

EXAMPLES
IN
ARITHMETIC

S. PEDLEY

MACMILLAN & CO.

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S.DICKSTEIN

EXAMPLES IN ARITHMETIC.



EXAMPLES
IN
ARITHMETIC.

BY
SAMUEL PEDLEY,
LATE OF TAMWORTH GRAMMAR SCHOOL;
AUTHOR OF "THE PUPIL TEACHER'S HANDBOOK, &c."

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G. M. I. 22.

PREFACE.

THE object of the present work is to supply a series of carefully graduated exercises to supplement oral instruction in Arithmetic. For this purpose it has been arranged in two parts.

The first part, which embraces the whole of the rules of Arithmetic, consists of (*a*) a series of purely mechanical exercises arranged under each rule. These are designed to follow immediately after the explanation of a rule by the teacher, their leading aim being to give familiarity with the method employed in working the rule and to promote quickness and accuracy. Perhaps the most effective manner of using these exercises is to dictate them to the class for collective competition. They are followed in each instance by (*b*) a series of examples in the form of questions, for individual work, intended to excite thought and lead the pupil to discover the practical application of the rule in the solution of problems.

The second part contains a number of miscellaneous examples arranged as Examination Papers, gradually increasing in difficulty, which may be used to test the pupil's progress at any stage of his work.

The whole of the Exercises are original.

Much care has been taken to ensure the accuracy of the Answers, but in a collection of more than 7200 examples it is possible some errors may have escaped notice. The Author will feel grateful for having his attention called to them.

The long addition exercises in the simple and compound rules, as well as the other examples in the earlier rules, may be used occasionally with advantage by the advanced student who wishes to become quick and accurate in his work, and will be found of especial value to those who are preparing for the Civil Service Examinations. Every endeavour has been used throughout to give the work a thoroughly practical character, and to make it as complete as possible.

TAMWORTH, Oct. 1879.

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ARITHMETICAL TABLES.

Twice	3 times	4 times	5 times	6 times	7 times
1 = 2	1 = 3	1 = 4	1 = 5	1 = 6	1 = 7
2 = 4	2 = 6	2 = 8	2 = 10	2 = 12	2 = 14
3 = 6	3 = 9	3 = 12	3 = 15	3 = 18	3 = 21
4 = 8	4 = 12	4 = 16	4 = 20	4 = 24	4 = 28
5 = 10	5 = 15	5 = 20	5 = 25	5 = 30	5 = 35
6 = 12	6 = 18	6 = 24	6 = 30	6 = 36	6 = 42
7 = 14	7 = 21	7 = 28	7 = 35	7 = 42	7 = 49
8 = 16	8 = 24	8 = 32	8 = 40	8 = 48	8 = 56
9 = 18	9 = 27	9 = 36	9 = 45	9 = 54	9 = 63
10 = 20	10 = 30	10 = 40	10 = 50	10 = 60	10 = 70
11 = 22	11 = 33	11 = 44	11 = 55	11 = 66	11 = 77
12 = 24	12 = 36	12 = 48	12 = 60	12 = 72	12 = 84

8 times	9 times	10 times	11 times	12 times
1 = 8	1 = 9	1 = 10	1 = 11	1 = 12
2 = 16	2 = 18	2 = 20	2 = 22	2 = 24
3 = 24	3 = 27	3 = 30	3 = 33	3 = 36
4 = 32	4 = 36	4 = 40	4 = 44	4 = 48
5 = 40	5 = 45	5 = 50	5 = 55	5 = 60
6 = 48	6 = 54	6 = 60	6 = 66	6 = 72
7 = 56	7 = 63	7 = 70	7 = 77	7 = 84
8 = 64	8 = 72	8 = 80	8 = 88	8 = 96
9 = 72	9 = 81	9 = 90	9 = 99	9 = 108
10 = 80	10 = 90	10 = 100	10 = 110	10 = 120
11 = 88	11 = 99	11 = 110	11 = 121	11 = 132
12 = 96	12 = 108	12 = 120	12 = 132	12 = 144

MONEY TABLE.

<table style="width: 100%; border-collapse: collapse;"> <tr><td>12 pence = 1 shilling</td><td>0 pence</td></tr> <tr><td>20 " = 1 " 8</td><td>" "</td></tr> <tr><td>24 " = 2 shillings</td><td>0 " "</td></tr> <tr><td>30 " = 2 " 6</td><td>" "</td></tr> <tr><td>36 " = 3 " 0</td><td>" "</td></tr> <tr><td>40 " = 3 " 4</td><td>" "</td></tr> <tr><td>48 " = 4 " 0</td><td>" "</td></tr> <tr><td>50 " = 4 " 2</td><td>" "</td></tr> <tr><td>60 " = 5 " 0</td><td>" "</td></tr> </table>	12 pence = 1 shilling	0 pence	20 " = 1 " 8	" "	24 " = 2 shillings	0 " "	30 " = 2 " 6	" "	36 " = 3 " 0	" "	40 " = 3 " 4	" "	48 " = 4 " 0	" "	50 " = 4 " 2	" "	60 " = 5 " 0	" "	<table style="width: 100%; border-collapse: collapse;"> <tr><td>70 pence = 5 shillings</td><td>10 pence</td></tr> <tr><td>72 " = 6 " 0</td><td>" "</td></tr> <tr><td>80 " = 6 " 8</td><td>" "</td></tr> <tr><td>84 " = 7 " 0</td><td>" "</td></tr> <tr><td>90 " = 7 " 6</td><td>" "</td></tr> <tr><td>96 " = 8 " 0</td><td>" "</td></tr> <tr><td>100 " = 8 " 4</td><td>" "</td></tr> <tr><td>108 " = 9 " 0</td><td>" "</td></tr> <tr><td>120 " = 10 " 0</td><td>" "</td></tr> </table>	70 pence = 5 shillings	10 pence	72 " = 6 " 0	" "	80 " = 6 " 8	" "	84 " = 7 " 0	" "	90 " = 7 " 6	" "	96 " = 8 " 0	" "	100 " = 8 " 4	" "	108 " = 9 " 0	" "	120 " = 10 " 0	" "
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108 " = 9 " 0	" "																																				
120 " = 10 " 0	" "																																				
<table style="margin-left: auto; margin-right: auto;"> <tr><td>4 farthings</td><td>make 1 penny (<i>d.</i>)</td></tr> <tr><td>12 pence</td><td>" 1 shilling (<i>s.</i>)</td></tr> <tr><td>20 shillings</td><td rowspan="3">} " 1 pound (£)</td></tr> <tr><td>240 pence</td></tr> <tr><td>960 farthings</td></tr> </table>		4 farthings	make 1 penny (<i>d.</i>)	12 pence	" 1 shilling (<i>s.</i>)	20 shillings	} " 1 pound (£)	240 pence	960 farthings																												
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AVOIRDUPOIS WEIGHT.

16 drams (drs.)	= 1 ounce (oz.)
16 ounces	= 1 pound (lb.)
28 lbs.	= 1 quarter (qr.)
4 qrs.	= 1 hundredweight (cwt.)
20 cwts.	= 1 ton

14 lbs.	= 1 stone
112 lbs.	} = 1 cwt.
8 stones	
2240 lbs.	} = 1 ton
160 stones	

TROY WEIGHT.

24 grains	make 1 pennyweight (dwt.)
20 dwts.	„ 1 ounce
12 ozs.	„ 1 lb.

7000 Troy Grains = 1 lb. Avoir.

APOTHECARIES' WEIGHT.

20 grains	make 1 scruple
3 scruples	„ 1 dram
8 drams	„ 1 ounce
12 ounces	„ 1 lb.

The lb. Troy and the lb. Apoth. are of the same weight—both contain 5760 grains.

MEASURE OF LENGTH.

12 inches	= 1 foot
3 feet	= 1 yard
5½ yards	= 1 pole
40 poles	= 1 furlong
8 furlongs	= 1 mile

4 inches	= 1 hand
36 inches	= 1 yard
6 feet	= 1 fathom
22 yards	= 1 chain
220 yards	= 1 furlong
1760 yards	= 1 mile
80 chains	= 1 mile

2¼ inches	= 1 nail
4 nails	= 1 quarter
4 qrs.	= 1 yard
5 qrs.	= 1 ell

Used in measuring cloth.

MEASURE OF SURFACE.

144 square in.	= 1 sq. foot
9 sq. ft.	= 1 sq. yd.
30¼ sq. yds.	= 1 pole or perch
40 poles	= 1 rood
4 roods	= 1 acre
640 acres	= 1 s. mile

100000 sq. links	} = 1 ac.
10 sq. chains	
4840 sq. yards	

MEASURE OF TIME.

60 seconds	= 1 minute
60 min.	= 1 hour
24 hours	= 1 day
7 days	= 1 week
365 days	= 1 year

MEASURE OF SOLIDITY.

1728 cubic in.	= 1 cub. ft.
27 cub. ft.	= 1 cub. yd.

MEASURE OF CAPACITY.

2 gills or 4 quarterns	} = 1 pint
2 pints	
4 quarts	= 1 gallon
2 gallons	= 1 peck
4 pecks	= 1 bushel
8 bushels	= 1 quarter
5 qrs.	= 1 load

3 bushels	= 1 sack
2 bushels	= 1 boll
36 gallons	= 1 barrel of beer
63 gallons	= 1 hhd. of wine
2 hhds.	= 1 pipe

SIMPLE ADDITION.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
296	707	511	119	754	926	479	302	906	599
318	770	729	594	386	218	629	420	729	444
246	777	856	376	924	377	329	522	318	726
372	696	963	829	373	964	719	716	294	813
964	804	717	674	869	419	599	968	316	968
327	593	692	315	719	527	698	725	928	946
946	123	314	968	694	619	398	368	372	926
519	456	721	376	598	328	498	724	928	813
239	789	816	945	729	726	727	976	372	726
518	987	928	618	618	495	777	816	316	846
929	546	576	726	726	727	667	946	594	929
373	312	924	918	915	816	766	729	726	616
409	407	714	109	112	916	866	318	813	728
508	692	316	296	239	515	567	776	999	444

(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
294	909	707	906	742	906	906	928	992	927
519	99	29	57	804	98	15	976	181	315
327	276	77	985	112	728	726	543	296	96
338	5	209	79	92	507	37	21	315	609
969	72	56	159	118	96	296	987	929	78
572	906	795	78	73	726	57	654	376	596
694	98	88	335	109	17	209	32	906	87
518	57	769	567	51	209	19	105	572	697
729	159	584	769	906	92	567	719	969	376
694	68	72	835	38	290	69	15	707	906
592	725	707	946	736	76	385	150	169	57
718	69	98	718	109	99	156	312	318	209
994	70	109	81	21	286	729	792	229	58
576	430	558	108	746	73	115	186	156	196

(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)
7903	8025	9051	2107	1096	7206	9026	7215
5988	9067	8007	3206	3003	9025	7219	8603
7966	5067	2398	9063	7967	8396	1856	9206
8644	3815	7916	8025	8296	7215	1876	5946
3716	9295	5998	9206	3915	9604	9215	7003
9215	7963	7946	3058	7968	3726	3734	1596
9284	8435	3021	7021	5969	9063	1009	7002
7107	9219	8969	9086	8725	7158	2100	3019
5006	8072	8729	5721	9683	3102	7200	7156
7913	9586	9569	3102	7025	2002	6999	9208
8015	9989	7219	8607	8967	7206	9989	3107
7908	7025	5968	2906	9213	9608	7095	8828
3728	8694	7216	3106	3596	3728	7683	9987
5969	7021	5585	8207	7007	1559	9215	9195

(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)
9067	3796	207	5964	2001	9002	5906	7206
569	109	3709	7216	786	2071	909	3721
3021	2906	9216	9608	2907	5968	9909	594
795	7096	896	3916	726	7219	9999	9076
808	9006	7219	7213	3015	3968	8888	586
996	5960	3003	9065	990	7965	7777	9211
5092	7021	2916	7213	7203	8219	6666	679
7906	9117	707	906	596	2007	5566	3819
769	9009	9061	7908	9603	956	7766	9021
596	3967	729	5968	729	7029	9085	5960
7021	1509	3969	7213	1901	596	703	372
906	62	501	900	729	7968	37	9021
5986	384	15	7906	839	707	5921	717
509	1955	7026	512	8879	1906	629	8642

(37)	(38)	(39)	(40)	(41)	(42)	(43)
29061	50216	29113	39061	12345	96044	90216
70635	79613	7029	72096	67891	3726	3729
92186	80156	69031	59185	23456	96921	87268
59147	7007	79163	72096	78912	72156	5946
99081	30916	80217	3095	34567	9213	39472
79698	50911	9056	69002	89123	87215	8692
39091	72196	89215	7358	45678	9061	50012
87296	39167	90061	92015	91234	70123	7916
99896	9026	7213	8017	56789	9686	38194
79684	90766	98175	29163	1237	500	7968
59607	9667	3007	7215	86041	72156	90917
79061	39286	90216	96003	88139	33363	3968
59692	99081	72136	7215	71031	59081	79586
79683	7296	9021	27568	6944	7216	9981

(44)	(45)	(46)	(47)	(48)	(49)	(50)
29137	90716	70140	40317	40211	20191	23946
59038	3824	92382	9856	70130	79386	5916
29537	96864	90368	47256	9035	59406	872
90613	72196	59376	89666	79032	39601	96
96928	39185	90213	37694	80965	89063	906
57216	96072	76384	59465	79632	79158	5986
90317	38067	96058	70315	1560	9091	36958
20313	47215	37213	96018	96876	19090	702
69681	90516	96474	86219	94032	70215	309
72136	38296	58169	47206	5968	90217	72156
9063	39285	39467	96081	11411	5038	3159
70031	37216	29606	47216	5917	4715	86251
2931	90213	70915	17129	86928	9624	72063
59368	13729	80706	29615	37169	7968	84321

(51)	(52)	(53)	(54)	(55)	(56)	(57)
90613	90611	53546	72131	90615	11302	20917
8215	3712	9348	5911	9063	9031	9213
70206	87269	72196	59110	72136	8736	79684
9021	2329	91131	3146	9065	90567	99881
76583	59468	71316	39682	38603	6946	7216
90615	7206	9031	7017	9021	31146	93969
9216	38156	29163	11416	5959	90031	5967
82005	92159	92136	9023	57256	7215	316
1768	37258	59684	39673	3825	95854	90726
926	69003	72196	8692	96836	7216	59295
90476	8967	38194	38656	9211	38156	79694
92919	21131	79696	9009	59686	7213	30126
30515	7036	38654	15686	7213	9698	9989
7987	90215	92196	3721	9683	13572	29176

(58)	(59)	(60)	(61)	(62)	(63)	(64)
71596	59761	3	29101	70619	39968	79007
3894	23456	303	7903	2946	3712	3977
72156	78902	796	92136	30101	59608	63286
3946	93586	30330	8013	7962	3706	9025
92189	59606	90101	69013	90211	99816	73968
7156	38767	7296	69130	89999	7926	4906
90021	96985	58947	70223	78888	30215	59765
7215	57676	8011	19667	59466	6968	3807
92176	38969	72003	7021	92135	37215	796
50019	7944	72156	58	71321	74119	38216
3729	87265	9213	92067	9266	59296	9219
41326	90611	73169	57026	37219	27685	38267
39003	7263	2003	26026	5902	90213	92096
90216	59433	71001	26260	7203	7969	5948

(65)	(66)	(67)	(68)	(69)	(70)
30216917	72061317	3160031	700070007	59600311	150012367
219001116	928061115	721360	70077070	72031600	396384696
38216306	72903716	929096	7700700	39386370	724546697
49036305	9831206	17387387	999999999	49726176	2943867
9203160	129316060	6946316	888888888	38216318	5723016
78306009	372072720	7216084	777777777	59209792	3803715
178962315	58286082	5019380	666666666	38626835	72316115
38724116	9999999	6216026	555666777	59726032	99909090
9028370	78906320	38296033	304034340	38762096	72038370
7280300	572136180	7906009	209000110	59068389	59626360
1701707	36926310	11001	555555555	79011907	67216162
9203023	400040004	10011	60060600	38038308	46314217
75319019	35682003	376989	79386946	38380038	72003176
86326320	78216370	56357909	89379868	29299299	296008360

(71)	(72)	(73)	(74)	(75)	(76)
29609721	312037160	29061131	31011702	7007070	9508176
1101001	7296380	79031030	32016163	57317690	3726196
11011110	59672190	84362138	87078780	3906005	8296372
29680726	37286390	92003070	92092092	57203116	9736156
77396580	99029160	59316370	9209092	92861315	8217326
49297387	87276387	1021207	7316007	75037616	3072007
77196176	58026260	11307000	8014316	3021212	5096315
96307207	39273716	9909090	9207116	5960380	7216038
7706726	476017170	7770007	8113008	7958115	8576934
77007116	5726003	5826003	56560056	9260031	4701235
9219029	6920007	3030330	10001010	3303003	6677889
5829638	7202031	9216016	3726038	7926707	5054040
7211011	5926736	1726318	5962082	7505414	7206038
7316027	3216026	3928119	7904036	4445762	1563281

(77)	(78)	(79)	(80)	(81)	(82)
2906096	209170	3201706	114014	1307006	900196
727076	37027	7021017	30370	360306	37295
38216	99016	9208030	296716	36789	11209
79116	576218	596370	9709790	1234345	3960
586308	316028	732117	8380716	6789012	7070
79031	404040	116372	5926073	3456789	58965
8302	4594604	387316	703116	925000	370037
1716504	762314	196093	555555	86007	58051
11100	807216	926316	474047	632108	99684
101011	999999	106720	382036	792607	55984
5201210	909808	37073	196096	657372	72101
726038	372995	49056	72063	7969314	38969
70007	673006	384968	59608	720306	57196
99886	594067	7216009	372969	896969	138285

(83)	(84)	(85)	(86)	(87)	(88)
302196	510051	40444	908076	906017	111011
75194	325686	37251	504321	29603	37209
99098	72980	99186	123607	78596	56006
57969	59066	3217	790102	39281	5606
88880	17095	9602	803209	57116	970
88800	71017	11904	576038	92384	326842
808808	968214	44444	38386	76034	79081
79445	512696	54843	139015	95021	51026
40044	387714	74945	78216	50210	38213
7986	706194	47896	102012	37013	19019
6789	926318	60636	36316	92315	28280
51015	407	70000	59063	96081	642196
10012	13130	7968	78779	79115	37106
9990	130013	3115	69446	80295	15908

(89)	(90)	(91)	(92)	(93)	(94)
123456	999998	796769	999999	927282	905090
234567	888887	769796	888888	292728	806080
345678	777776	313331	777777	393837	75057
456789	987987	133444	666666	939787	50907
567890	789789	495678	494765	839385	38883
678901	897897	912345	555555	721608	79694
789012	807807	678901	444444	30915	37162
890123	596096	234567	876829	800724	96386
777666	308083	890123	309176	92176	96038
999786	790651	456789	926179	83064	79605
70219	998877	123456	888888	71906	333333
59999	665587	789012	999999	38215	888888
89769	921902	345678	777777	11010	999999
99989	370613	901234	666666	38638	579757

(95)	(96)	(97)	(98)	(99)	(100)
306	390309	547683	95765	83978	201001
1739	73128	547689	95726	83979	73213
8647	57927	547687	95738	83980	96028
9284	66366	547682	95707	83955	79069
603169	59463	547688	95770	83076	59286
78283	72156	547684	95715	83979	86924
99099	38206	547604	96721	88975	794687
7958	573176	547685	95706	83974	808381
5626	92026	547683	95076	83973	92037
78364	88219	547085	95987	83968	59067
808139	57101	547096	95632	83962	11906
79016	96208	547685	95757	88964	72105
59723	137596	547672	95726	83963	87296
11811	39609	547632	95877	83964	38279

(101)	(102)	(103)	(104)	(105)	(106)	(107)	(108)	(109)	(110)
706	798	99	772	789	495	727	290	796	946
79	109	990	916	897	393	317	307	707	319
586	110	88	984	796	892	642	39	699	444
79	111	808	375	395	694	963	183	409	445
98	212	707	962	596	795	118	716	726	565
59	313	770	662	894	690	924	98	946	575
669	441	995	729	593	394	572	296	943	672
73	697	95	594	616	491	368	158	118	964
883	388	105	682	472	999	716	926	726	796
179	883	76	712	89	998	926	726	194	896
612	999	276	396	99	997	594	38	219	318
373	809	976	517	79	996	726	229	294	496
96	921	367	662	169	697	316	115	684	319
196	37	69	374	712	687	404	764	729	726
372	596	294	695	69	689	592	924	694	118
38	872	316	712	187	789	663	116	518	986
139	969	425	392	305	881	795	338	729	729
176	368	926	118	709	551	675	94	363	119
960	712	318	981	696	595	886	77	763	316
609	446	172	641	318	896	885	78	963	447
69	588	316	512	44	792	999	97	868	772
172	992	294	376	644	835	776	69	555	116
38	105	435	945	533	990	676	369	955	95
193	79	717	702	838	909	388	373	666	184
69	87	694	119	833	99	969	118	767	69
79	66	316	107	722	90	59	98	897	37
83	339	929	67	999	296	79	79	678	139
75	57	516	89	795	597	185	156	318	78

(111)	(112)	(113)	(114)	(115)	(116)	(117)	(118)	(119)	(120)
909	694	929	729	138	887	139	992	907	929
998	714	717	813	78	787	319	998	796	379
808	816	968	906	59	696	999	899	384	869
796	928	312	312	969	314	878	897	596	575
395	337	878	94	78	928	779	798	397	696
807	516	96	49	39	337	699	397	308	387
87	926	996	185	67	644	597	596	929	496
905	842	78	581	367	708	317	998	318	713
95	116	994	80	78	69	696	908	726	964
59	95	37	35	59	960	802	809	316	372
786	187	109	729	499	609	109	929	929	864
312	117	318	69	38	57	307	595	363	926
111	71	556	726	73	381	37	597	943	318
901	365	109	647	195	996	496	795	729	726
109	381	229	786	703	189	595	705	684	839
91	701	317	969	370	317	96	832	946	436
726	71	187	384	59	594	37	726	316	707
38	98	212	596	778	386	139	962	928	796
380	98	960	862	699	787	237	119	713	398
72	298	314	395	76	59	606	363	928	374
51	278	762	796	338	78	908	962	632	594
51	916	149	518	44	37	35	963	712	386
84	57	316	224	712	138	726	726	596	594
196	186	505	535	96	932	39	115	707	726
216	92	99	707	105	624	38	964	906	318
375	319	88	999	115	719	137	74	726	229
804	44	77	77	91	594	216	88	829	235
59	586	606	98	87	732	260	77	119	672

(121)	(122)	(123)	(124)	(125)	(126)	(127)	(128)	(129)	(130)
306	296	394	726	694	926	929	596	709	909
192	718	706	990	713	103	713	312	390	999
219	328	387	999	927	79	694	414	490	596
796	694	519	337	614	69	316	562	590	956
892	719	366	868	592	185	387	829	696	721
999	591	813	372	682	726	596	616	316	127
777	617	519	316	395	314	414	594	987	319
598	296	317	929	674	595	557	672	543	924
928	869	664	375	816	616	729	826	654	376
372	372	696	619	772	327	684	306	321	371
969	596	356	727	692	414	468	516	123	673
575	998	713	596	832	372	568	307	456	728
960	317	829	316	594	418	768	816	787	568
726	299	672	928	665	396	687	307	789	314
907	384	595	372	886	519	787	216	788	729
997	727	674	646	929	624	987	929	887	636
776	618	446	384	678	715	513	307	886	729
909	372	549	707	886	996	222	213	998	376
299	508	483	770	338	884	333	996	596	969
279	309	606	679	518	376	444	583	307	876
596	999	319	696	729	449	555	649	624	515
303	888	327	319	316	994	666	946	312	926
929	777	716	589	519	123	777	316	695	387
376	666	387	627	576	456	888	729	724	906
596	316	729	318	495	789	999	616	396	991
814	596	396	584	694	12	616	372	445	558
726	727	519	326	726	976	721	616	583	369
928	346	445	519	832	543	847	419	726	229

(131)	(132)	(133)	(134)	(135)	(136)	(137)	(138)	(139)	(140)
292	338	999	901	813	999	808	777	992	444
716	926	888	709	964	999	880	777	984	444
295	842	777	868	594	999	888	777	666	505
816	729	666	713	904	999	888	777	666	550
999	316	555	965	39	999	888	770	666	555
987	597	444	724	309	999	888	770	666	555
789	618	333	695	390	999	888	707	666	554
599	229	222	882	703	999	788	77	666	565
366	336	111	228	37	909	780	777	763	575
376	418	595	375	73	990	708	77	367	855
518	597	726	694	582	999	888	70	566	954
229	694	837	712	802	999	888	707	766	324
376	372	964	502	76	909	888	789	464	456
418	496	729	962	607	99	788	787	392	789
392	527	415	365	392	69	788	877	876	444
479	372	696	928	115	969	887	778	666	555
316	519	325	316	201	996	887	887	666	555
292	314	726	596	112	999	889	777	666	555
816	516	318	813	370	989	889	777	666	555
373	842	962	967	385	899	988	777	666	55
962	926	372	822	965	989	987	777	666	505
875	365	413	476	919	998	789	707	666	785
969	52	929	969	828	999	879	777	666	956
728	84	713	229	808	999	798	707	797	729
696	996	965	699	80	98	888	777	877	888
724	87	318	539	79	89	888	886	77	684
694	909	476	372	556	79	888	899	606	721
928	875	595	908	73	97	888	876	660	319

(141)	(142)	(143)	(144)	(145)	(146)	(147)	(148)	(149)
2901	9268	3029	6906	7296	5955	9090	9061	3071
7206	3075	6969	7891	5944	6968	795	3706	964
987	1868	3728	2345	9682	3721	896	9638	789
5432	1875	8684	6789	3715	8628	398	5968	596
6789	9989	9658	1234	6944	5944	5914	9213	1968
3216	9899	7215	5678	7268	3726	7926	4473	318
8998	7998	9603	9123	3166	9872	8688	9218	414
8776	3772	8216	4567	3804	8763	3814	789	376
5914	8664	7958	8912	7968	9205	5944	3457	909
7219	9667	3666	3456	5968	9025	6729	9891	726
6384	8321	7303	7891	5726	896	8651	3729	938
7215	6916	8684	2345	4933	795	901	6998	724
8692	7215	7213	6072	8864	382	7908	3726	9945
3847	6984	9645	8864	7749	1945	3026	9087	9495
7482	7321	8968	9876	6384	2396	5926	6958	762
9685	9065	3725	5432	7216	8492	8021	3929	823
9638	8726	5914	1234	9683	7163	795	3817	796
5946	9638	7215	5678	7219	9064	5966	2296	1594
908	7021	6928	9046	6517	7963	829	3195	795
729	9929	5715	3219	9286	2816	7916	4906	806
385	8728	6947	6999	7896	9021	3928	7963	1396
9602	9695	3726	7062	3045	3729	4726	8688	715
756	5959	8682	9063	6947	6847	8444	7889	998
8686	6960	7968	8645	8072	5019	5496	6944	8317
9026	796	3607	9215	3906	6902	3933	3729	7597
576	897	2901	6047	926	3721	2213	6966	1696
384	1965	7299	5960	385	6908	7856	8725	3495
7032	385	8677	1103	9032	3726	9206	6944	707

(150)	(151)	(152)	(153)	(154)	(155)	(156)	(157)	(158)
3373	7906	7219	3969	7963	7963	4796	5968	7219
906	8329	8946	7915	3385	796	3894	7025	9068
1395	7913	9916	7213	1965	879	3726	398	7963
786	6984	9814	8684	4788	616	3906	7213	8081
3095	7159	7219	3604	3604	8926	989	968	5058
8996	6906	5946	3723	3725	3728	5968	7215	7296
7219	3726	8686	8695	9683	5926	3769	9684	3917
3854	8315	3090	7371	7211	7015	696	721	868
6993	3819	5723	5968	3916	989	3728	3968	796
8772	5999	8609	3723	9026	789	694	725	315
3156	3987	9999	9607	3716	909	8898	104	9607
9217	7162	8888	5713	9064	7296	987	1140	725
6947	9217	9907	3916	7998	297	594	576	807
3186	3916	7326	8602	3961	3328	1014	998	699
9215	7576	3138	6925	5964	317	987	8099	398
6947	8689	9045	8777	3723	607	9696	8908	7215
3145	9219	7213	7889	9628	5906	3905	7215	1635
9025	3724	9628	3905	3719	389	7219	7716	9213
7213	5968	7315	5093	9969	9383	969	9899	7906
9064	3914	9603	1276	3723	716	386	8989	5989
7215	3726	791	7079	9669	926	785	7915	6714
9316	9981	396	6969	7737	317	9027	3962	3429
8729	7213	1386	7031	7165	969	795	7213	8621
3605	9603	904	969	9027	1985	962	8684	7916
9608	7915	7036	3086	3966	709	784	7903	9985
7213	8765	928	901	8729	306	1968	8622	3716
6999	9628	1726	726	3065	1594	376	7585	9026
7986	1596	707	9025	7963	7799	9213	3606	5999

(159)	(160)	(161)	(162)	(163)	(164)	(165)	(166)
7904	92196	50123	90213	9296	9023	7112	9015
3908	37141	92913	79118	3795	8134	8663	7915
1980	96037	86945	36276	7906	7245	7072	8329
9967	88969	76932	90516	3815	6356	5967	6736
3156	37156	86958	87119	7963	5467	3814	9014
9295	96028	72136	96379	8696	4578	6965	7219
8694	37219	96047	59046	3715	3689	7213	696
2968	56063	96396	58966	9608	2791	9638	879
3067	79061	87587	37055	3729	1812	7159	591
3169	39216	69077	96825	5916	9001	3829	5914
5964	99081	39166	79696	3773	3769	7206	726
7044	72136	70195	38568	5785	5946	3515	3862
8921	99067	38692	72136	6946	3817	9607	3965
3016	79067	71385	10615	3844	9638	7219	864
1112	90673	5906	9213	7062	7213	617	7219
9045	72196	72136	9012	3126	9637	8726	729
8886	39157	9095	37269	9065	8658	929	3865
6674	96038	69697	5906	5917	7976	5736	795
4455	76935	2969	7962	3726	8692	839	5114
3392	86927	7213	33864	9091	3729	6847	374
3933	71136	89692	7916	3725	5964	969	6729
7166	90638	3726	5914	8694	9607	3876	697
9996	5996	9981	72962	3706	3968	906	9063
7129	7906	3729	38164	5906	5964	387	899
6945	38157	69476	98375	9999	3777	1596	792
7021	79601	5913	1164	8888	6944	798	1698
3968	3802	7926	9076	7698	5966	3159	3176

(167)	(168)	(169)	(170)	(171)	(172)	(173)	(174)
29017	290617	702135	37051	90916	79998	90315	98476
39116	305165	59608	9062	39063	89395	72195	9009
1079	87216	726096	73296	72196	69087	85096	37296
81105	98046	38167	86025	30013	72136	72137	8005
9208	3745	59218	37629	31030	59061	69487	97209
37116	928615	37115	83472	89689	37256	90324	3864
9007	7005	900307	59682	59676	87206	72156	7998
5090	111001	29115	37256	83969	90603	92173	8995
7217	100010	6705	89276	72136	27136	93928	5969
67318	33716	821315	31926	96031	99156	9007	7913
11011	98514	93127	72134	59067	79063	9876	86095
9069	39683	695818	59147	29684	99181	3965	15087
7210	72963	37615	78162	37695	37026	87264	37213
38005	84563	90726	39069	90916	96058	3965	96118
9608	92167	115904	79682	37215	79658	90257	90019
9680	119121	37296	72136	96031	38213	5964	9876
99291	71510	317	59065	72136	9012	92063	54321
89898	38164	1107	78236	92847	37261	7968	12345
37276	973618	1154	59637	60917	40719	9906	67891
59695	89006	903816	79646	39998	59609	38073	23456
92137	39115	793115	89061	59697	57216	9213	78912
87159	193015	696123	37296	38567	38795	8965	34567
38147	38706	960315	59061	72136	92075	79004	89123
69286	132015	729929	38276	96837	11025	3916	45678
98032	73963	694047	86027	96035	9607	8729	91234
71560	91998	38564	92137	87216	38695	69586	56789
3869	37684	337962	69999	96031	7213	9219	22219
72156	89164	1012	89898	59682	86957	37294	32196

(175)	(176)	(177)	(178)	(179)	(180)	(181)	(182)
11302	90613	50719	301475	32123	79603	70615	11826
9608	7915	3729	92186	45678	8763	9943	11825
795	8906	6966	75680	90123	9006	34956	11824
88878	78956	7968	96372	34567	37968	7825	29298
79006	9658	38662	594768	89123	8607	7256	29299
69318	726	7996	39614	45678	3904	6432	39998
75113	588	8998	76382	91234	90607	11011	47694
96303	3764	15966	99089	56789	3999	5795	50176
57629	9698	38776	101010	12345	8778	8602	39609
69464	37694	79606	75167	67891	8996	3726	37216
38575	5968	88965	3072	23456	3012	86968	38472
96032	89443	70945	76038	78912	15634	3725	92678
7958	99087	7917	59556	78996	7213	6945	69698
3706	9682	3896	87898	83667	8615	8076	31566
13960	7892	9065	39175	58776	9628	6831	59472
5907	3156	9928	69474	60931	3715	12756	79663
3876	76382	7968	59699	70586	99684	9026	98765
19296	5916	19065	89998	92136	3005	3999	7229
3888	83992	78905	90998	87219	53053	9893	3637
99999	78156	59116	89989	36137	37290	7195	56056
77777	9606	3803	37658	92147	6969	6947	38380
99999	78096	9025	276356	58947	3938	8769	87970
50599	39156	7261	38147	98765	5678	18965	7586
89696	7213	38119	59216	43219	9876	7215	3915
37113	8999	7263	87904	87654	3457	3896	79162
9209	9888	84695	69380	32191	19684	59473	8684
7896	17696	92167	59673	76543	8721	76315	7213
9698	39587	93033	77175	21987	99087	9051	96037

(183)	(184)	(185)	(186)	(187)	(188)	(189)	(190)
71017	70617	12304	88888	40915	33333	60913	99087
39516	39673	56789	66666	88896	44444	313	78956
92137	88789	1233	99999	76908	55555	10191	38569
99096	99673	73696	77766	39696	66666	10019	79138
38579	76316	86767	31597	87159	77777	37216	38372
36928	96389	39158	89898	39127	22222	8015	96031
92761	37609	99091	98989	66382	99999	926	79638
71213	37697	73162	89898	59167	88888	3716	59672
92136	51030	59638	98988	37695	66077	93456	36976
59999	39696	90673	88998	82163	73199	72192	89987
99599	71968	88776	73157	99081	99591	6946	69686
88788	92173	99666	72176	59177	7091	37163	75158
77877	95167	72139	77777	3796	39015	9063	7963
76767	59683	89156	66666	8092	7221	7219	19633
67676	71693	72131	66666	799	29163	69213	877
56569	92173	10967	66666	808	60613	8915	1877
30707	90931	37145	99999	995	73131	79638	9606
57969	79396	99999	77777	7638	96072	9092	38697
35644	89696	99999	99876	5963	88684	33776	59381
88693	37159	88888	59175	79176	59159	3709	7219
71921	86725	88888	57219	89455	72173	59199	39687
92065	79163	77777	39165	5945	39167	9067	7195
87219	88176	66666	88679	60273	49631	779	44146
59147	96003	77777	59027	5916	59853	385	90319
92138	23231	66666	79638	82175	44704	7156	72195
76963	17864	55555	92197	9608	47504	92193	9217
11965	90506	44444	67308	37214	99999	7062	3999
59607	78956	34217	71506	3795	88777	59176	99999

(191) $41715 + 6943 + 7031 + 38161 + 7219 + 5967 + 83267 + 5921 + 8376 + 90075 + 47461 + 92867 + 39156 + 7213 + 66968 + 80909 + 17071 + 59666$.

(192) $714 + 330967 + 59176 + 382956 + 714315 + 8006 + 92867 + 33915 + 577166 + 38721 + 96031 + 79603 + 9067 + 314 + 92603 + 7131 + 9263 + 8729 + 9669$.

(193) $79909 + 36921 + 597 + 898 + 100139 + 75197 + 92075 + 73968 + 7763 + 9603 + 3996 + 69694 + 72093 + 872 + 59663 + 9983 + 59763 + 5903$.

(194) $7113 + 563 + 51021 + 36035 + 724 + 6968 + 75385 + 7966 + 8866 + 72135 + 9091 + 9607 + 372 + 697 + 307631$.

(195) $90613 + 7296 + 34581 + 696 + 5887 + 307 + 22021 + 30013 + 79610 + 380830 + 79961 + 75631 + 8692 + 6938 + 37146 + 14192$.

(196) $3553 + 95864 + 3729 + 69683 + 79163 + 2213 + 72131 + 6966 + 3104 + 73236 + 4481 + 246810 + 92613 + 8137$.

(197) $36073 + 69607 + 3815 + 6966 + 44839 + 3712 + 96076 + 39175 + 79071 + 3716 + 99086 + 969 + 7915 + 79167 + 3726 + 8696 + 4415$.

(198) $92107 + 31763 + 92196 + 5916 + 37296 + 37216 + 86864 + 39167 + 7219 + 7163 + 11096 + 72137 + 68316 + 49136$.

(199) $71107 + 386967 + 596831 + 99672 + 8070 + 3696 + 441567 + 370382 + 372191 + 709 + 96072 + 33671 + 876926 + 769163$.

(200) $20219 + 92044 + 7219 + 3969 + 70311 + 781567 + 96038 + 96043 + 7216 + 833383 + 929169 + 72706 + 387269 + 96037$.

(201) Add together seventy nine, ninety eight, a thousand and four, five hundred and eleven, ninety one, twelve, three thousand and fifty one, one hundred and three, and seven.

(202) Add together seventeen thousand and four, fifty eight hundred and two, eleven thousand five hundred and thirty, four hundred thousand nine hundred and six, forty five thousand, and ninety eight thousand and seventy.

(203) Add together five millions eleven thousand and sixty, thirty three millions nine hundred thousand and nine, twelve thousand twelve hundred and twelve, thirteen millions nineteen thousand six hundred and four, eighteen millions eighteen hundred thousand and eighteen, and seventy six thousand five hundred and one.

(204) There are eighteen panes of glass in one window, twelve in another, thirty two in another, and nine in another; how many altogether?

(205) In each of five schools there are seven hundred and ninety eight scholars, five hundred and sixty six in another, and eleven hundred and nine in the seventh. What is the total number?

(206) If London has four millions three hundred and seven thousand inhabitants, Manchester seven hundred and fifty thousand, Glasgow eight hundred and seventy five thousand, Birmingham five hundred thousand; how many altogether?

(207) Find the sum of $906 + 170031 + 3002 + 969 + 596 + 5871$ and three millions two hundred and ten thousand and ten.

(208) A person bought eighty three, seventy nine, one hundred and four, fifty six, three hundred and eleven, and ninety nine yards of calico. How many yards altogether?

(209) One tree has four hundred and fifty seven apples, a second fifty nine, a third five hundred and seventy four, a fourth eleven hundred and two. Find the total number.

(210) Find the amount of six hundred and seven, nine hundred and twenty three, three thousand two hundred and six, fourteen thousand eleven hundred and nine, and twenty one thousand one hundred and seventy.

(211) How many is $376 + 5096 + 82 + 90027 + 5176 + 968 + 47074$?

(212) A millowner employs 27 workpeople in one room, 136 in another, 129 in a third, and 1076 in other rooms. How many does he employ altogether?

(213) One man walked 130 miles, another 79, another 145, a fourth 226, and a fifth 187 miles. What distance did they walk altogether?

(214) Add together $219 + 7219 + 5968 + 7368 + 47283$ and 3 millions four thousand and seventy seven.

(215) In a plantation there are 476 oaktrees, 1968 beech, 4072 larch, 902 spruce, 127 elm, and 97 ash. How many trees altogether?

(216) In one regiment there are 1576 men, in another 1153, in another 1154, and in a fourth 1097. How many men would there be if 68 were added to each regiment?

(217) Perform the addition of $496 + 7296 + 3162 + 7626 + 317 + 599 + 18867 + 7294$.

(218) There are nine sacks each containing 197 apples; how many altogether?

(219) A book has 496 pages; how many pages would 8 such books have?

(220) A newspaper has 19604 words on the first page, 17692 on the second, 14705 on the third, and 15998 on the fourth. How many words does it contain?

(221) A gardener potted out 694 geraniums, 1187 calceolarias, 472 fuchsias, 7219 stocks, and 4608 of various plants. How many plants did he pot out altogether?

(222) Find the sum of $4726 + 318 + 699 + 7238 + 697 + 887$ and 3063.

(223) An eleven in a cricket match scored as follows: 47, 13, 51, 0, 3, 17, 73, 86, 29, 117 and 31. How many runs were made altogether?

(224) A train carried 27 passengers by first class, 113 more than that number by second, and 28 more by third class than by first and second together. How many altogether?

(225) Find the value of a strong box containing 1497 sovereigns in one compartment, 1906 in a second, and 1196 in a third.

(226) Add together $7209 + 3863 + 472 + 10906 + 387 + 4917 + 7903$.

(227) Find the sum of $90617 + 1000317 + 19286 + 372983 + 2916472 + 200313 + 997616$.

(228) How many pens are there in 7 boxes, each containing 144?

(229) A farmer has 479 sheep in one flock, 387 in another, 445 in another, and buys 998; how many has he?

(230) Add together 473, 1 score and 17, 1 dozen and 11, and a hundred and seven.

(231) How many days are there in a year if January has 31, February 28, March 31, April 30, May 31, June 30, July 31, August 31, September 30, October 31, November 30, and December 31 days?

(232) On Monday 9406 packs of wool were sold, on Tuesday 479, on Wednesday 8987, on Friday 4475, and on Saturday 398 more than on Tuesday; how many were sold in all?

(233) Add together $47291 + 8309 + 72196 + 9608 + 37284 + 57216 + 3916 + 5738$.

(234) Write down in figures and add, seven hundred and seven millions seven hundred thousand and seventy, fifty five thousand fifty five hundred and fifty five, thirteen thousand thirteen hundred and thirteen, nine millions eleven hundred and one, four hundred and seventy millions four hundred and seven thousand and forty seven, and eleven millions ten thousand one hundred and one.

(235) In the six working days of a week the number of tons of coal raised from a mine was 476, 398, 1011, 564, 899, and 338. How many tons in all?

(236) Find the sum of $84961 + 7071 + 3998 + 1968 + 17969$.

(237) How many strokes does a clock telling the hours strike in twelve hours?

(238) A householder used 4906 feet of gas in the spring quarter, 1799 in summer, 4879 in autumn and 9687 in winter. How many feet altogether?

(239) In January 3017916 persons travelled by rail; 3904719 in February; 18960709 in March; 24009687 in April; 25472816 in May, and 31013409 in June. How many for the half year?

(240) If there are 29 boys in the first class, 35 in the second, 196 in the third and fourth together, and 57 in each of the fifth, sixth, and seventh, how many are there in the whole school?

(241) How many days are there in 7 weeks and 3 days?

(242) Find how many is nine times 987.

(243) A farmer sold 13 cows for 26 sovereigns each; how much money did he receive?

(244) If the Post Office sells 876504 stamps daily, how many does it issue in a week, omitting Sunday ?

(245) Add $472919 + 800316 + 92769 + 39603 + 157 + 3$ times one hundred and ninety nine.

(246) A train consists of six carriages in which are the following numbers of people 29, 57, 40, 11, 32 and 17 ; if 17 people now get into each of the carriages, how many passengers will there be altogether ?

(247) A wine merchant sells 5 dozen and 4 bottles on Monday, 2 dozen and six on Tuesday, 8 dozen and 7 on Wednesday, 4 dozen and 9 on Thursday, 5 dozen on Friday, and 7 dozen and 4 on Saturday. How many bottles does he sell ?

(248) Find the sum of $7906 + 1894 + 9046 + 5$ times 9897.

(249) Find the sum of 3 times 1198 + 4 times 4736 + 5 times 7968.

(250) Add together 5 dozen and 7, seven score and 12, 3 score, 5 dozen, seventy, 9046 and 4 times 7963.

SIMPLE SUBTRACTION.

(1)	(2)	(3)	(4)	(5)
396175	790215	79061	869724	920175
143023	340202	17329	345678	372998
<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
(6)	(7)	(8)	(9)	(10)
7509001	7213069	713061	456317	119808
3216968	1725968	293697	237629	115799
<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
(11)	(12)	(13)	(14)	(15)
1190967	302156	1180217	3159607	9211316
372969	179339	753699	2096185	9071608
<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
(16)	(17)	(18)	(19)	(20)
1706157	3906131	1103031	1590617	7201307
929159	672864	729682	365139	109109
<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
(21)	(22)	(23)	(24)	(25)
9012013	3061306	1901321	7031637	8902137
7296097	796588	973162	693796	958709
<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
(26)	(27)	(28)	(29)	(30)
3219063	13905572	10010100	15103302	15607131
1985197	9709907	3762007	7964209	5960073
<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
(31)	(32)	(33)	(34)	(35)
93213216	1000000	1010000	1010000	902169
70911569	17307	17968	599	2179
<hr/>	<hr/>	<hr/>	<hr/>	<hr/>

(36)	(37)	(38)	(39)	(40)
7103115	50050015	19020030	8012960	8621395
<u>37968</u>	<u>3123716</u>	<u>7216031</u>	<u>1390972</u>	<u>107099</u>

(41)	(42)	(43)	(44)	(45)
7152136	6036031	5960317	2906137	3031311
<u>372195</u>	<u>603932</u>	<u>1137129</u>	<u>728659</u>	<u>719191</u>

(46)	(47)	(48)	(49)	(50)
9010000	7156031	8603176	1001297	5090501
<u>2737</u>	<u>90937</u>	<u>1276959</u>	<u>20988</u>	<u>509055</u>

(51)	3010926 -	289576	(76)	104014041 -	103015032
(52)	2920156 -	1796328	(77)	37216003 -	18197314
(53)	10904032 -	7206315	(78)	143027303 -	111219375
(54)	7005168 -	2456789	(79)	27061325 -	26394087
(55)	3721604 -	3216034	(80)	101316072 -	99289119
(56)	21902308 -	17526319	(81)	92096001 -	56263179
(57)	9076308 -	4444576	(82)	102201030 -	100210034
(58)	38075154 -	29307265	(83)	79005167 -	38214039
(59)	7960012 -	7115092	(84)	68042316 -	32370197
(60)	10210301 -	3450032	(85)	301310300 -	300301310
(61)	11506308 -	7308075	(86)	70132301 -	35196804
(62)	90090090 -	45450176	(87)	13030316 -	12076947
(63)	11010010 -	2070030	(88)	86001115 -	75330697
(64)	15190002 -	7216036	(89)	72400156 -	36036384
(65)	9076318 -	6394479	(90)	157902137 -	146897386
(66)	3114071 -	2009318	(91)	732001706 -	394800796
(67)	16003007 -	15004009	(92)	1102331755 -	928696318
(68)	2310056 -	1584049	(93)	20010011 -	9050012
(69)	137006003 -	128900314	(94)	73106101 -	38209504
(70)	75101101 -	70102012	(95)	11210060 -	7109755
(71)	36303307 -	15025189	(96)	83083830 -	7905799
(72)	150013306 -	150009198	(97)	67231310 -	38445556
(73)	77210318 -	66013189	(98)	92001100 -	74390104
(74)	9001010 -	7003890	(99)	10000131 -	703506
(75)	40146036 -	36310075	(100)	9980313 -	7998414

- | | | | |
|-------|-----------------------|-------|-----------------------|
| (101) | 13213203 - 10406007 | (139) | 111311301 - 92195057 |
| (102) | 1974013 - 596831 | (140) | 801108180 - 707009181 |
| (103) | 11901080 - 3704925 | (141) | 79103070 - 69244069 |
| (104) | 71217036 - 37385942 | (142) | 929176003 - 920079104 |
| (105) | 300149 - 290318 | (143) | 378684311 - 279695512 |
| (106) | 701316 - 355907 | (144) | 606600060 - 376601075 |
| (107) | 109109108 - 107109109 | (145) | 723005176 - 159694307 |
| (108) | 37041010 - 36542317 | (146) | 180172019 - 795099 |
| (109) | 92092087 - 90092088 | (147) | 316217318 - 298889566 |
| (110) | 11211021 - 7209364 | (148) | 101103035 - 9207048 |
| (111) | 90216316 - 79118495 | (149) | 96131503 - 79237495 |
| (112) | 50713036 - 24385197 | (150) | 880180170 - 793156028 |
| (113) | 30101715 - 29187697 | (151) | 405107136 - 113133139 |
| (114) | 101371115 - 98343907 | (152) | 70770700 - 37179699 |
| (115) | 90137215 - 75196899 | (153) | 108110103 - 9203746 |
| (116) | 110101010 - 57920763 | (154) | 75001308 - 69071497 |
| (117) | 30902117 - 23796118 | (155) | 100000000 - 361564 |
| (118) | 13907113 - 9908014 | (156) | 970302060 - 599316185 |
| (119) | 141013076 - 139618079 | (157) | 30143137 - 29137139 |
| (120) | 101131006 - 80037907 | (158) | 72113063 - 38038197 |
| (121) | 90603715 - 72096318 | (159) | 68019079 - 67019089 |
| (122) | 13603306 - 8729039 | (160) | 313111306 - 169015709 |
| (123) | 10901709 - 9796384 | (161) | 10000101 - 7356180 |
| (124) | 9026013 - 7927026 | (162) | 8131047 - 7295368 |
| (125) | 8000010 - 6000734 | (163) | 90215715 - 45363808 |
| (126) | 101031316 - 77139489 | (164) | 11002115 - 7319009 |
| (127) | 40132017 - 3096219 | (165) | 7000000 - 35060 |
| (128) | 30913714 - 9296847 | (166) | 301207139 - 175809296 |
| (129) | 19600131 - 7963804 | (167) | 207139015 - 63726159 |
| (130) | 20121010 - 17315804 | (168) | 743443144 - 373144967 |
| (131) | 356017091 - 299009098 | (169) | 807126026 - 545928397 |
| (132) | 796030205 - 259383769 | (170) | 130207139 - 73160289 |
| (133) | 130716902 - 29609965 | (171) | 75103724 - 69385596 |
| (134) | 702136005 - 15096387 | (172) | 809195443 - 374579867 |
| (135) | 509308180 - 272197990 | (173) | 455173226 - 299407329 |
| (136) | 110010101 - 5703097 | (174) | 111223445 - 63796876 |
| (137) | 715132177 - 696928969 | (175) | 152173106 - 78369459 |
| (138) | 404040400 - 393390716 | (176) | 990316104 - 729457967 |

(177)	127108316 - 94094397	(189)	601106016 - 365365065
(178)	19190019 - 7191197	(190)	72013018 - 35316077
(179)	203230023 - 23033033	(191)	109901010 - 77868037
(180)	171698107 - 17180538	(192)	56312312 - 56311409
(181)	3100031 - 300043	(193)	700000000 - 375000031
(182)	987654321 - 123456789	(194)	80310036 - 16494729
(183)	16025713 - 13417839	(195)	790101010 - 5964318
(184)	706310301 - 387495696	(196)	108304040 - 72405043
(185)	118413106 - 92307297	(197)	60000100 - 572130
(186)	363036066 - 167366059	(198)	312137311 - 46439728
(187)	57570057 - 50868318	(199)	109090137 - 79393089
(188)	10010010 - 9007035	(200)	55103301 - 47013907

(201) Find the difference between 7296 and 4053.

(202) From 8697 take 3245.

(203) How many is 70211 more than 17345?

(204) Take 29388 from 92176.

(205) Find the difference of thirty one thousand three hundred and seventy, and twelve thousand nine hundred and seventy six.

(206) From eighty six thousand and twenty one, take six thousand seven hundred and seven.

(207) Take thirty nine thousand six hundred and fifty nine, from seventy nine thousand five hundred and eight.

(208) Out of forty thousand one hundred and twenty one troops, twelve thousand nine hundred and thirty seven were cavalry; how many others were there?

(209) Sold 16789 bricks out of thirty thousand one hundred and twenty seven; what number was left?

(210) Eleven thousand and ninety one persons visited an exhibition, of whom nine thousand six hundred and ninety seven paid for admission. How many went free?

(211) From 39002 take twice 14307.

(212) Of an estate of 80211 acres, 41173 acres are arable, the rest being pasture land. How much grass land was there?

(213) If Oldham has 79061 inhabitants, and Stalybridge 36973, how many has one more than the other ?

(214) Out of an army of forty thousand men, 30012 are ordered on foreign service; how many remain at home ?

(215) A game dealer sells seven and a half brace of partridges out of three dozen brace received; how many has he on hand ?

(216) If in a school of 368 boys, 93 are admitted and 79 leave during the year, how many remain on the books ?

(217) Take thirty two thousand eight hundred and sixty four from seven hundred thousand three hundred and eleven.

(218) Subtract 79869 from 119926.

(219) One city contains 302136 people, another 172969; how many has one more than the other ?

(220) From 806113 take three times 173697.

(221) A merchant received at various times 31, 84, 96, 107, 509, 71 and 38 casks, and sold 47, 340, 49 and 87; how many has he remaining ?

(222) A nobleman purchases an estate for £31,068 and lays out £2964 on drainage; what was the entire cost ?

(223) From the sum of 11, 1096, 2007, 855 and 97 take the sum of 43, 108, 969, 2136 and 384.

(224) Take 326908 from 501207.

(225) A population of 5702139 was left in a country after 321695 had emigrated; what number was there at first ?

(226) A well discharges 100120 gallons of water a day, of which 71029 are used. How many gallons run to waste ?

(227) A tradesman owes £3037 and pays £1548; what is still owing ?

(228) From two millions nine hundred and six thousand one hundred and thirteen, take four hundred and ninety three thousand six hundred and seven.

(229) Find the value of $51 + 17 + 93 - 69$.

(230) Find the value of $1703116 - 751897$.

(231) A draper bought three lots of calico measuring 5916, 8014 and 11129 yards, and sold 9697 yards; what had he remaining in stock?

(232) Take 59016 from the sum of $11706 + 389 + 57698 + 327 + 1020$.

(233) Add together 591638 and 47958 and from the sum take thirty one thousand thirty one hundred and thirteen.

(234) Of 860213 acres, two hundred and seventy three thousand six hundred and ninety seven are waste land; how many acres are cultivated?

(235) Add 7 dozen, 3 hundred, 6 score and twelve and 5109, and from this sum take 5299.

(236) From 121314 take 3 times 10302.

(237) What is left after taking 73699 from 902176?

(238) Out of a million of people 30630 people die annually; how many remain?

(239) Take eight hundred and thirty seven thousand and twenty nine from seven millions one hundred and fifty thousand six hundred and thirty one.

(240) What number added to 729069 will give 6940613?

(241) How many is 8321658 more than 1706579?

(242) Which is the greater and by how many, 3 times 119 or 4 times 89?

(243) A boy was born in 1869, what is his age in 1878?

(244) The Indian mutiny took place in 1857; how many years was that before 1878?

(245) A person writing in 1849 says the battle of Waterloo took place 34 years ago: find the date of the battle.

(246) From the sum of six millions nine hundred and sixty thousand three hundred and twelve, nine millions twenty one thousand one hundred and thirty one, and one million twenty one thousand four hundred and six, take the sum of seven hundred and fifty nine thousand eight hundred and sixty four, two millions one hundred and ninety six thousand three hundred and seventy five, and seven hundred and twenty nine thousand six hundred and eighty four.

(247) By how many does 40169 exceed four times 2998?

(248) Find the value of $1506 - 386 + 496 + 7031 - 3269 - 314 + 590$.

(249) From a piece of silk measuring 301 yards the following lengths were cut: 16 yards, 11 yds, 11 yds, 18 yds, 15 yds, 13 yds, 13 yds, 16 yds, 17 yds, 17 yds, 24 yds, 23 yds, 29 yds, and 34 yds; what length remained?

(250) From 9 times 3099 take 7 times 1997.

SIMPLE MULTIPLICATION.

(1) 3721695 × 2	(31) 19579 × 123	(61) 6978954 × 7081
(2) " × 3	(32) " × 345	(62) " × 3906
(3) " × 4	(33) " × 678	(63) " × 5402
(4) " × 5	(34) " × 907	(64) 729637 × 3750
(5) " × 6	(35) 926985 × 709	(65) " × 2468
(6) " × 7	(36) " × 876	(66) " × 9027
(7) " × 8	(37) " × 543	(67) 869109 × 9080
(8) " × 9	(38) " × 205	(68) " × 3700
(9) 8976543 × 2	(39) 6963519 × 1234	(69) " × 5640
(10) " × 3	(40) " × 2056	(70) 372954 × 6809
(11) " × 4	(41) " × 6570	(71) " × 7003
(12) " × 5	(42) " × 8090	(72) " × 8245
(13) " × 6	(43) 79056 × 2345	(73) 5931768 × 2037
(14) " × 7	(44) " × 6789	(74) " × 7050
(15) " × 8	(45) " × 7065	(75) " × 8009
(16) " × 9	(46) " × 9107	(76) " × 4402
(17) 579609 × 10	(47) 694857 × 79	(77) 73908 × 5967
(18) " × 100	(48) " × 86	(78) " × 8043
(19) " × 1000	(49) " × 53	(79) 51783 × 9682
(20) " × 20	(50) " × 490	(80) " × 7350
(21) " × 50	(51) 72158 × 96	(81) 90217 × 8690
(22) " × 600	(52) " × 84	(82) " × 5704
(23) " × 9000	(53) " × 75	(83) " × 2395
(24) " × 70	(54) " × 42	(84) 159607 × 7958
(25) 921939 × 12	(55) " × 103	(85) " × 3640
(26) " × 23	(56) 569437 × 885	(86) 92375 × 5438
(27) " × 45	(57) " × 790	(87) " × 2795
(28) " × 67	(58) " × 986	(88) 672976 × 209
(29) " × 89	(59) " × 513	(89) " × 789
(30) " × 997	(60) " × 479	(90) " × 5006

(91)	705968 × 357	(114)	82754 × 2754	(137)	71965 × 8076
(92)	„ × 879	(115)	„ × 6890	(138)	„ × 7203
(93)	„ × 2405	(116)	„ × 3007	(139)	37298 × 8806
(94)	„ × 6069	(117)	928417 × 8300	(140)	„ × 9095
(95)	721563 × 7005	(118)	„ × 9405	(141)	„ × 7203
(96)	„ × 5906	(119)	„ × 7229	(142)	„ × 5420
(97)	„ × 8043	(120)	„ × 6208	(143)	690875 × 3240
(98)	912736 × 927	(121)	79163 × 7916	(144)	„ × 4076
(99)	„ × 608	(122)	„ × 8907	(145)	„ × 9028
(100)	„ × 5430	(123)	„ × 3728	(146)	„ × 5609
(101)	7215698 × 3007	(124)	„ × 6980	(147)	290377 × 6607
(102)	„ × 5098	(125)	97209 × 5603	(148)	„ × 8270
(103)	„ × 3201	(126)	„ × 4009	(149)	„ × 5059
(104)	99278 × 8837	(127)	„ × 7021	(150)	„ × 3009
(105)	„ × 5916	(128)	„ × 8002	(151)	6976 × 6976
(106)	„ × 4408	(129)	69587 × 8300	(152)	3884 × 3884
(107)	50764 × 5076	(130)	„ × 9007	(153)	9608 × 9608
(108)	„ × 3081	(131)	„ × 6050	(154)	5327 × 5327
(109)	„ × 4932	(132)	„ × 4706	(155)	7209 × 7209
(110)	„ × 2069	(133)	93285 × 3007	(156)	9987 × 9987
(111)	78134 × 8130	(134)	„ × 6900	(157)	6245 × 6245
(112)	„ × 4700	(135)	„ × 8052	(158)	8796 × 8796
(113)	„ × 3965	(136)	71965 × 9045	(159)	1234 × 1234

(160)	5678 × 5678	(175)	5703 × 5703 × 5703
(161)	125 × 125 × 125	(176)	9876 × 9876 × 9876
(162)	694 × 694 × 694	(177)	876 × 876 × 876
(163)	721 × 721 × 721	(178)	765 × 765 × 765
(164)	699 × 699 × 699	(179)	6009 × 6009 × 6009
(165)	856 × 856 × 856	(180)	3729 × 3729 × 3729
(166)	308 × 308 × 308	(181)	678 × 678 × 678 × 678
(167)	795 × 795 × 795	(182)	987 × 987 × 987 × 987
(168)	865 × 865 × 865	(183)	305 × 305 × 305 × 305
(169)	372 × 372 × 372	(184)	609 × 609 × 609 × 609
(170)	999 × 999 × 999	(185)	869 × 869 × 869 × 869
(171)	1234 × 1234 × 1234	(186)	908 × 908 × 908 × 908
(172)	4567 × 4567 × 4567	(187)	988 × 988 × 988 × 988
(173)	7079 × 7079 × 7079	(188)	3271 × 3271 × 3271 × 3271
(174)	8907 × 8907 × 8907	(189)	8004 × 8004 × 8004 × 8004

(190)	$9999 \times 9999 \times 9999 \times 9999$	(229)	69211×5750
(191)	37219678×907006	(230)	„ $\times 1850$
(192)	8219543×700761	(231)	„ $\times 1625$
(193)	7051136×903106	(232)	48211×168
(194)	6644585×437980	(233)	„ $\times 324$
(195)	7040957×900700	(234)	„ $\times 8016$
(196)	6789123×721369	(235)	„ $\times 968$
(197)	5947687×956072	(236)	„ $\times 847$
(198)	6784365×446709	(237)	79306×505
(199)	8097653×580039	(238)	„ $\times 903$
(200)	9927869×796030	(239)	„ $\times 186$
(201)	47031×25	(240)	„ $\times 7212$
(202)	„ $\times 250$	(241)	„ $\times 5511$
(203)	„ $\times 50$	(242)	49607×819
(204)	„ $\times 20$	(243)	„ $\times 729$
(205)	„ $\times 75$	(244)	„ $\times 213$
(206)	„ $\times 125$	(245)	„ $\times 444$
(207)	379601×500	(246)	„ $\times 648$
(208)	„ $\times 125$	(247)	79382×8811
(209)	„ $\times 75$	(248)	„ $\times 819$
(210)	„ $\times 625$	(249)	„ $\times 963$
(211)	„ $\times 375$	(250)	„ $\times 567$
(212)	49067×250	(251)	„ $\times 497$
(213)	„ $\times 675$	(252)	56038×1188
(214)	„ $\times 1250$	(253)	„ $\times 2360$
(215)	„ $\times 5000$	(254)	„ $\times 605$
(216)	„ $\times 12500$	(255)	„ $\times 728$
(217)	92684×625	(256)	„ $\times 546$
(218)	„ $\times 750$	(257)	721306×125
(219)	„ $\times 375$	(258)	„ $\times 625$
(220)	„ $\times 225$	(259)	„ $\times 12500$
(221)	„ $\times 1750$	(260)	„ $\times 750$
(222)	47076×250	(261)	„ $\times 8125$
(223)	„ $\times 9250$	(262)	47291×324
(224)	„ $\times 1750$	(263)	„ $\times 486$
(225)	„ $\times 450$	(264)	„ $\times 546$
(226)	„ $\times 525$	(265)	„ $\times 427$
(227)	69211×325	(266)	„ $\times 5490$
(228)	„ $\times 475$	(267)	83294×8750

(268)	83294 × 4970	(285)	4721 × 25
(269)	„ × 1375	(286)	„ × 99
(270)	„ × 426	(287)	„ × 8190
(271)	„ × 847	(288)	„ × 56284
(272)	4095 × 8421	(289)	4315 × 9300
(273)	„ × 357	(290)	„ × 56700
(274)	„ × 9680	(291)	„ × 639
(275)	„ × 3240	(292)	„ × 110555
(276)	„ × 1550	(293)	„ × 4411
(277)	8724 × 1560	(294)	8729 × 36186
(278)	„ × 28567	(295)	„ × 4080
(279)	„ × 42217	(296)	„ × 13212
(280)	„ × 35700	(297)	„ × 84213
(281)	„ × 999	(298)	„ × 99999
(282)	„ × 2790	(299)	14207 × 125
(283)	„ × 48600	(300)	„ × 98497
(284)	„ × 2550		

- (301) Find the difference of 36 times 35 and 35 times 34.
- (302) Find the sum of $9887 + 9887 + 9887 + 9887 + 9887$.
- (303) Multiply seventy six thousand and three by three hundred and nine.
- (304) If an acre of land contains 4840 square yards, how many yards are there in 17 acres?
- (305) Find the cost of 18 tons of iron at £7 per ton.
- (306) Wheat is sold at £3 per quarter; what is the value of 93 quarters?
- (307) Multiply 30 times 79 by 43 times 114.
- (308) How many added to 36 times 73 will give 3000?
- (309) How far will a train travelling 45 miles an hour run in 8 hours if an hour is consumed in stoppages?
- (310) What is the cost of a barrel containing 36 gallons of ale at 2s. a gallon?
- (311) What is the weight of a train of 18 trucks each weighing 14 tons and an engine weighing 65 tons

- (312) Multiply 309975 by 3897.
- (313) There are 1760 yards in a mile: how far has a man to go to complete 5 miles if he has already walked 3 miles and 128 yards?
- (314) How many feet of fencing is required for seven fields each 4729 feet round?
- (315) If in each of 58 barrels there are 36 gallons, how many gallons in all?
- (316) A box contained 198 oranges; how many oranges are there in 326 such boxes?
- (317) Add $476 + 369 + 817$ and multiply the sum by 23.
- (318) Each of the 40 counties of England contains one with the other 686591 people. What is the population of England?
- (319) How many is $769 \times 358 \times 501$?
- (320) Each of 17 workmen earns £3 per week. What sum will pay them for a year, there being 52 weeks in a year?
- (321) How many is 3 score and 7 multiplied by 71?
- (322) Multiply 497 by 4 dozen and 6.
- (323) Find the continued product 2.3.4.5.6.7.8 and 9.
- (324) How many hours are there in 365 days, if each day has 24 hours?
- (325) How many hours are there in 6 weeks and 5 days?
- (326) Subtract 3969 from 10000 and multiply the remainder by 87.
- (327) Find the product of $37 \times 27 \times 111$.
- (328) To what sum does 91 times £335 amount?
- (329) Sold 23 horses at £61 each, 29 at £87 each, and 46 at £37 each: to how much money does this amount?
- (330) *A* has 3 times £28 and pays *B* £42, *B* has 4 times £29 and pays *A* £36. How much has one more than the other?
- (331) Multiply 34968 by 1300006.
- (332) Find the value of $376 + 596 - 387 + 226 - 138$, and multiply the result by 490.

- (333) Find the weight of 106 chests of tea each 96 lbs.
- (334) How many matches are there in 337 boxes each containing 125?
- (335) From the sum of $363 + 598 + 198$ take 3 times 179, and multiply the result by 114.
- (336) If 87 times 49 be taken away from five thousand four hundred and six, how many will remain?
- (337) There are 112 lbs. in a hundredweight of coal: how many lbs. in 19 hundredweights and 13 lbs.?
- (338) Multiply 37 times 27 by 8100.
- (339) A book has 375 pages, 36 lines on a page and 83 letters in a line: how many letters in the whole book?
- (340) How many lines are there in a copy-book of 12 leaves if each page has 9 lines?
- (341) What number is 6 times the product of 1096×18 ?
- (342) The engines on a railway consume 1573 tons of coke daily: how many tons will last them a year (365 days)?
- (343) If 1323116 letters pass through the post daily, how many is that in a year?
- (344) How many yards of cloth are there in 37 bundles, each bundle containing 27 pieces and each piece 150 yards?
- (345) Find the continued product of 8, 25, 40 and 125.
- (346) After subtracting 1470 twenty nine times from half a million, what remains?
- (347) Multiply 3809 times 3808 by 3807.
- (348) Find the value of $496 + 729 + 315 - 1368$, multiplied by 33.
- (349) From 114 times 3369 take 11 times the product of 159×36 .
- (350) If 36 shares in a railway worth £139 each, and 114 shares valued at £79 be sold, and the proceeds applied to the purchase of 40 houses at £350 each, what sum would remain?

SIMPLE DIVISION.

(1)	2916438 ÷ 2	(31)	99875031 ÷ 8	(61)	7146213 ÷ 40
(2)	" ÷ 3	(32)	" ÷ 9	(62)	" ÷ 50
(3)	" ÷ 4	(33)	52163847 ÷ 2	(63)	" ÷ 60
(4)	" ÷ 5	(34)	" ÷ 3	(64)	" ÷ 70
(5)	" ÷ 6	(35)	" ÷ 4	(65)	" ÷ 80
(6)	" ÷ 7	(36)	" ÷ 5	(66)	" ÷ 90
(7)	" ÷ 8	(37)	" ÷ 6	(67)	3916476 ÷ 16
(8)	" ÷ 9	(38)	" ÷ 7	(68)	" ÷ 25
(9)	75061382 ÷ 2	(39)	" ÷ 8	(69)	" ÷ 35
(10)	" ÷ 3	(40)	" ÷ 9	(70)	" ÷ 81
(11)	" ÷ 4	(41)	31020761 ÷ 2	(71)	" ÷ 56
(12)	" ÷ 5	(42)	" ÷ 3	(72)	8213964 ÷ 15
(13)	" ÷ 6	(43)	" ÷ 4	(73)	" ÷ 18
(14)	" ÷ 7	(44)	" ÷ 5	(74)	" ÷ 24
(15)	" ÷ 8	(45)	" ÷ 6	(75)	" ÷ 14
(16)	" ÷ 9	(46)	" ÷ 7	(76)	" ÷ 36
(17)	47316928 ÷ 2	(47)	" ÷ 8	(77)	2156903 ÷ 49
(18)	" ÷ 3	(48)	" ÷ 9	(78)	" ÷ 72
(19)	" ÷ 4	(49)	" ÷ 10	(79)	" ÷ 84
(20)	" ÷ 5	(50)	82151583 ÷ 2	(80)	" ÷ 110
(21)	" ÷ 6	(51)	" ÷ 3	(81)	" ÷ 50
(22)	" ÷ 7	(52)	" ÷ 4	(82)	5713860 ÷ 21
(23)	" ÷ 8	(53)	" ÷ 5	(83)	" ÷ 54
(24)	" ÷ 9	(54)	" ÷ 6	(84)	" ÷ 99
(25)	99875031 ÷ 2	(55)	" ÷ 7	(85)	" ÷ 63
(26)	" ÷ 3	(56)	" ÷ 8	(86)	" ÷ 108
(27)	" ÷ 4	(57)	" ÷ 9	(87)	8414948 ÷ 42
(28)	" ÷ 5	(58)	" ÷ 10	(88)	" ÷ 66
(29)	" ÷ 6	(59)	7146213 ÷ 20	(89)	" ÷ 81
(30)	" ÷ 7	(60)	" ÷ 30	(90)	" ÷ 144

(91)	8414948 ÷ 27	(130)	790613825 ÷ 23
(92)	7146031 ÷ 64	(131)	„ ÷ 29
(98)	„ ÷ 121	(132)	„ ÷ 31
(94)	„ ÷ 120	(133)	„ ÷ 47
(95)	„ ÷ 32	(134)	„ ÷ 53
(96)	„ ÷ 56	(135)	„ ÷ 79
(97)	5621103 ÷ 77	(136)	„ ÷ 83
(98)	„ ÷ 64	(137)	926104513 ÷ 37
(99)	„ ÷ 81	(138)	„ ÷ 89
(100)	„ ÷ 108	(139)	„ ÷ 97
(101)	„ ÷ 28	(140)	„ ÷ 51
(102)	4461387 ÷ 18	(141)	„ ÷ 86
(103)	„ ÷ 21	(142)	„ ÷ 76
(104)	„ ÷ 22	(143)	„ ÷ 103
(105)	„ ÷ 96	(144)	„ ÷ 123
(106)	„ ÷ 132	(145)	„ ÷ 217
(107)	7153961 ÷ 75	(146)	„ ÷ 71
(108)	„ ÷ 105	(147)	371321617 ÷ 613
(109)	„ ÷ 98	(148)	„ ÷ 439
(110)	„ ÷ 144	(149)	„ ÷ 546
(111)	„ ÷ 512	(150)	„ ÷ 729
(112)	8471635 ÷ 140	(151)	„ ÷ 113
(113)	„ ÷ 175	(152)	58469613 ÷ 441
(114)	„ ÷ 180	(153)	„ ÷ 961
(115)	„ ÷ 192	(154)	„ ÷ 308
(116)	„ ÷ 126	(155)	„ ÷ 139
(117)	6901213 ÷ 840	(156)	„ ÷ 193
(118)	„ ÷ 1008	(157)	70213169 ÷ 473
(119)	„ ÷ 960	(158)	„ ÷ 886
(120)	„ ÷ 462	(159)	„ ÷ 947
(121)	„ ÷ 240	(160)	„ ÷ 314
(122)	2159063 ÷ 729	(161)	„ ÷ 713
(123)	„ ÷ 189	(162)	61201793 ÷ 806
(124)	„ ÷ 441	(163)	„ ÷ 795
(125)	„ ÷ 432	(164)	„ ÷ 446
(126)	„ ÷ 625	(165)	„ ÷ 718
(127)	790613825 ÷ 13	(166)	„ ÷ 553
(128)	„ ÷ 17	(167)	71903864 ÷ 83
(129)	„ ÷ 19	(168)	„ ÷ 87

(169)	71903864 ÷ 89	(208)	596802 ÷ 1100
(170)	46582113 ÷ 111	(209)	” ÷ 5760
(171)	” ÷ 173	(210)	” ÷ 218
(172)	” ÷ 189	(211)	472169 ÷ 5900
(173)	51647901 ÷ 79	(212)	” ÷ 1875
(174)	” ÷ 59	(213)	” ÷ 16230
(175)	” ÷ 99	(214)	” ÷ 11090
(176)	71620151 ÷ 123	(215)	” ÷ 512
(177)	” ÷ 193	(216)	721906 ÷ 440
(178)	” ÷ 118	(217)	” ÷ 8860
(179)	713061311 ÷ 793	(218)	” ÷ 225
(180)	” ÷ 864	(219)	” ÷ 1960
(181)	” ÷ 773	(220)	” ÷ 1728
(182)	49031702 ÷ 849	(221)	591608 ÷ 99
(183)	” ÷ 663	(222)	” ÷ 999
(184)	” ÷ 979	(223)	” ÷ 9999
(185)	8861594 ÷ 1026	(224)	” ÷ 728
(186)	” ÷ 921	(225)	” ÷ 5190
(187)	” ÷ 5149	(226)	4483162 ÷ 592
(188)	47603136 ÷ 2149	(227)	” ÷ 11600
(189)	” ÷ 847	(228)	” ÷ 5780
(190)	” ÷ 3016	(229)	” ÷ 3169
(191)	39176034 ÷ 5968	(230)	” ÷ 34460
(192)	” ÷ 3916	(231)	51980631 ÷ 19890
(193)	72041358 ÷ 9215	(232)	” ÷ 3735
(194)	” ÷ 7203	(233)	” ÷ 6620
(195)	86043759 ÷ 7128	(234)	” ÷ 975
(196)	” ÷ 3999	(235)	” ÷ 448
(197)	46021307 ÷ 8295	(236)	11021031 ÷ 2997
(198)	” ÷ 4601	(237)	” ÷ 1268
(199)	7391684 ÷ 9999	(238)	” ÷ 115700
(200)	” ÷ 5734	(239)	” ÷ 30870
(201)	3721690 ÷ 57	(240)	” ÷ 69380
(202)	” ÷ 89	(241)	1961381 ÷ 125
(203)	” ÷ 990	(242)	” ÷ 250
(204)	” ÷ 510	(243)	” ÷ 500
(205)	” ÷ 119	(244)	” ÷ 18750
(206)	596802 ÷ 87	(245)	” ÷ 1125
(207)	” ÷ 1002	(246)	7284364 ÷ 476

(247)	7284364 ÷ 1482	(274)	580844 ÷ 425
(248)	” ÷ 119	(275)	” ÷ 840
(249)	” ÷ 1119	(276)	236916 ÷ 78912
(250)	” ÷ 358	(277)	” ÷ 1760
(251)	7204561 ÷ 99	(278)	” ÷ 1728
(252)	” ÷ 999	(279)	” ÷ 9989
(253)	” ÷ 9999	(280)	” ÷ 9999
(254)	” ÷ 9990	(281)	558844 ÷ 6480
(255)	” ÷ 9900	(282)	” ÷ 5040
(256)	4721621 ÷ 25	(283)	” ÷ 512
(257)	” ÷ 50	(284)	” ÷ 5670
(258)	” ÷ 75	(285)	” ÷ 729
(259)	” ÷ 125	(286)	456835 ÷ 250
(260)	” ÷ 500	(287)	” ÷ 475
(261)	4921608 ÷ 125	(288)	” ÷ 225
(262)	” ÷ 675	(289)	” ÷ 350
(263)	” ÷ 525	(290)	” ÷ 488
(264)	” ÷ 6750	(291)	4903126 ÷ 189
(265)	” ÷ 1625	(292)	” ÷ 1857
(266)	9021363 ÷ 540	(293)	” ÷ 219
(267)	” ÷ 630	(294)	” ÷ 365
(268)	” ÷ 888	(295)	” ÷ 730
(269)	” ÷ 968	(296)	5916021 ÷ 125
(270)	” ÷ 14150	(297)	” ÷ 999
(271)	580844 ÷ 99	(298)	” ÷ 15063
(272)	” ÷ 999	(299)	” ÷ 7209
(273)	” ÷ 175	(300)	” ÷ 84007

(301) How often is 98 contained in 98980 ?

(302) From the third part of 4791 take 1148.

(303) How often may 903 be taken from ten millions five hundred and sixty eight thousand seven hundred and twelve ?

(304) What number is that which divided by 269 gives 47903 as quotient ?

(305) How many times is 1179 contained in 87690315 ?

(306) What is the 24th part of £19296 ?

- (307) If £30311 be divided into 17 equal parts, what is the amount of one?
- (308) How many dozens of wine are there in 879576 bottles?
- (309) In 1728 scores how many dozens?
- (310) The death rate of a town containing 120000 people is 22 per thousand in the year. How many remain?
- (311) How many times is 37 contained in 999999?
- (312) Sound travels at the rate of 1132 feet a second: how long would it take to travel 5660 feet?
- (313) Find the value of $306 + 90571 \div 28$.
- (314) Find the continued product of 71, 86, 19 and 34, and divide the result by the third part of 69.
- (315) A certain number on being divided by 987 gives 436 as quotient and 23 remainder; what is the number?
- (316) If the dividend be 1130787 and the quotient 12159, what is the divisor?
- (317) If the divisor be 394, the quotient 495 and the remainder 33, what is the dividend?
- (318) How many times may 377 be subtracted from 3808077?
- (319) How many hundred-weights of coal each weighing 112 lbs. (pounds) are there in 50 tons, each weighing 2240 lbs.?
- (320) A quantity of blue serge contained in 98 pieces of 69 yards each, is given out to make up into clothing for 729 sailors. If each man has an exact number of yards, how many will be returned?
- (321) Find the number of quarters in 7023 pecks, if each quarter contains eight bushels of four pecks each.
- (322) Divide 5906 into three parts so that one shall be 203 more than either of the others.
- (323) How many tons of hay at 9 half-sovereigns the ton may be bought for £261?
- (324) From 318015 take 4968, and divide the remainder into 9 equal parts.

- (325) Find the 48th part of 477 times 192.
- (326) A barrel of ale contains 36 gallons each 8 pints. How many dozen pint bottles may be filled from it?
- (327) Multiply the thirty seventh part of 9990 by 13 times the third part of 48.
- (328) Find the sum of the sum, difference, product and quotient of 667 and 29.
- (329) The expense of cutting a road was £11963, and of making a bridge £4768, and is to be borne equally by nine parishes. What is the share of each parish?
- (330) How many times is £17 contained in £459?
- (331) Divide 30401 by 301 and multiply the result by 399.
- (332) How many times 4791 is 4853283?
- (333) What number multiplied by 789 will produce 3771420?
- (334) How many pounds of sugar at 5*d.* can be bought for 330 pence?
- (335) *A* and *B* started from the same place going in the same direction; *A* travelled on horseback 51940 feet, while *B* on foot went one-fourth of the distance: how far were they then apart?
- (336) How many gallons of whiskey at 23*s.* per gallon may be bought for 621*s.*?
- (337) Divide the half of 906138 by the 5th part of 10825.
- (338) From the sum of $5367 + 1926 + 899$ take 4791, and divide the remainder by 13.
- (339) How many gross are there in 37 dozen, 15 score, and 8 times 15 articles?
- (340) The attendance at a school was 946 on Monday, 819 on Tuesday, 920 on Wednesday, 897 on Thursday, and 888 on Friday: what was the average number for the five days?
- (341) Four sorts of brandy at 28*s.*, 32*s.*, 29*s.* and 43*s.* per gallon are blended in equal quantities: at what price per gallon should the mixture be sold?

(342) If the quotient be 49769 and divisor 362, what is the dividend?

(343) If the dividend be 9096256 and the quotient 3016, what is the divisor?

(344) Divide 43813578 by three times the half of 292.

(345) What number is contained 3169 times in 128991450, leaving a remainder of 474?

(346) Find the value of 7 times £314 + 5 times £468 - 6 times £48; and divide the result by 5.

(347) John has 100 marbles; if he had 8 more he would have exactly six times as many as the half of what Henry has: how many has Henry?

(348) Divide 900 into two parts so that one may be 62 more than the other.

(349) Which is the greater, and by how many; 34 times 27, or the 37th part of 999999?

(350) What number less than 365 added to 730320 will make the number exactly divisible by 365?

REDUCTION OF MONEY.

- | | | | | | |
|------|--------|-----------|-----------------|----------------|--|
| (1) | Reduce | £13 | to | shillings. | |
| (2) | ” | £19. 16 | 0 | to shillings. | |
| (3) | ” | £17. 13 | 0 | ” | |
| (4) | ” | £103. 19 | 0 | ” | |
| (5) | ” | £7. 2 | 6 | to pence. | |
| (6) | ” | £9. 9. | 8 | ” | |
| (7) | ” | £13. 12. | 7 | ” | |
| (8) | ” | £19. 16. | 4 | ” | |
| (9) | ” | £116. 14. | 4 | ” | |
| (10) | ” | £73. 12. | 5 | ” | |
| (11) | ” | £5. 0. | 11 | ” | |
| (12) | ” | £3. 6. | 8 | to half-pence. | |
| (13) | ” | £4. 7. | $6\frac{1}{2}$ | ” | |
| (14) | ” | £0. 13. | $5\frac{1}{2}$ | ” | |
| (15) | ” | £19. 0. | $9\frac{1}{4}$ | to farthings. | |
| (16) | ” | £3. 17. | $10\frac{1}{2}$ | ” | |
| (17) | ” | £4. 3. | $5\frac{1}{4}$ | ” | |
| (18) | ” | £6. 16. | $10\frac{3}{4}$ | ” | |
| (19) | ” | £17. 13. | $9\frac{1}{4}$ | ” | |
| (20) | ” | £9. 11. | $10\frac{1}{2}$ | ” | |
| (21) | ” | £8. 13. | $7\frac{3}{4}$ | ” | |
| (22) | ” | £114. 7. | $9\frac{1}{2}$ | ” | |
| (23) | ” | £38. 6. | $9\frac{3}{4}$ | ” | |
| (24) | ” | £111. 0. | $9\frac{1}{4}$ | ” | |
| (25) | ” | £92. 8. | $0\frac{1}{2}$ | ” | |
| (26) | ” | £17. 7. | 6 | to pence. | |
| (27) | ” | £3. 0. | 3 | ” | |
| (28) | ” | £1. 19. | $5\frac{1}{2}$ | to half-pence. | |
| (29) | ” | £6. 13. | 2 | ” | |
| (30) | ” | £108. 16. | $4\frac{1}{2}$ | ” | |

- (31) Reduce £7. 7. 6 to sixpences.
 (32) " £8. 9. 9 " threepences.
 (33) " £5. 8. 4 " pence.
 (34) " £17. 4. 8 " fourpences.
 (35) " £9. 16. 9 " threepences.
 (36) " £0. 19. 4 " twopences.
 (37) " £19. 9. 4 " fourpences.
 (38) " £7. 3. 8 " "
 (39) " £6. 16. 0 " "
 (40) " £0. 18. 9 " threepences.
 (41) " £7. 14. 0 " florins.
 (42) " £8. 16. 0 " "
 (43) " £19. 10. 0 " crowns.
 (44) " £3. 15. 0 " half-crowns.
 (45) " £7. 16. 9 " threepences.
 (46) " £8. 7. 6 " half-crowns.
 (47) " £108. 11. 1 " pence.
 (48) " £109. 12. 6 " half-crowns.
 (49) " £53. 18. 0 " florins.
 (50) " £76. 13. 2½ " farthings.
 (51) " 496 shillings to pounds.
 (52) " 319 " "
 (53) " 407 " "
 (54) " 862 pence to shillings.
 (55) " 1037 " "
 (56) " 92864 " pounds.
 (57) " 71596 " "
 (58) " 30624 " "
 (59) " 1996 " "
 (60) " 54362 " "
 (61) " 70213 " "
 (62) " 69446 half-pence to pounds.
 (63) " 3062 " "
 (64) " 1969 " "
 (65) " 72131 farthings to pounds.
 (66) " 68324 " "
 (67) " 40316 " "
 (68) " 17291 " "
 (69) " 308162 " "

- (70) Reduce 590001 farthings to pounds.
 (71) " 39161 pence to half-crowns.
 (72) " 17003 " half-sovereigns.
 (73) " 9605 " crowns.
 (74) " 17111 " guineas.
 (75) " 9037 " half-guineas.
 (76) " 70391 farthings to pounds, &c.
 (77) " 3363 " "
 (78) " 1962 " "
 (79) " 7026 " half-sovereigns.
 (80) " 1156 " crowns.
 (81) " 96002 " guineas.
 (82) " 11110 florins to farthings.
 (83) " 9463 half-crowns to pence.
 (84) " 7156 crowns to half-pence.
 (85) " 2999 pence to pounds.
 (86) " 7000 farthings to half-sovereigns.
 (87) " 1369 sixpences to pounds, &c.
 (88) " 94416 " half-guineas.
 (89) " 7135 " half-crowns.
 (90) " 2009 " guineas.
 (91) " 3184 half-crowns to pounds.
 (92) " 1144 " "
 (93) " 1318 " half-sovereigns.
 (94) " 962 florins to pounds.
 (95) " 1306 shillings to guineas.
 (96) " 1399 threepences to pounds.
 (97) " 3086 " guineas.
 (98) " 796 " half-sovereigns.
 (99) " 596 fourpences to shillings.
 (100) " 739 " crowns.
 (101) " 1877 " pounds.
 (102) " 962 " guineas.
 (103) " 1026 sixpences to half-crowns.
 (104) " 319 farthings to sixpences.
 (105) " 4320 threepences to fourpences.
 (106) " 702 half-sovereigns to guineas.
 (107) " 394 crowns to guineas.
 (108) " 3159 sevenpences to pounds, &c.



- (109) Reduce 729 crowns to florins.
 (110) " 384 half-crowns to shillings.
 (111) " 4199 fourpences to sixpences.
 (112) " £31. 10. 6 to sixpences.
 (113) " £15. 19. 6 " "
 (114) " £3. 18. 4 to fourpences.
 (115) " £21. 10. 6 to half-guineas.
 (116) " 3794 sixpences to half-guineas.
 (117) " 9215 half-crowns to pounds.
 (118) " 7021 shillings to pounds.
 (119) " 1196 pence to guineas.
 (120) " 3041 guineas to account money.
 (121) " 1963 " " "
 (122) " 7216 half-guineas " "
 (123) " 1159 " " "
 (124) " 3864 " " "
 (125) " 588 crowns " "
 (126) " 196 " " "
 (127) " 785 half-crowns " "
 (128) " 9095 sixpences " "
 (129) " 372 threepences " "
 (130) " 906 " " "
 (131) " 472 fourpences " "
 (132) " 319 " " "
 (133) " 1157 fivepences " "
 (134) " 691 florins " "
 (135) " 999 " " "
 (136) " 713 groats (4*d.*) " "
 (137) " 397 " " "
 (138) " 10316 testers (6*d.*) " "
 (139) " 7219 " " "
 (140) " 480 nobles (6*s.* 8*d.*) "
 (141) " 1760 " " "
 (142) " 442 " " "
 (143) " 630 angels (10*s.*) " "
 (144) " 998 " " "
 (145) " 1759 merks (13*s.* 4*d.*) "
 (146) " 3461 " " "
 (147) " 1026 " " "

(148)	Reduce	796 merks (13s. 4d.)	to account money.		
(149)	"	429 moidores (27s.)	"	"	"
(150)	"	372	"	"	"
(151)	"	7019 francs (each 9½d.)	"	"	"
(152)	"	1394	"	"	"
(153)	"	1795	"	"	"
(154)	"	40000	"	"	"
(155)	"	3000 dollars (each 4s. 2d.)	"	"	"
(156)	"	17693	"	"	"
(157)	"	3146	"	"	"
(158)	"	1500 cents (each ½d.)	"	"	"
(159)	"	31570	"	"	"
(160)	"	2916157	"	"	"
(161)	"	£1000	to dollars.		
(162)	"	£7219. 17. 6	to cents.		
(163)	"	£209. 13. 4	to nobles.		
(164)	"	£713. 18. 4	to dollars and cents.		
(165)	"	£931. 17. 6½	"	"	
(166)	"	3096 groats	to testers.		
(167)	"	4196 nobles	to merks.		
(168)	"	3000 silver roubles (each 3s. 1½d.)	to account money.		
(169)	"	75032	"	"	"
(170)	"	96003	"	"	"
(171)	"	4500 piastres (each 2½d.)	"	"	"
(172)	"	1926	"	"	"
(173)	"	730626	"	"	"
(174)	"	4021 ducats (each 3s. 4d.)	"	"	"
(175)	"	19261	"	"	"
(176)	"	7295	"	"	"
(177)	"	52009 rupees (each 2s.)	"	"	"
(178)	"	4725	"	"	"
(179)	"	9000 Calcutta rupees (each 1s. 11¾d.)	"	"	"
(180)	"	26721	"	"	"
(181)	"	47295	"	"	"
(182)	"	3132 Sicca rupees (each 2s. 0¾d.)	"	"	"
(183)	"	59213	"	"	"
(184)	"	70300	"	"	"
(185)	"	10000 groats	to English account money.		
(186)	"	"	testers	"	"

- (187) Reduce 10000 nobles to English account money.
 (188) " " angels " " "
 (189) " " merks " " "
 (190) " " moidores " " "
 (191) " " francs " " "
 (192) " " cents " " "
 (193) " " dollars " " "
 (194) " " silver roubles " " "
 (195) " " piastres " " "
 (196) " " Calcutta rupees " " "
 (197) " " Sicca rupees " " "
 (198) " £100. 8. 0 to francs (25 f. = £1 sterling).
 (199) " £316. 17. 6 to dollars.
 (200) " £5000 to piastres.

(201) How many farthings are there in two-and-a-half guineas, three half-sovereigns, two shillings, and ninepence half-penny?

(202) A person exchanges £25. 4. 0 for francs at the rate of 25 francs for the £ sterling: how many ought he to receive?

(203) Reduce 1093 pence to pounds, &c.

(204) How many guineas are there in 30 times 42 pence?

(205) Find the sum of $306 + 298 + 5071 + 389$ farthings, and reduce the result to pounds, &c.

(206) Find the amount in account money of 3 half-guineas, 5 half-crowns, 19 florins, 14 sixpences, and $13\frac{1}{2}$ pence.

(207) Reduce 30112 half-pence to half-sovereigns.

(208) How many half-crowns are there in £3+18 crowns + 31 shillings + 18 pence?

(209) By how many pence is £11. 12. 11 more than 186 shillings and fourpence?

(210) How many rupees, each worth 1s. $9\frac{1}{2}d.$, may be obtained in exchange for £8500?

(211) How many sixpences are there in 93 times 109 fourpences?

(212) How many times is 3s. 4d. contained in 20 guineas?

(213) How many shillings are there in 11400 times three half-pence ?

(214) Reduce the sum of £5, 5 guineas, 5 half-guineas, 5 half-crowns, 5 shillings and 5 pence, to farthings.

(215) Reduce £17. 10. 10 to half-pence.

(216) How many times is tenpence contained in £5. 10. 0 ?

(217) *A* has £2. 10. 0, *B* 1304 pence : how much has *B* more than *A* ?

(218) At 7*d.* a day, what amount in a year of 365 days ?

(219) Three hundred and twelve thousand one hundred and six copies of a penny newspaper were sold : what amount was realised ?

(220) How many threepenny postage stamps may be purchased for thirty shillings and ninepence ?

(221) Two workmen, *A* and *B*, are paid 8*d.* an hour each ; *A* receives £2. 10. 0 and *B* £1. 18. 8 : how many hours has *A* worked more than *B* ?

(222) If there are 30 millions of people in England and Wales, what would a tax of a penny per head produce ?

(223) What sum would be paid for 3013 penny postage stamps ?

(224) What sum was paid by 29111 visitors to the Crystal Palace, each paying half-a-crown ?

(225) Paying 3*s.* 6*d.* each, how many persons dined for 3½ guineas ?

(226) Reduce 2013 piastres, each 2½*d.*, to English money.

(227) Reduce to account money the sum of 13 half-sovereigns, 13 crowns, and 13 fourpences.

(228) What is the cost of 313 copies of a work at a crown per copy ?

(229) How many children at 9*d.* per head, can be admitted to an exhibition for the sum of 15*s.* ?

(230) How many times is 2*s.* 3½*d.* contained in £2. 15. 0 ?

(231) If 1311 vehicles pay a toll of 2*d.* each daily, what amount would be collected in a week ?

(232) If 79061 passengers book daily at Moorgate Street for Farringdon Street, paying 1*d.* each, what would their united fares amount to in six days?

(233) Reduce £79. 0. 11 $\frac{1}{4}$ to farthings.

(234) How many times is three-farthings contained in 7*s.* 5 $\frac{1}{4}$ *d.*?

(235) How many times is 2 $\frac{1}{2}$ *d.* contained in £1. 5. 0?

(236) The Roman penny was worth 7 $\frac{1}{2}$ *d.* of our present coinage: how many such pennies are contained in £30 English money?

(237) Find the money value of seven dozen penny loaves.

(238) What would be the cost of repairing 5 $\frac{1}{2}$ miles of road (1760 yards to the mile) at a cost of 15 pence per lineal yard?

(239) Find the total cost of 7 $\frac{1}{2}$ dozen books at 3*d.* each, 3 $\frac{1}{4}$ dozen at sixpence each, and 5 dozen pens at $\frac{1}{2}$ *d.* each.

(240) Reduce 5000 roubles, each 2*s.* 5 $\frac{1}{2}$ *d.*, to English money.

(241) How many articles at 4*d.* each may be bought for £21. 1. 8?

(242) How many times is 3*s.* 9*d.* contained in £47. 8. 9?

(243) What will a rate of 3*d.* in the £ produce on property valued at £70107?

(244) Reduce £10. 17. 6 to sixpences.

(245) Find the cost of 709 panes of glass at 7*d.* per pane.

(246) What is the cost of gilding a sign containing 113 letters at 1 $\frac{3}{4}$ *d.* per letter?

(247) Reduce 4903 merks, each 13*s.* 4*d.*, to English account money.

(248) Reduce the sum of £24 + £6. 10. 0 + £5. 18. 0 + £19. 12. 0 to florins.

(249) Reduce 109103 threepences to £*s.*

(250). Find the entire cost of 6 $\frac{1}{2}$ dozen at 3*d.* each, 4 $\frac{1}{4}$ score at 5*d.* each, and 3 $\frac{1}{2}$ hundred at 1*d.* each.

COMPOUND ADDITION.

(1)			(2)			(3)			(4)			(5)		
£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.
7	1	9	14	14	5	3	2	6	21	10	6	20	10	10
2	11	4	3	17	6	8	9	7	22	14	0	33	18	6
3	13	6	9	18	4	3	17	6	16	11	10	19	15	7
9	15	8	6	19	4	4	19	5	7	9	8	16	10	8
17	10	9	3	10	11	7	17	6	15	6	9	72	13	9
11	11	11	11	10	9	5	12	9	17	13	9	46	12	6
5	7	6	8	16	8	6	13	7	16	14	7	17	14	2
8	13	6	7	16	0	8	14	7	15	15	11	5	0	7
(6)			(7)			(8)			(9)			(10)		
£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.
19	10	10	36	10	8 $\frac{1}{4}$	75	16	0 $\frac{1}{2}$	104	6	8	17	12	11 $\frac{1}{2}$
15	17	6	17	9	6 $\frac{3}{4}$	32	15	6 $\frac{1}{4}$	38	13	4 $\frac{1}{2}$	3	19	6 $\frac{3}{4}$
3	14	7 $\frac{1}{2}$	9	14	7 $\frac{3}{4}$	84	13	7 $\frac{1}{2}$	37	16	10	18	16	7
8	16	9	7	15	6 $\frac{1}{2}$	98	0	6 $\frac{1}{4}$	28	14	5	9	14	6 $\frac{1}{2}$
5	7	6 $\frac{1}{2}$	8	19	6 $\frac{3}{4}$	30	1	4	19	16	7 $\frac{1}{2}$	7	11	10 $\frac{3}{4}$
4	19	5 $\frac{1}{4}$	9	16	4 $\frac{1}{2}$	69	2	7 $\frac{1}{2}$	38	2	9 $\frac{1}{4}$	5	16	6
16	17	2 $\frac{3}{4}$	7	0	5	83	7	11	19	12	6	4	17	7 $\frac{1}{2}$
17	12	10	25	6	9	60	12	10	40	10	10	3	16	6 $\frac{3}{4}$
(11)			(12)			(13)			(14)			(15)		
£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.
706	13	6 $\frac{1}{2}$	30	0	3 $\frac{1}{2}$	290	11	1 $\frac{1}{2}$	130	13	6	175	12	10
19	16	7 $\frac{3}{4}$	76	13	0 $\frac{1}{4}$	209	6	10 $\frac{3}{4}$	75	12	7 $\frac{1}{4}$	92	13	7 $\frac{1}{2}$
18	12	6	18	18	2	72	0	6	69	14	8 $\frac{1}{2}$	86	14	5 $\frac{1}{4}$
99	16	7 $\frac{1}{2}$	92	14	7 $\frac{1}{2}$	93	12	4	36	17	6 $\frac{3}{4}$	69	13	8 $\frac{3}{4}$
44	14	4	69	16	9 $\frac{3}{4}$	69	13	6 $\frac{1}{2}$	29	14	6	609	15	5 $\frac{1}{2}$
38	18	6 $\frac{3}{4}$	47	13	5	5	16	6 $\frac{3}{4}$	256	13	8 $\frac{1}{4}$	37	16	6
176	15	8	92	16	6	16	17	8	11	10	11	25	12	7 $\frac{1}{2}$
39	16	10	17	0	7	50	10	2 $\frac{1}{2}$	5	9	6 $\frac{1}{2}$	13	16	6

(16)			(17)			(18)			(19)			(20)		
£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.
176	19	0 $\frac{1}{4}$	900	9	9 $\frac{1}{4}$	102	0	11 $\frac{1}{4}$	136	6	4	2701	9	6 $\frac{1}{4}$
308	16	10 $\frac{3}{4}$	76	19	7 $\frac{1}{4}$	3	9	9	1024	16	7 $\frac{1}{2}$	926	14	11 $\frac{1}{2}$
59	17	5 $\frac{1}{2}$	68	13	7 $\frac{1}{4}$	19	2	2 $\frac{3}{4}$	928	14	6 $\frac{1}{4}$	713	17	10 $\frac{3}{4}$
189	16	11 $\frac{1}{2}$	196	18	9 $\frac{1}{4}$	16	8	8 $\frac{1}{2}$	702	13	9 $\frac{1}{4}$	9284	19	9 $\frac{1}{2}$
96	13	8 $\frac{1}{4}$	906	13	7 $\frac{1}{4}$	7	19	6 $\frac{1}{4}$	88	16	4	7568	13	8 $\frac{1}{4}$
67	14	6	79	17	9	19	19	9 $\frac{1}{4}$	108	5	11	667	17	7 $\frac{3}{4}$
184	15	9 $\frac{1}{4}$	38	16	4	67	11	1 $\frac{1}{4}$	56	19	7 $\frac{1}{4}$	98	6	6 $\frac{1}{2}$
38	0	2	102	17	5 $\frac{1}{2}$	303	12	4 $\frac{1}{2}$	906	13	11	888	15	4 $\frac{1}{4}$
(21)			(22)			(23)			(24)			(25)		
£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.
1376	14	7 $\frac{1}{2}$	52	10	0 $\frac{1}{2}$	1090	13	6 $\frac{1}{2}$	29	16	6 $\frac{1}{2}$	199	16	7 $\frac{1}{2}$
906	13	6 $\frac{1}{2}$	36	19	6	385	17	4 $\frac{1}{4}$	76	13	7 $\frac{1}{2}$	33	16	11 $\frac{1}{4}$
35	17	9 $\frac{1}{4}$	18	12	10 $\frac{1}{2}$	176	18	6 $\frac{3}{4}$	92	16	8	706	15	9 $\frac{1}{4}$
196	18	6 $\frac{1}{2}$	37	10	6 $\frac{3}{4}$	9026	19	2 $\frac{3}{4}$	177	14	6	169	17	2 $\frac{1}{2}$
727	8	8	19	17	9 $\frac{1}{2}$	375	17	10 $\frac{1}{2}$	66	13	8 $\frac{1}{2}$	92	13	6
896	12	4 $\frac{1}{4}$	207	16	8 $\frac{1}{4}$	609	16	9 $\frac{1}{2}$	96	19	6	86	14	9 $\frac{1}{4}$
5075	13	2 $\frac{1}{2}$	386	14	4 $\frac{1}{2}$	7208	13	7 $\frac{3}{4}$	70	0	7 $\frac{1}{2}$	179	16	7 $\frac{3}{4}$
699	6	8	15	13	3	376	16	4	50	2	6 $\frac{3}{4}$	80	19	6
(26)			(27)			(28)			(29)			(30)		
£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.
2076	13	6 $\frac{1}{2}$	119	0	9 $\frac{1}{4}$	209	6	7 $\frac{1}{2}$	1000	12	6 $\frac{1}{2}$	921	13	6 $\frac{1}{4}$
969	17	6	73	1	7 $\frac{3}{4}$	75	17	8 $\frac{3}{4}$	576	15	0	86	14	2 $\frac{1}{2}$
706	9	2 $\frac{1}{2}$	88	7	8 $\frac{1}{2}$	106	13	9 $\frac{1}{2}$	318	17	6	137	13	4 $\frac{1}{2}$
38	13	4 $\frac{1}{2}$	66	16	11 $\frac{1}{4}$	98	9	7 $\frac{1}{2}$	400	4	4 $\frac{1}{2}$	66	12	1 $\frac{1}{2}$
726	16	3 $\frac{3}{4}$	57	3	10 $\frac{1}{2}$	176	13	6 $\frac{1}{2}$	32	1	11	96	13	5
90	17	9 $\frac{1}{2}$	39	14	6	902	14	7 $\frac{3}{4}$	17	4	9 $\frac{1}{4}$	88	16	4
880	18	6 $\frac{1}{4}$	99	13	9	13	15	8 $\frac{1}{2}$	69	3	8 $\frac{1}{2}$	79	19	9
112	14	4	84	6	3 $\frac{1}{2}$	75	6	6 $\frac{3}{4}$	72	15	6	58	4	2 $\frac{1}{2}$

(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)
s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
1 3	7 6	7 5 6	7	9 4 5	1 7	1 10	1 10		
1 9	3 8	7 11 2 4	9 11	7	2 7 10	1 9			
7	1 2	6 3 6	11	5 7 9	1 3 6 11	2 8			
11	9	9 3 8	1 11	1 7	11	6 1 11	1 7		
9	6 3	1 2 9	2 6 6 9	8 2 9	3 11	3 6			
2 6	4 4	11 3 7	3 11	1 3 6 6	8 10	5			
3 8	11 1	6 1 9	1 11	1 8 3 3 3	1 5	4			
4 2	10	9 1 9	9 4 6 9	4 1 11	6	3			
7	11 7	10 5 6	7 1 3	3 2	7 4 7	1 2			
1 9	5	11 4 7	6	7 1 9	7 6	8			
11	7 4	5 3 1	9 11	11	9 5 9	7 11			
8	1 7	4 6 1	9 6	11 9 5	6 6 3				
3 6	3 6	6 8 9 4	3 8 1 9	1 10 8	3 9				
5	1 8	3 9 3 6	4 6 5 8	10 6 8	1 7 1 9				
7 7	9 5	7 2 4	2 7 5 11	4 9 9	11				
16 4	7	11 1 7	7 11 6 7	9 5 1 10					
3 9	10	10 11	9 1 11	6 1 7	6 2 9				
11	6	5 3	6 1 6	9 6 2 11	7 5				
10	9 4	6 8	11 1 9	3 1 9 1 10	7				
8	5	4 1 6	3 1 5	1 8 1 5 1 10	1 3				
3 7	6	3 2 9	1 3 2 7	5 7 6 11	8				
6 9	7	8 11 7 9	3 3 6 4 2	5 2 7					
7	9 3	9 10 6 9	8 9	6 6	6				
6	10	6 9 3 7	11 11	1 3 7	9				
5	3 2	7 6 6 9	5 2 5 1 7	5 8 4 2					
1 6	1 1	2 4 3 3 5 8	1 7 1 6	9 7	1				
11	4 11	1 9 1 6 1 0	6 2 1 9	11 9 1 10					
9	16 8	3 3 2 7 1 4	3 3 1 0	11 9	4				

(41)	(42)	(43)	(44)	(45)	(46)	(47)	(48)
s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
11 $\frac{1}{4}$	9 9 $\frac{1}{2}$	6 6	16 8	17 2	2 7 $\frac{1}{2}$	1 6 $\frac{1}{2}$	6 9 $\frac{1}{2}$
7 $\frac{1}{2}$	1 7 $\frac{1}{2}$	1 8	13 4	19 6	1 7 $\frac{3}{4}$	9 7	7 10 $\frac{1}{2}$
3 $\frac{1}{4}$	3 $\frac{1}{4}$	2 9	5 9	16 8	1 6 $\frac{1}{2}$	6 9 $\frac{1}{4}$	1 11 $\frac{1}{2}$
1 9 $\frac{1}{2}$	3 3	3 7 $\frac{1}{4}$	7 10	14 7	1 9	7 1	11 $\frac{3}{4}$
7 $\frac{1}{2}$	8	1 6	7 7 $\frac{1}{4}$	13 2 $\frac{1}{2}$	11 $\frac{1}{4}$	7	2 6
6 $\frac{1}{4}$	1 8 $\frac{1}{4}$	9	7 6 $\frac{1}{2}$	6 6 $\frac{1}{4}$	7 7	1 11 $\frac{1}{2}$	7 $\frac{1}{4}$
2 7 $\frac{3}{4}$	2 9 $\frac{1}{2}$	11	5 8 $\frac{3}{4}$	7 2 $\frac{1}{4}$	6 9 $\frac{1}{4}$	1 7 $\frac{3}{4}$	2 9
9 6	7	1 10	10	1 6	6 9 $\frac{1}{2}$	6	6
1 4	11 $\frac{1}{2}$	2 7 $\frac{1}{4}$	6 11 $\frac{1}{2}$	1 3	9 7 $\frac{1}{2}$	2 9	1 7 $\frac{3}{4}$
7	3 6 $\frac{1}{4}$	6 0	7 2	9 3	6	1 10	11
9	13 7	7 2	6 9	1 7 $\frac{1}{2}$	7 9	10 $\frac{1}{2}$	1 9
2 0	19 11	1 3	8 3	1 4	7 10	3 7	1 5
3 6	5 8	19 6	9 6 $\frac{1}{2}$	10	2 11	6	1 6 $\frac{1}{2}$
1 5 $\frac{1}{2}$	6 9	7 5	11	11 $\frac{1}{2}$	8 $\frac{1}{2}$	3 9 $\frac{1}{2}$	13 7 $\frac{1}{4}$
6 $\frac{3}{4}$	3 7	9 9	1 10	11 $\frac{3}{4}$	7	7 $\frac{1}{2}$	16 6
7 $\frac{1}{2}$	10	6 10	1 9 $\frac{1}{2}$	1 6	1 11	1 6	19 3
1 1 $\frac{1}{4}$	11	7 3	6	9	9	9	9 $\frac{1}{2}$
9 6 $\frac{1}{2}$	9	1 5	1 7	2 3 $\frac{1}{2}$	6 6 $\frac{1}{4}$	1 11	14 6 $\frac{1}{4}$
7 7 $\frac{1}{2}$	9 $\frac{1}{2}$	9 6	2 9	7 11	3 3 $\frac{1}{2}$	6	7
8 6 $\frac{3}{4}$	7 $\frac{3}{4}$	1 11	1 3 $\frac{1}{4}$	1 5 $\frac{1}{2}$	7 $\frac{1}{2}$	2 7	3 11
9	1 6	7 10	1 7 $\frac{1}{2}$	1 6	4 11 $\frac{1}{4}$	12 11 $\frac{1}{2}$	2
11	1 6	1 9	6	2 9	6 $\frac{1}{2}$	13 9	7 3
5 $\frac{1}{4}$	1 9	1 9	9	10	7 7 $\frac{3}{4}$	6 $\frac{1}{4}$	1 2 $\frac{1}{2}$
7 $\frac{3}{4}$	1 7 $\frac{1}{2}$	6 3 $\frac{1}{4}$	1 11	8	9	6 7 $\frac{1}{2}$	9 11
1 9 $\frac{1}{2}$	1 7 $\frac{1}{2}$	7 11 $\frac{1}{2}$	5	6	1 6 $\frac{1}{2}$	10 7 $\frac{1}{4}$	10 $\frac{1}{2}$
7 2	6	1 10	1 6	1 9	7	7 3 $\frac{1}{2}$	2 6
3 4 $\frac{1}{4}$	1 9	1 11	7 2 $\frac{1}{2}$	3 8	1 11	4 6	10 $\frac{1}{4}$
1 7 $\frac{1}{4}$	3 $\frac{1}{4}$	1 11 $\frac{1}{2}$	1 3 $\frac{3}{4}$	10 7	6	3 9	1 11

(49)		(50)		(51)		(52)		(53)		(54)		(55)		(56)	
s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
3	7½	2	11½	1	7½	2	7½	7	9½	2	9½	5	7½	2	9
13	6¼	4	3½	3	6¼	11	6¾	11	4½	4	7½	19	6	12	9½
19	2¾	3	0¼	5	10½	3	9	13	6¼	7	6¼	6	3¼	3	3
17	1	7	11½	7	11¼	7	10	18	9	9	7¾	13	9¼	13	7
6	9	9	6¼	2	3½	9	5¼	15	7½	19	9½	9	8½	5	4
7	3½	6	7¾	9	9¼	8	0½	6	3¼	16	9	6	11	14	6
8	9¼	1	0	16	6½	11	6	9	8½	13	10¼	13	7	16	9
15	7½	3	10	15	2½	12	7	7	2¼	17	11¼	7	4	17	11
	11½	4	11¼	14	10½	5	11	17	6	12	11	6	4½	2	11½
	11¾	2	9¾	13	1¼	7	3	2	3	13	10	9	8	9	10¾
	9¼	7	4	17	3¾	6	9	1	11½	2	10½	6	6½	5	9
1	7	9	4½	3	11¾	9	8½	5	10¼	9	9½	13	7	11	8½
9	6½	6	7	7	10¾	13	10½	13	6	16	6	13	9	13	6¼
18	4½	1	9	9	9½	16	3½	8	9	8	0¼	9	11	4	7¼
6	9¼		10½	6	7¼	15	7¼	7	7½		9¾	6	10½	7	2
3	8	3	6	13	4¼	14	5½	9	6¼		10½	3	6¾	17	2
5	6¼		10	16	5½	2	6½	16	3½	7	2	13	7½	6	4
	3½		11¼	12	6¼	10	7	19	9½	3	7	15	9	9	4½
	8¼	4	7	12	8½	5	11	19	7	1	6	6	6½	19	11
1	3½	7	6¼	10	3¼	6	11	2	11½	1	9½	7	7½	19	10½
	6¼		6	5	7½	7	10		11¼	2	10¼	2	5	17	11¼
7	9	11	3½	4	9½	8	9¼	8	3	1	7	13	9	11	6
5	4½	6	7½	3	7¼	2	6	7	9		6½	9	6	12	7
4	7½		10	6	4¾	5	7½	6	10½	3	11	6	9	11	9
1	9	9	7	5	8½	7	8¾	5	5	7	5½	3	7	6	3¼
2	6	3	6½	3	7¾	9	7	9	9	4	11	7	5½	9	10
3	3½	1	5½	8	6½	6	2	3	8¼	4	3	9	6	3	8
1	10½	2	6	11	3½	8	7	7	6	2	7½	8	8	8	7½

(57)		(58)		(59)		(60)		(61)		(62)		(63)		(64)	
s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
11	7	14	11	16	$7\frac{1}{2}$	4	9	19	7	9	8	15	7	19	10
12	9	13	10	7	$8\frac{1}{2}$	3	5	18	$0\frac{1}{2}$	5	7	19	$9\frac{1}{2}$	19	11
17	$3\frac{1}{2}$	15	9	9	10	7	$5\frac{1}{2}$	16	10	7	3	14	6	18	6
6	0	7	7	13	11		$3\frac{3}{4}$	17	$3\frac{1}{4}$	2	10	16	$7\frac{1}{2}$	18	3
9	6	2	9	14	5	2	$0\frac{1}{4}$	15	$11\frac{1}{2}$	7	$9\frac{1}{4}$	13	6	18	7
5	$5\frac{1}{4}$	5	$11\frac{1}{2}$	16	$7\frac{1}{4}$	9	6	13	$9\frac{1}{4}$	3	$8\frac{1}{4}$	2	9	12	$10\frac{1}{2}$
8	$7\frac{3}{4}$	9	$11\frac{1}{4}$	4	$8\frac{1}{2}$		11	14	$7\frac{3}{4}$	6	$6\frac{1}{2}$		$3\frac{1}{2}$	14	$11\frac{1}{4}$
13	8	19	10		11	11	$10\frac{1}{4}$	17	$6\frac{1}{2}$	9	$7\frac{1}{2}$	14	$7\frac{1}{2}$	14	$10\frac{1}{4}$
17	9	2	$10\frac{3}{4}$		$6\frac{1}{2}$	5	$0\frac{3}{4}$	19	$7\frac{3}{4}$	10	10	2	$6\frac{1}{4}$	14	$1\frac{3}{4}$
19	6	6	6	5	$7\frac{1}{2}$	6	7	16	8	5	6	7	$7\frac{1}{2}$	13	6
2	7	7	6		9	17	$9\frac{1}{2}$	18	8		9		9	13	9
1	10	3	9	7	$8\frac{1}{2}$		6	2	9		$7\frac{1}{2}$	9	6	13	7
2	$11\frac{1}{4}$	4	$8\frac{1}{2}$	9	$6\frac{1}{4}$		$8\frac{1}{2}$	4	$5\frac{1}{4}$	2	$7\frac{1}{4}$		$8\frac{1}{2}$	10	8
7	$10\frac{1}{4}$	5	$1\frac{1}{4}$	9	5	3	$7\frac{1}{4}$	6	$7\frac{1}{2}$		3	5	7	9	7
4	$9\frac{1}{2}$	6	$0\frac{1}{2}$	8	$7\frac{1}{4}$		$5\frac{1}{2}$	8	$6\frac{3}{4}$	7	$1\frac{1}{2}$	7	9	9	5
9	$7\frac{1}{4}$	7	$5\frac{1}{2}$	18	$6\frac{1}{2}$	4	7	10	$7\frac{1}{2}$	3	$0\frac{1}{4}$	16	$6\frac{1}{2}$	9	$5\frac{1}{2}$
3	$6\frac{3}{4}$	3	$6\frac{1}{2}$	4	7		9	11	8	8	6	13	$3\frac{1}{2}$	7	0
16	9	14	11	7	$9\frac{1}{4}$	19	$9\frac{1}{2}$	9	$9\frac{1}{2}$	16	$9\frac{1}{2}$	14	$7\frac{1}{4}$	17	3
15	$7\frac{1}{2}$	13	5	16	3	2	$1\frac{3}{4}$	7	$10\frac{1}{4}$		10	12	6	17	$2\frac{1}{2}$
9	9	16	8	13	$10\frac{1}{4}$	8	$6\frac{1}{4}$	3	7	17	$11\frac{1}{2}$		11	17	6
17	$10\frac{1}{2}$	19	9		$8\frac{1}{2}$	16	$7\frac{3}{4}$	1	9	13	6	10	6	15	9
5	11	12	$8\frac{1}{2}$	5	11		$9\frac{1}{2}$	5	6	14	9		$5\frac{1}{4}$	15	$4\frac{1}{4}$
8	$9\frac{1}{4}$	7	7	9	$5\frac{1}{4}$		4	6	8		$5\frac{1}{2}$		$7\frac{3}{4}$	15	10
3	$8\frac{1}{2}$	11	10	7	$7\frac{1}{4}$	4	5	7	$7\frac{1}{2}$	2	6	3	6	6	3
13	$6\frac{1}{2}$	12	6	3	6	7	10	2	6	9	4	6	9	3	6
17	$7\frac{1}{2}$	6	$3\frac{1}{2}$	6	9	1	$5\frac{1}{2}$	9	$4\frac{1}{4}$	6	$8\frac{1}{2}$	7	8	7	$8\frac{1}{2}$
19	2	2	7	13	4	9	6	5	$6\frac{3}{4}$	7	3	5	$5\frac{1}{2}$	9	$11\frac{3}{4}$
14	6	17	9	17	6	5	4	7	$2\frac{1}{4}$	3	$11\frac{1}{2}$	17	$6\frac{1}{4}$	8	$6\frac{1}{2}$

(65)			(66)			(67)			(68)			(69)		
£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.
13	7	9½	17	12	6	77	13	6½	69	17	10½	58	6	8
18	16	7¼	18	16	4½	19	17	5¼	79	16	9¼	68	17	4½
11	10	6½	7	9	6½	17	13	6½	36	13	11	37	3	8½
9	1	4¼	19	19	6½	3	14	2	12	2	6	16	6	4
7	2	6	7	8	5	4	4	4	19	19	3½	19	7	5½
11	5	8½	11	10	6½	6	9	10½	37	4	7¼	29	6	9
16	13	7½	13	16	7½	17	13	4	15	15	6¾	36	17	5½
9	16	5¼	9	15	6¼	80	16	0	17	7	7½	13	16	6
7	12	1	6	13	2½	11	10½		29	9	6	17	13	2½
8	16	7½	7	15	5	1	10	0	68	10	9	29	6	6
9	15	8½	9	11	10	3	6	8	37	3	7	16	13	4
6	11	10	5	16	7¼	1	0	4¼	66	17	3	36	17	5
5	9	6¼	13	12	0½	7	19	8½	13	4	6	17	11	10½
70	12	1	6	0	10	3	3	7¾	12	5	10½	48	5	5

(70)			(71)			(72)			(73)			(74)		
£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.
17	10	6	20	11	10½	13	13	7¼	96	17	6½	11	12	6
19	13	7½	13	16	7¼	99	16	8½	88	8	8½	10	13	7½
29	16	8	19	13	8½	17	12	9¼	47	3	4	6	14	10¼
33	14	7½	17	12	6½	16	12	6	13	16	2½	9	18	6½
16	13	8¼	2	19	5½	13	17	10½	29	15	6	3	13	7¼
75	14	6	7	13	2	86	14	5	66	13	4½	15	16	10
99	19	9¼	6	19	5¼	19	13	11¼	14	2	6	29	13	6
29	13	6	8	6	8	7	2	9	36	18	5½	8	16	9¼
18	14	7¼	13	16	9½	16	0	0	28	9	9	17	19	6¼
9	19	6¼	10	10	10	27	13	7½	17	11	10	3	13	7¼
7	12	9¾	11	12	11	96	14	6¼	12	5	7¼	17	10	6
6	13	9½	29	16	8½	17	10	6	6	15	10¾	9	19	6½
17	19	6	3	14	6¼	9	18	9½	19	19	9½	28	17	5
56	13	4	18	12	9¼	37	16	2¼	5	3	7	13	16	2½

(75)			(76)			(77)			(78)			(79)		
£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.
103	17	$7\frac{1}{2}$	996	13	$8\frac{1}{2}$	130	$12\frac{1}{2}$	$7\frac{1}{4}$	609	13	$8\frac{1}{2}$	92	13	6
296	13	$8\frac{3}{4}$	713	15	$7\frac{1}{2}$	296	10	8	105	16	$7\frac{3}{4}$	19	10	$7\frac{1}{2}$
175	12	$6\frac{1}{2}$	219	17	$8\frac{1}{4}$	115	9	11	726	13	$8\frac{1}{4}$	705	11	8
800	9	$7\frac{1}{4}$	156	14	11	924	8	$10\frac{1}{4}$	968	12	$9\frac{1}{2}$	68	7	10
702	6	$9\frac{3}{4}$	709	16	$10\frac{1}{4}$	82	7	$6\frac{1}{2}$	117	10	$10\frac{1}{2}$	365	18	2
113	10	$7\frac{1}{2}$	445	13	$6\frac{1}{2}$	79	16	$9\frac{1}{4}$	364	10	11	144	16	1
147	0	$6\frac{1}{4}$	504	16	$7\frac{3}{4}$	316	13	$9\frac{3}{4}$	129	0	7	73	15	11
902	13	$8\frac{3}{4}$	699	18	9	175	17	6	765	5	$7\frac{3}{4}$	96	14	$5\frac{1}{2}$
113	17	10	789	17	$6\frac{1}{2}$	116	6	8	808	4	$7\frac{1}{2}$	87	7	$6\frac{3}{4}$
626	16	$11\frac{1}{4}$	623	19	7	924	4	11	116	7	6	59	3	$6\frac{1}{2}$
713	12	$7\frac{1}{4}$	139	16	$9\frac{1}{2}$	638	3	7	75	6	9	318	13	$1\frac{1}{4}$
209	8	8	604	12	6	119	14	5	38	9	$8\frac{1}{2}$	12	8	$0\frac{1}{4}$
118	15	10	726	0	9	745	5	$8\frac{1}{2}$	726	19	$8\frac{3}{4}$	906	9	10
212	6	$11\frac{1}{2}$	133	3	10	225	19	$0\frac{3}{4}$	99	13	7	72	19	$11\frac{1}{2}$

(80)			(81)			(82)			(83)			(84)		
£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.
296	13	$8\frac{1}{2}$	989	2	$7\frac{1}{2}$	144	$12\frac{1}{2}$	$10\frac{1}{2}$	10	12	$11\frac{1}{2}$	903	17	$6\frac{1}{2}$
73	12	$9\frac{1}{4}$	726	7	6	76	13	$8\frac{1}{2}$	365	7	6	399	13	$7\frac{1}{4}$
15	14	$6\frac{1}{2}$	13	10	$9\frac{1}{4}$	96	15	$7\frac{1}{4}$	93	0	9	898	2	6
362	12	$11\frac{1}{4}$	138	11	$6\frac{1}{2}$	209	11	10	111	1	$11\frac{1}{4}$	776	0	$9\frac{1}{2}$
193	13	$6\frac{1}{2}$	75	6	7	13	17	$6\frac{1}{2}$	62	13	$6\frac{1}{2}$	446	10	$3\frac{1}{4}$
76	0	3	69	10	10	29	16	$8\frac{1}{4}$	17	15	$8\frac{1}{2}$	543	11	$7\frac{1}{2}$
193	10	6	12	8	$11\frac{1}{4}$	176	13	$8\frac{1}{4}$	29	16	2	829	5	10
73	8	$9\frac{1}{2}$	304	13	8	92	14	7	113	14	6	613	7	11
156	13	8	162	4	$6\frac{1}{2}$	147	13	2	29	13	$7\frac{1}{2}$	719	6	$5\frac{1}{2}$
70	15	$6\frac{1}{2}$	973	14	$7\frac{3}{4}$	76	18	$4\frac{1}{2}$	716	14	$5\frac{1}{4}$	926	16	$7\frac{3}{4}$
89	11	8	864	13	6	96	13	5	69	13	8	113	13	6
139	16	4	519	9	9	992	10	2	505	14	$7\frac{1}{2}$	629	2	9
172	14	$2\frac{1}{2}$	304	6	8	11	10	6	167	16	7	114	12	8
56	0	6	114	3	10	12	10	$11\frac{1}{2}$	5	0	$0\frac{3}{4}$	79	9	$10\frac{1}{2}$

(85)			(86)			(87)			(88)			(89)		
£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.
1316	12	10½	8216	13	4½	1138	17	6½	7021	17	6½	3067	13	1½
9208	10	11¼	909	19	6½	1154	13	8¼	3968	13	5½	9989	17	6
796	6	6¾	1107	13	6½	1216	16	11½	7001	18	6½	5567	13	8¾
5947	7	9½	968	14	7¼	7296	2	10¾	1106	0	7	199	19	11
389	17	11¼	702	13	8½	8043	19	9	3389	13	5	2017	16	8
6213	13	6	1903	17	6	599	13	7½	1760	11	7¼	9026	13	5
597	2	5½	2916	13	4½	726	16	6¾	9020	18	0¾	739	18	5½
7007	18	9	7219	16	8¼	3132	7	0	376	19	3	316	19	7¾
3996	14	7¼	3241	0	4	699	11	10	125	17	6	926	14	5
8682	3	6¾	5004	0	3½	8726	15	11½	1026	0	11½	3004	11	10½
7136	7	11	729	6	8¼	904	8	7¼	770	10	6	176	13	8½
5904	9	10½	9268	13	7	5969	19	6	3869	19	9½	99	19	9½
3216	6	7¼	199	12	8	872	12	9	7156	11	7¼	1269	12	10
8888	8	9	2010	10	10	1509	13	10	3821	15	8½	776	14	4½

(90)			(91)			(92)			(93)			(94)		
£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.
7131	17	7¾	4031	17	5½	2916	13	8½	1131	17	4	3113	13	6
1696	16	11¼	7021	16	9¼	316	12	6	209	13	6½	9686	18	4½
2006	3	10½	9021	11	10¾	29	19	4	76	18	2¼	7021	10	9¾
1398	13	9¼	3729	18	6	138	10	6	36	19	9¾	1369	9	10
7062	14	10½	6928	19	7½	7024	15	8½	2095	18	5¼	7021	13	1¾
5568	13	11¼	7135	18	6	1770	11	0¾	79	13	8¼	3169	17	6
9286	14	7¼	8836	11	10½	707	11	5	9	16	7½	7021	18	4½
3715	11	9½	9446	6	9	36	10	8¼	3000	13	8¼	5526	16	9¼
903	12	10½	702	16	3	946	9	9	75	12	6	9038	18	2
1735	16	11¼	1703	11	3½	1968	8	4¼	29	13	8¼	55	11	3¾
9027	17	8	886	7	0½	729	17	3	138	17	6¼	77	5	8
396	16	9¼	9091	5	7	3146	2	2	3462	0	3	138	2	4¼
1769	19	10	7296	16	4	555	15	8¼	9007	13	1½	1596	12	6
3115	0	11¼	839	4	4¼	4	16	8	11	10	6¼	706	11	5¼

(95)			(96)			(97)		
£.	s.	d.	£.	s.	d.	£.	s.	d.
301276	13	8 $\frac{1}{2}$	713116	13	7 $\frac{1}{2}$	3030330	17	6
1966847	17	7 $\frac{1}{2}$	902013	19	8 $\frac{3}{4}$	700770	13	9
208	16	8 $\frac{3}{4}$	730026	16	9 $\frac{1}{2}$	39628	16	3
37062	13	9	820028	17	10 $\frac{3}{4}$	603	12	1 $\frac{1}{4}$
921685	18	10 $\frac{1}{2}$	700007	19	6	119621	10	11 $\frac{3}{4}$
1100011	2	11 $\frac{1}{4}$	30021	16	10	9321163	9	9 $\frac{1}{2}$
2020200	19	6	73602	10	11 $\frac{1}{2}$	73176	13	7 $\frac{1}{4}$
376009	16	8	90377	13	6 $\frac{3}{4}$	32005	10	8 $\frac{3}{4}$
5137462	12	9	159603	19	7 $\frac{1}{2}$	604140	6	9
900206	11	10 $\frac{3}{4}$	702131	13	6	40400	17	7 $\frac{1}{4}$
3007	10	7	50030	17	9	3039393	19	10 $\frac{1}{2}$
7070700	16	5 $\frac{1}{2}$	176039	6	8 $\frac{1}{2}$	7607687	16	11
2136137	13	11 $\frac{1}{4}$	11010	19	7 $\frac{3}{4}$	878787	13	6
9998562	15	6 $\frac{3}{4}$	11303	16	6	999899	18	7
7593163	16	7 $\frac{1}{2}$	600606	13	8	51105	13	9 $\frac{1}{4}$
303030	13	8 $\frac{3}{4}$	721968	10	4	110011	3	0
2290192	0	9	999989	11	4 $\frac{1}{2}$	2963706	2	10
16515	10	10	763821	10	2 $\frac{1}{4}$	130261	11	0 $\frac{1}{2}$
707	5	11	509005	13	1 $\frac{1}{2}$	570072	14	7
1101010	15	7	37026	11	0 $\frac{1}{2}$	1031	14	9
306663	19	6	729168	5	6 $\frac{3}{4}$	1201021	9	10
999888	16	8 $\frac{1}{2}$	315627	16	7 $\frac{1}{4}$	903116	8	11 $\frac{3}{4}$
70207	17	11 $\frac{1}{4}$	7031	18	4 $\frac{1}{2}$	20202	7	11 $\frac{3}{4}$
5050505	13	9 $\frac{3}{4}$	90311	10	6	101110	13	9
17003	12	7	573008	10	9	7077077	3	8 $\frac{1}{4}$
5090	3	8 $\frac{1}{2}$	90313	8	8	396921	5	4
136702	16	9 $\frac{3}{4}$	137026	6	11	7296031	6	6
100	11	6	902116	19	10 $\frac{1}{4}$	156796	15	7 $\frac{1}{2}$

(98)			(99)			(100)		
£.	s.	d.	£.	s.	d.	£.	s.	d.
313021	15	9½	36975	17	7½	695106	12	7½
70103	15	7¼	17093	13	9	302103	13	8¼
13113	11	8½	69009	0	8¼	1007	16	9¾
44040	9	11	73106	5	10	900090	14	10¼
694800	10	10¼	11031	2	11¼	99909	2	11
70210	6	9	7092	9	10	250	11	10
503136	9	8¼	80867	11	9½	17	19	9
110011	19	6¾	1396	18	3¼	17210	19	6
470216	17	7	4748	3	3½	21012	19	6½
60606	19	0	99808	13	8	17616	15	7½
372730	13	5½	17906	9	6¼	139	13	8¼
990909	13	4	500	16	9¼	6075	13	9¾
78136	14	7	1703	3	10	99028	13	6
594637	7	6	1877	10	7¼	17596	17	7
7321	3	11½	69586	17	8	998899	16	8
96037	6	10	1921	4	9	88099	14	5
5728	7	9	38764	11	5	16760	3	6
39009	19	8¼	7021	18	6½	59059	9	9
5678	10	11	93007	5	7	9027	18	11
21311	11	10¼	8621	12	7¾	9098	18	10
112360	6	5	17219	19	10	75168	8	6
94587	13	2½	8627	6	11½	3077	0	9
709035	17	1½	59603	13	8	99682	2	7½
699886	12	1¼	69000	0	6	15096	5	9
474047	12	1¾	7507	2	3¼	330033	12	6½
921311	12	7	11056	1	1½	170017	4	3
54709	9	6	90213	15	1¼	706076	14	9½
903179	16	11	1967	14	10	92920	4	11¼

(101) Add together £101. 12. 11½, £109. 16. 8½, £11. 11. 10¼, £1. 18. 6¼, £3. 18. 7¾, £2. 19. 10½, £4. 14. 6¼.

(102) A person owes the following amounts, viz. £3. 13. 8½, £2. 19. 6¼, £11. 17. 7¼, £86. 13. 8, £4. 13. 9¼ and £5. 5. 6. What does he owe altogether?

(103) Find the sum of £3. 12. 6½ + £9. 19. 0¾ + £2. 18. 5½ + £3. 19. 9¾ + £4. 17. 10½ + £6. 11. 9¾.

(104) A person died leaving 1000 guineas to each of three sons, besides £10,500 worth of stock to each of his three sons and two daughters; his plate, furniture and horses worth £6398. 12. 9; real property to the amount of £40,000; legacies to charitable institutions, servants, &c. £4705. 9. 8; and in addition the residuary legatee received £23,946. 19. 1½. What was the worth of his whole estate?

(105) Find by addition the worth of 17 articles at £3. 18. 10¾ each.

(106) Add together 31 sovereigns, 31 half-sovereigns, 31 guineas, 31 half-guineas, 31 crowns and 31 half-crowns.

(107) Find the value of a wine merchant's stock which consists of Old Port £1943. 16. 8, Port £3126. 4. 6, Sherry £2021. 17. 9, Claret £209. 11. 9, Hock £572. 11. 6, Champagne £4796. 12. 10, and Spirits £4219. 13. 6.

(108) A person buys goods for £209. 11. 6 and gains £23. 10. 8½ on their sale: for what does he sell them?

(109) Find the sum of the following items, 3s. 6d., 8s. 9½d., 5s. 10¼d., 3s. 8¼d., 19s. 6d., 11s. 3½d., 4s. 7d., 5s. 9½d. and 8s. 6¼d.

(110) Find by addition the cost of 7 tons of hay at £3. 18. 9½ per ton.

(111) A tradesman receives on Monday £2. 9. 6¼, Tuesday £4. 13. 6, Wednesday £8. 14. 9½, Thursday £1. 1. 8½, Friday £19. 16. 7¼ and Saturday £27. 14. 8¾: what did he receive altogether?

(112) Find the sum of £141. 11. 8 + £193. 16. 9½ + £20. 10. 10 + £17. 19. 6¾ + £18. 12. 9½ + £43. 19. 8.

(113) A merchant consigns to India ale valued at £4709. 16. 8, stout £479. 15. 8, drugs £786. 11. 6, and stationery £2963. 13. 4: what was the total value of his consignment?

(114) A daily newspaper published at a penny has an average circulation of 47312 copies: find by addition the value of a week's sale.

(115) Add together £31. 13. 6 $\frac{1}{4}$ and 10958 farthings.

(116) The expenditure of a Union is as follows: Maintenance of Inmates of Workhouse £13912. 11. 10 $\frac{1}{2}$, Buildings, repairs, &c. £1306. 12. 8, Salaries £4176. 5. 8, Law expenses £219. 13. 4, Out-door relief £7216. 13. 8, Printing and Stationery £303. 14. 6, Gas £47. 11. 9, Miscellaneous expenses not included in the above £1147. 13. 6. If the income exceeded the expenditure by £271. 19. 9 $\frac{1}{2}$, what was the total income?

(117) Add together 5 $\frac{1}{2}$ guineas, 3 $\frac{1}{2}$ half-guineas and 21 half-crowns.

(118) A collection at a church realised 31 sovereigns, 5 five pound notes, 1 ten ditto, 115 half-crowns, 19 half-sovereigns, 3 crown pieces, 1196 pence, 915 shillings and 72 sixpences: find the total amount.

(119) A housekeeper's weekly butcher's bills for the Quarter ending March 25 were as follows: 18s. 6*d.*, 19s. 7 $\frac{1}{2}$ *d.*, 13s. 3 $\frac{1}{4}$ *d.*, 14s. 11*d.*, 23s. 9*d.*, 6s. 8 $\frac{1}{2}$ *d.*, 17s. 6*d.*, 18s. 4*d.*, 15s. 9*d.*, 17s. 11 $\frac{1}{2}$ *d.*, 13s. 10 $\frac{1}{4}$ *d.*, 22s. 2 $\frac{1}{2}$ *d.* and 16s. 4 $\frac{1}{4}$ *d.*: find the total.

(120) Find by addition the sum of 10 payments of £1. 19. 9 $\frac{1}{2}$ each.

(121) Add together £113. 17. 6, £11. 19. 8, £14. 17. 6, £3. 2. 8, £13. 12. 6, £1. 18. 6 and £2. 13. 6 $\frac{1}{4}$.

(122) Reduce £31. 12. 11 $\frac{1}{2}$ and £50 19. 7 $\frac{1}{4}$ to farthings, subtract one number from the other and reduce the result to pounds, shillings, &c.

(123) Find in account money the sum of 58 half-crowns, 119 sixpences, 131 fourpences, and 111 threepences.

(124) How many times is £1. 10. 5 contained in the sum of £5, 5 half-sovereigns and 5 fivepences?

(125) The treasurer of a charity has in hand £312. 0. $7\frac{1}{4}$, and receives in the course of a year £1476. 6. 8, £219. 14. 5, £813. 11. $11\frac{1}{2}$ and £403. 17. 6: what is the amount received?

(126) Find by addition the cost of 12 bales of clothing at £3. 1. $4\frac{1}{4}$ per bale.

(127) Add together £2. 19. $6\frac{1}{2}$, £3. 11. $9\frac{1}{4}$, £9. 12. $10\frac{1}{4}$, £8. 18. $6\frac{1}{4}$, £3. 17. $10\frac{1}{2}$, £9. 13. $6\frac{1}{2}$ and £1. 17. 3.

(128) A person paid away 2s. 6d., 5s. $8\frac{1}{2}$ d., 4s. 9d., 3s. 7d., 8s. 9d., 11s. $6\frac{1}{2}$ d. and 16s. 2d., and had then left 13s. 6d.: how much had he at first?

(129) A merchant bought 7 chests of tea, for which he paid £2. 13. 6, £3. 11. $9\frac{1}{2}$, £2. 18. 10, £3. 16. 8, £3. 14. $5\frac{1}{2}$, £4. 19. $5\frac{1}{2}$ and £4. 2. 9 respectively. What was the total sum paid?

(130) From a certain sum £9. 11. $6\frac{1}{2}$ was taken and there remained £5. 2. $8\frac{1}{4}$: what was the sum?

(131) A workman thus spends his weekly wages: Rent 3s. 9d., Provisions 15. $8\frac{1}{2}$ d., Clothing 2s. 6d., Sundries 3s. 10d., and after paying 5s. into Savings' Bank has 3s. 6d. left: what are his weekly wages?

(132) Paid £2. 13. 8 for gas in March, £1. 19. 6 in June, £2. 11. $10\frac{1}{2}$ in September and £4. 5. $9\frac{1}{4}$ in December: find the amount paid in the year.

(133) Find the sum £13 + 13 guineas + 13 half-guineas + 13 half-crowns + 13 farthings.

(134) In building a house the expense was as follows: Lime £4. 13. 8, Sand £1. 0. 6, Bricks £13. 9. 10, Wood-work £9. 19. 6, Cartage £17. 10. 6, Men's wages £79. 18. 3. What was the entire cost of the house if £24. 0. 0 was paid for the site?

(135) A servant pays the following accounts: Baker 11s. 9d., Butcher £2. 1. 6, Greengrocer 8s. $6\frac{1}{2}$ d., Milkman 5s. 3d. and Sundries 10s. 9d., she has then left 15s. $8\frac{1}{2}$ d. out of the sum given her. What was the sum?

(136) Add together the items of a bill as follows: 11s. 6d., 5s. 9½d., 7s. 1½d., 8s. 2¼d., 5s. 9½d., 6s. 11¾d., 9s. 6d., 3s. 3¼d. and 5s. 6½d.

(137) Reduce to account money the sum of 51 crowns + 111 florins + 80 ninepences + 36 sixpences + 103 fourpences + 23 threepences.

(138) What salary has a clerk who spends £26. 10. 10½ each quarter and saves 38 guineas in the year?

(139) Reduce to account money the sum of 1102 shillings + 1102 pence + 1102 half-pence + 1102 farthings.

(140) What sum was paid for 6 Chairs costing £1. 14. 0, a Table £2. 13. 0, Carpet £3. 12. 0, Fender and fire-irons 18s. 6d., Curtains £1 15. 0, Hearth-rug 19s., Chimney-glass £2. 12. 6, and Pictures and Ornaments 3½ guineas?

(141) A gentleman paid for paving £9. 19. 6, for plumber's work £2. 18. 0, carpenter's ditto £4. 19. 0, plastering £1. 11. 10½, white-washing £1. 15. 8, paper-hanging £4. 13. 8, painting £11. 16. 9, and for general repairs £3. 18. 6½. What was the total sum paid?

(142) What is the amount of salaries paid to five clerks who receive annually £340. 10. 0, £289. 13. 0, 220 guineas, 193 guineas and 85½ guineas respectively?

(143) What amount does a booking clerk receive who issues 501 penny, 384 threepenny, 494 sixpenny, and 194 eightpenny tickets?

(144) A mistake is made in adding together the items of a bill; it is made out for £124. 16. 2½, which is less than the true amount by £2. 11. 11¾. What is the right amount?

(145) A farmer sells 16 bullocks for £235. 16. 0, 138 sheep for £392. 10. 6, 51 calves at a guinea and a half each, and 3½ score of pigs at the rate of £64 for each score. What amount of money did the whole realise?

(146) A person pays at various times £2. 11. 10½, £9. 16. 4¼, £3. 19. 6½, £11. 11. 10 and £5; he still owes £23. 16. 0. What did he owe at first?

(147) A draper buys calico to the value of £134. 10. 6, linen £432. 3. 8, cambric £121. 11. 0, prints £118. 10. 0, stuffs £319. 14. 6, and silks £580. 19. 0. What is the value of his stock thus acquired?

(148) What did I pay for 1 vol. Longfellow's poems at 5s. 6d., 1 do. Campbell's 6s. 6d., 1 do. Scott's 7s. 6d., 1 do. Byron's 4s. 6d., and 1 set of Waverley Novels at £4. 4. 0 the set?

(149) Find the sum of £1. 11. 6 + 16s. 9d. + 3s. 8½d. + 19s. 10¼d. + £2. 1. 9 + 18s. 6¼d. + 19s. 11¾d. + 18s. 6d. + 17s. 2½d. + 15s. 8½d. + £14. 17. 0 + £1. 19. 9½.

(150) Find by compound addition the value of 13 articles at £3. 18. 10¾ each.

COMPOUND SUBTRACTION.

(1)	(2)	(3)	(4)	(5)
£ s. d. 7 9 6 3 4 4	£ s. d. 90 3 7 4 2 3	£ s. d. 75 18 11 29 16 4	£ s. d. 30 2 6 7 0 2	£ s. d. 100 13 4 73 8 1
(6)	(7)	(8)	(9)	(10)
19 10 6 5 6 7	7 3 8 2 1 10	17 10 9 13 5 11	12 10 5 7 9 6	3 18 4 1 12 9
(11)	(12)	(13)	(14)	(15)
73 10 5 5 10 7	60 15 6 17 17 9	80 16 3 7 17 10	50 1 11 7 2 7	90 15 0 30 17 3
(16)	(17)	(18)	(19)	(20)
3 2 6½ 1 2 9¼	9 0 5¾ 7 1 9½	9 7 2¼ 7 3 9½	16 16 6 3 18 9	30 12 4½ 5 9 7¼
(21)	(22)	(23)	(24)	(25)
105 12 7¼ 37 16 9½	109 13 6¼ 73 19 7½	130 3 6 72 1 10½	170 11 1 76 13 8¼	308 1 7 92 9 9½
(26)	(27)	(28)	(29)	(30)
71 13 0 13 1 9½	100 0 0¼ 17 0 9½	306 12 11 5 12 11½	105 0 1¾ 16 17 7	71 3 6 29 16 7½
(31)	(32)	(33)	(34)	(35)
130 13 6½ 111 14 9¾	5 0 0 15 5½	270 2 6 19 16 8½	102 1 1 22 2 2	13 7 0¼ 2 19 3

(36)			(37)			(38)			(39)			(40)		
£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.
160	17	5 $\frac{1}{4}$	1102	1	6	300	1	3 $\frac{1}{2}$	990	9	1 $\frac{1}{2}$	301	3	10
99	18	9 $\frac{3}{4}$	70	5	9 $\frac{1}{2}$	16	10	7 $\frac{3}{4}$	99	17	6 $\frac{3}{4}$	175	19	11
(41)			(42)			(43)			(44)			(45)		
400	4	4 $\frac{1}{2}$	302	13	1 $\frac{1}{2}$	474	1	2	13	2	9 $\frac{1}{4}$	102	11	9
71	13	6 $\frac{3}{4}$	67	19	6 $\frac{1}{4}$	99	8	8 $\frac{1}{2}$	6	11	9 $\frac{1}{2}$	76	18	5 $\frac{1}{2}$
(46)			(47)			(48)			(49)			(50)		
500	17	6	103	9	1 $\frac{1}{4}$	203	13	1 $\frac{1}{2}$	413	1	7	1031	7	6 $\frac{1}{2}$
27	19	9 $\frac{1}{2}$	72	19	6	201	19	6 $\frac{3}{4}$	198	8	10 $\frac{3}{4}$	32	5	9 $\frac{1}{4}$
(51)			(52)			(53)			(54)			(55)		
702	1	6 $\frac{1}{2}$	626	11	8	170	1	9 $\frac{1}{2}$	702	1	7 $\frac{1}{2}$	7051	11	7 $\frac{1}{4}$
135	14	9	33	13	9	99	19	6 $\frac{3}{4}$	196	11	9 $\frac{3}{4}$	438	16	5 $\frac{1}{2}$
(56)			(57)			(58)			(59)			(60)		
1026	1	9	306	4	4	190	7	6 $\frac{1}{2}$	60	12	1	2019	2	1 $\frac{1}{4}$
729	8	10 $\frac{1}{2}$	92	17	7 $\frac{1}{2}$	90	19	5 $\frac{1}{4}$	13	17	0 $\frac{3}{4}$	116	9	7 $\frac{1}{2}$
(61)			(62)			(63)			(64)			(65)		
112	12	8	904	14	2 $\frac{1}{2}$	121	19	9 $\frac{1}{4}$	707	7	7 $\frac{1}{2}$	2193	3	11
74	14	9	26	17	9 $\frac{1}{4}$	120	19	9 $\frac{3}{4}$	29	14	8 $\frac{1}{2}$	2093	16	11 $\frac{1}{4}$
(66)			(67)			(68)			(69)			(70)		
570	1	6	1000	10	11	1650	6	9	540	14	4 $\frac{1}{2}$	606	13	8 $\frac{1}{4}$
38	4	6 $\frac{3}{4}$	55	10	11 $\frac{1}{2}$	1059	6	7 $\frac{3}{4}$	12	17	9 $\frac{3}{4}$	66	19	9 $\frac{1}{2}$
(71)			(72)			(73)			(74)			(75)		
111	11	11	200	0	0	2114	3	8 $\frac{1}{2}$	1300	6	6	1702	13	7 $\frac{1}{4}$
101	13	9 $\frac{1}{4}$	70	9	6	297	16	9 $\frac{3}{4}$	626	6	8	1660	15	3 $\frac{1}{2}$
(76)			(77)			(78)			(79)			(80)		
2017	13	4	4195	6	3	1244	3	8 $\frac{1}{4}$	302	2	2 $\frac{1}{2}$	976	13	6 $\frac{1}{2}$
309	16	9	2037	16	4 $\frac{1}{2}$	933	16	9 $\frac{1}{2}$	19	16	9 $\frac{3}{4}$	176	19	9 $\frac{3}{4}$

(81)			(82)			(83)			(84)			(85)		
£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.
119	5	1 $\frac{1}{4}$	2081	1	7 $\frac{1}{2}$	310	13	7	1906	15	5 $\frac{1}{2}$	1030	0	3
37	16	9	396	13	9 $\frac{3}{4}$	31	18	9	903	16	7 $\frac{1}{4}$	79	17	9 $\frac{1}{4}$
(86)			(87)			(88)			(89)			(90)		
1021	16	9 $\frac{1}{4}$	1303	11	3	500	1	6 $\frac{1}{2}$	90	18	0	600	6	8
729	17	10 $\frac{1}{2}$	976	13	9 $\frac{1}{2}$	73	19	9 $\frac{3}{4}$	7	18	5 $\frac{1}{4}$	305	1	10 $\frac{1}{2}$
(91)			(92)			(93)			(94)			(95)		
1210	16	7 $\frac{3}{4}$	702	13	6 $\frac{1}{2}$	1902	1	7 $\frac{1}{2}$	244	4	6	102	1	6
996	19	9 $\frac{1}{2}$	135	13	7 $\frac{3}{4}$	777	7	7 $\frac{3}{4}$	79	19	8 $\frac{1}{2}$	31	0	11 $\frac{1}{4}$
(96)			(97)			(98)			(99)			(100)		
1302	6	3 $\frac{1}{2}$	3061	13	6 $\frac{1}{2}$	9026	14	7 $\frac{1}{4}$	204	1	5	998	6	2
726	19	7 $\frac{1}{2}$	796	19	3 $\frac{3}{4}$	313	17	6 $\frac{1}{2}$	44	11	10 $\frac{1}{2}$	73	13	5 $\frac{1}{2}$
(101)			(102)			(103)			(104)			(105)		
9261	18	1 $\frac{1}{4}$	1024	0	0 $\frac{1}{4}$	1446	13	5 $\frac{1}{2}$	1968	16	1 $\frac{1}{4}$	8001	1	10
799	16	11 $\frac{1}{2}$	113	7	0 $\frac{1}{2}$	769	18	7 $\frac{3}{4}$	1877	17	9	63	17	11
(106)			(107)			(108)			(109)			(110)		
900	11	2	365	10	6	1902	15	6 $\frac{1}{4}$	1721	0	3	1304	4	7
174	19	8	65	13	7 $\frac{1}{4}$	113	17	9 $\frac{1}{2}$	29	6	5 $\frac{1}{4}$	399	12	6 $\frac{1}{2}$
(111)			(112)			(113)			(114)					
£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.			
10000	1	6	30012	13	4	119031	5	6	120311	13	6 $\frac{1}{2}$			
920	8	8	17306	18	9 $\frac{1}{4}$	78029	15	7 $\frac{1}{2}$	75196	18	2 $\frac{3}{4}$			
(115)			(116)			(117)			(118)					
190031	7	0	313106	13	9 $\frac{1}{2}$	90000	0	0	27219	0	6 $\frac{1}{2}$			
3609	18	5 $\frac{1}{2}$	79517	16	11	1033	16	3	5031	12	9 $\frac{3}{4}$			
(119)			(120)			(121)			(122)					
750105	2	6	190213	16	0 $\frac{1}{2}$	110216	19	0 $\frac{3}{4}$	103116	3	1 $\frac{1}{2}$			
27216	13	4 $\frac{1}{2}$	73194	17	5 $\frac{3}{4}$	75326	19	9 $\frac{1}{2}$	11379	16	7 $\frac{3}{4}$			

(123)			(124)			(125)			(126)		
£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.
200120	13	6 $\frac{1}{2}$	1161302	3	8	713036	11	5	1102161	18	1 $\frac{1}{4}$
20173	9	7 $\frac{1}{2}$	303037	15	9	70316	11	7	517033	19	1 $\frac{1}{2}$
(127)			(128)			(129)			(130)		
313021	6	3	190311	14	4	213906	13	0 $\frac{1}{4}$	117061	13	2
79633	13	9	72006	15	6	13619	16	7 $\frac{1}{2}$	38156	15	8 $\frac{1}{2}$
(131)			(132)			(133)			(134)		
1000000	0	0	302156	9	0 $\frac{1}{2}$	177906	3	5	112123	4	6
110011	5	5	70209	16	9 $\frac{3}{4}$	7269	18	6	73029	16	9 $\frac{1}{2}$
(135)			(136)			(137)			(138)		
102116	3	1 $\frac{1}{4}$	403131	13	2 $\frac{1}{2}$	809116	17	6	113041	3	1 $\frac{1}{2}$
70291	16	10 $\frac{1}{2}$	76095	16	6 $\frac{1}{4}$	30915	18	9	21306	9	7 $\frac{3}{4}$
(139)			(140)			(141)			(142)		
721306	6	1 $\frac{1}{4}$	219910	3	3	99091	3	6	170316	0	3 $\frac{1}{4}$
69404	8	6 $\frac{1}{2}$	3416	2	7	7209	18	5 $\frac{3}{4}$	60196	1	7 $\frac{3}{4}$
(143)			(144)			(145)			(146)		
200013	3	1 $\frac{1}{2}$	906113	6	8 $\frac{1}{2}$	203113	6	7	902015	9	6 $\frac{1}{2}$
7696	13	7	79137	16	9 $\frac{3}{4}$	92163	9	8 $\frac{1}{2}$	21367	16	9 $\frac{3}{4}$
(147)			(148)			(149)			(150)		
302131	7	5	1100001	0	1	129021	0	5	1340506	13	8 $\frac{1}{4}$
91036	19	6	60137	0	7	13069	7	11	113069	17	10 $\frac{1}{2}$

(151) By how much is £20. 10. 11 more than £19. 11. 10 $\frac{1}{2}$?

(152) By how much is £20. 17. 11 less than £119. 11. 5 $\frac{1}{2}$?

(153) A person pays £6. 15. 8 $\frac{1}{2}$ of a debt of £10. What is still owing?

(154) Find the value of £103. 16. 6 + £29. 19. 9 $\frac{1}{2}$ + £73. 12. 6 + £19. 6. 0 - £180. 19. 11 $\frac{3}{4}$.

(155) Take £5. 11. 10 $\frac{1}{2}$ from £16. 8. 11 $\frac{1}{4}$.

(156) Which is the greater, and by how much, £5. 11. 10½ + £2. 1. 9¼ or £7. 9. 6¼ + 5s. 8¾d.?

(157) From £20 take 2000 farthings.

(158) From 3½ guineas take 13½ half-pence.

(159) A tradesman's accounts shewed receipts £209. 16. 0½, Expenses £305. 11. 2¼: find amount of loss.

(160) A farmer pays £709. 16. 0 a year for rent. His Wheat brings him in £203. 19. 0, Barley £140, Oats £475. 10. 6, Root-crops £232, and Hay £483. 12. 6. He pays in wages £236. 16. 0 and for seeds £136. 11. 10. What is his gain?

(161) A merchant pays £23. 16. 0, £107. 18. 0, and £191. 16. 8, and receives £230. 12. 0, £516. 17. 6 and £143. 2. 6. How much more does he receive than he pays?

(162) Find the difference of £130. 12. 6 and 130 half-guineas.

(163) Add together £13. 16. 8, £2. 11. 10½, £19. 16. 8½ and £14. 17. 6¼, and from the sum take £23. 19. 9¼.

(164) *A* sent to *B* on Jan. 4, Goods £29. 16. 9, Jan. 28, Goods £19. 16. 9½, and Feb. 3, Goods £16. 12. 6, and received from *B*, Feb. 3, Cash £13. 10. 0, March 1, Cash £10. 10. 0, and on July 6 the Balance. Find this balance.

(165) From £130. 1. 1¼ take the sum of £27, £28, £29. 16. 0 and £24. 13. 10.

(166) From £1. 16. 9½ take 3 times the half of 1148 farthings.

(167) *A* owes *B* £117. 16. 8 and pays £110. 19. 9, *B* owes *A* £136. 14. 7 and pays £119. 12. 11. How much does *B* still owe *A*?

(168) Find the value of 16s. 4d. + 13s. 8d. + 12s. 10½d. - 18s. 6¼d. + 11s. 6¼d. - 12s. 10¾d. + £1. 2. 6 - £1 19. 9.

(169) From 22 guineas take the sum of 22 half-guineas, 22 half-crowns, and 22 farthings.

(170) Reduce the difference of £11. 11. 6 and £9. 19. 8 to two-pences.

(171) From twice 12s. 7½d. take three times 1s. 11¼d.

(172) Find by addition the value of 5 times £1. 18. 6½ and 7 times £1. 14. 10½, and reduce to farthings the difference of the two results.

(173) A merchant's Cash Book shews Cash on hand £313. 6. 8, Cash in bank £2000, Cash paid £4416. 12. 8, Cash received £5916. 12. 8. What is the balance in his favour?

(174) From 31 half-guineas take 31 half-pence.

(175) After paying away £2. 19. 3½ what should I have left out of two £5 notes?

(176) A has £20 and pays B 365 pence, B has 1820 pence and pays A £5. 19. 10½. How much has A more than B?

(177) A farmer buys 3 horses costing respectively 28, 38½ and 48 guineas, and pays for them with a cheque for £100 and cash. How much cash does he pay?

(178) How much must be added to £4. 17. 9½ to make the sum total £5. 10. 0?

(179) What remains after subtracting £24. 13. 8¼ four times from £100?

(180) The income of a railway was, from Passenger traffic £1011447. 13. 1, from Goods £2119383. 16. 4, from Sale of old material £732605. 9. 1¾; the expenditure was, Salaries £242687. 17. 7, Expended on plant £790683. 12. 1, Gas £8760. 15. 0, Rates, &c. £42126. 11. 6, and Sundry expenses £21190. 4. 4. What was the total gain?

(181) Take £200. 11. 6½ from £502. 9. 8¾, and find the difference of the remainder and £126. 11. 9½.

(182) What sum must be added to twice 13s. 6½d. to make two guineas?

(183) What cash must I pay with three £10 notes, six £5 notes, and a cheque for £11. 17. 10½, to pay a bill of £86. 0. 1½?

(184) How many times is 1s. 9d. contained in the difference of 43 guineas and 33 half-guineas?

(185) What cash payment will settle an account of £40. 10. 0 of which £26. 13. 8 has been paid and on which a discount of £1. 15. 0 is further allowed?

(186) From £21 take 21 times 21 pence.

(187) Find the value of £1. 11. 10 + £2. 12. 6 + £9. 16. 3 - £1. 15. 7 - £23. 16. 7 + £24. 19. 8 + £1. 17. 10.

(188) Bought goods for £20. 17. 6 and sold them at a loss of £1. 19. 9: for what were they sold?

(189) By selling goods for £6. 16. 8½ I lose 13s. 6½d. What did they cost me?

(190) If I sold goods at £15. 10. 0, thus gaining £1. 15. 10¼, what did they cost me?

(191) Find the sum of £9. 2. 6 + 15s. 6d. + 13s. 8d. + 18s. 6d. + 13s. 7½d., and from this sum take £1. 14. 7½.

(192) By how much is twice 14s. 9¼d. short of 30 shillings?

(193) From a thousand guineas take the sum of 1000 crowns + 1000 half-crowns + 1000 pence.

(194) A person paid 26s. 10½d. second class fare from Manchester to King's Cross. What change did he receive out of a five pound note?

(195) A merchant on winding up his affairs finds that he has lost 300 guineas and that cash and stock amount to £7400. With what sum did he begin business?

(196) Multiply 2031 pence by 29, reduce the result to account money, and find by how much it differs from £400.

(197) From 101½ half-guineas take 3001 half-pence.

(198) Bought goods for £21. 12. 0, on which is allowed £1. 17. 6 discount; I sell them for £28. 19. 6, and allow £2. 1. 4 discount. What is my net profit?

(199) Received three cheques each £143. 17. 6 and a bill payable at 3 months in settlement of an account for £600. For what amount was the bill drawn?

(200) A owes B £11. 11. 6½, B owes A £19. 16. 7¼, B pays A £18. 17. 3¼, and A pays B £9. 14. 8½. Which is indebted, and how much?

COMPOUND MULTIPLICATION.

	£.	s.	d.																
(1)	2	3	9	×	2	(31)	19	0	$\frac{1}{2}$	×	32								
(2)	7	9	6	×	3	(32)	1	13	4	$\frac{1}{2}$	×	45							
(3)	3	10	5	×	4	(33)	6	19	7	$\frac{1}{2}$	×	48							
(4)	8	16	7	×	5	(34)	2	12	2	$\frac{1}{2}$	×	64							
(5)	1	19	6	×	6	(35)	2	16	8	×	99								
(6)	3	15	4	×	7	(36)	1	14	5	$\frac{1}{4}$	×	120							
(7)	8	16	9	×	8	(37)	7	2	6	×	125								
(8)	5	11	7	×	9	(38)	9	0	11	$\frac{1}{2}$	×	144							
(9)	6	13	9	×	10	(39)	3	16	7	$\frac{3}{4}$	×	63							
(10)	4	15	8	×	11	(40)	8	15	8	$\frac{1}{2}$	×	75							
(11)	3	19	10	×	12	(41)	2	19	6	$\frac{1}{2}$	×	147							
(12)	6	9	6	$\frac{1}{2}$	×	3	14	7	$\frac{1}{2}$	×	320								
(13)	7	7	5	$\frac{1}{4}$	×	6	13	2	$\frac{1}{4}$	×	168								
(14)	6	3	6	$\frac{1}{2}$	×	5	19	6	$\frac{1}{4}$	×	17								
(15)	9	2	7	$\frac{3}{4}$	×	3	18	2	$\frac{1}{4}$	×	23								
(16)	8	12	11	$\frac{1}{4}$	×	9	10	9	$\frac{1}{2}$	×	85								
(17)	6	13	5	$\frac{1}{2}$	×	5	5	5	$\frac{1}{2}$	×	97								
(18)	19	17	6	$\frac{1}{2}$	×	5	13	11	$\frac{1}{4}$	×	103								
(19)	15	3	8	$\frac{1}{4}$	×	6	19	8	$\frac{1}{2}$	×	601								
(20)	17	19	6	$\frac{3}{4}$	×	2	1	4	$\frac{1}{4}$	×	661								
(21)	5	13	7	$\frac{1}{2}$	×	17	10	5	$\frac{1}{2}$	×	79								
(22)	6	11	10	$\frac{1}{4}$	×	38	14	6	$\frac{1}{4}$	×	85								
(23)	3	17	6	$\frac{1}{2}$	×	29	13	7	$\frac{1}{2}$	×	67								
(24)	8	14	7	$\frac{1}{4}$	×	19	16	2	$\frac{1}{2}$	×	93								
(25)	9	16	9	$\frac{1}{4}$	×	76	15	6	$\frac{1}{2}$	×	109								
(26)	27	19	3	$\frac{1}{2}$	×	18	12	2	$\frac{1}{4}$	×	117								
(27)	10	12	11	×	20	(57)	33	3	4	×	91								
(28)	9	15	5	$\frac{1}{2}$	×	62	1	7	$\frac{1}{4}$	×	31								
(29)	7	2	9	$\frac{1}{4}$	×	59)	2	12	4	×	137								
(30)	17	6	$\frac{1}{2}$	×	36	(60)	3	13	9	×	184								

£.	s.	d.		£.	s.	d.	
(61)	8	13	$6\frac{1}{2} \times 185$	(99)	6	13	$8\frac{1}{4} \times 149$
(62)	2	15	$5\frac{1}{2} \times 286$	(100)	7	12	$4\frac{1}{2} \times 236$
(63)	7	9	$5\frac{3}{4} \times 291$	(101)	4	14	6×299
(64)	13	10	$6\frac{1}{2} \times 372$	(102)	4	7	$8\frac{1}{4} \times 992$
(65)	7	16	$4\frac{1}{4} \times 116$	(103)	5	11	$4\frac{3}{4} \times 173$
(66)	2	19	$6\frac{1}{4} \times 129$	(104)	3	19	6×197
(67)	1	16	$6\frac{1}{2} \times 307$	(105)	5	16	$2\frac{1}{4} \times 920$
(68)	1	15	8×395	(106)	6	17	$3\frac{1}{4} \times 384$
(69)	2	14	$9\frac{1}{2} \times 672$	(107)	1	19	$11\frac{3}{4} \times 195$
(70)	7	2	$5\frac{1}{2} \times 318$	(108)	19	13	$7\frac{1}{2} \times 929$
(71)	6	19	$0\frac{3}{4} \times 446$	(109)	27	14	$6\frac{3}{4} \times 116$
(72)	5	19	$11\frac{3}{4} \times 915$	(110)	18	12	$6\frac{1}{2} \times 377$
(73)	4	17	$10\frac{1}{2} \times 987$	(111)	66	11	$7\frac{1}{4} \times 629$
(74)	9	15	$8\frac{3}{4} \times 989$	(112)	35	13	$0\frac{1}{2} \times 946$
(75)	15	11	$6\frac{3}{4} \times 886$	(113)	29	12	$6\frac{1}{4} \times 482$
(76)	3	14	$10\frac{1}{2} \times 207$	(114)	76	11	$5\frac{3}{4} \times 435$
(77)	9	16	$8\frac{3}{4} \times 319$	(115)	58	15	$11\frac{1}{2} \times 721$
(78)	10	12	$11\frac{1}{4} \times 116$	(116)	39	16	$11\frac{3}{4} \times 119$
(79)	7	19	$6\frac{1}{2} \times 582$	(117)	76	17	8×211
(80)	8	13	$9\frac{1}{4} \times 497$	(118)	96	13	9×713
(81)	1	17	$5\frac{1}{2} \times 365$	(119)	99	19	$10\frac{1}{2} \times 371$
(82)	2	19	$3\frac{3}{4} \times 799$	(120)	82	13	$11\frac{3}{4} \times 694$
(83)	2	18	$0\frac{1}{2} \times 815$	(121)	83	15	$7\frac{1}{4} \times 872$
(84)	2	9	$5\frac{1}{4} \times 474$	(122)	57	9	$8\frac{1}{2} \times 116$
(85)	2	10	7×509	(123)	37	6	$11\frac{1}{4} \times 928$
(86)	3	11	$8\frac{1}{4} \times 673$	(124)	38	3	$11\frac{3}{4} \times 595$
(87)	3	16	$5\frac{3}{4} \times 862$	(125)	43	11	9×862
(88)	7	15	$8\frac{1}{2} \times 991$	(126)	47	10	10×935
(89)		19	$9\frac{3}{4} \times 339$	(127)	52	11	8×976
(90)		17	$2\frac{1}{2} \times 358$	(128)	15	13	$7\frac{1}{4} \times 599$
(91)		13	$6\frac{1}{2} \times 967$	(129)	29	12	$6\frac{1}{2} \times 1869$
(92)		19	$7\frac{1}{4} \times 702$	(130)	33	17	$3\frac{1}{4} \times 1720$
(93)	1	0	$6\frac{1}{4} \times 917$	(131)	37	16	$1\frac{1}{4} \times 3862$
(94)	10	11	$9\frac{1}{2} \times 776$	(132)	38	14	$2\frac{1}{2} \times 3754$
(95)	6	13	$7\frac{3}{4} \times 862$	(133)	98	9	$2\frac{1}{4} \times 6928$
(96)	7	15	$8\frac{1}{2} \times 954$	(134)	97	3	$3\frac{1}{4} \times 1968$
(97)	9	2	$6\frac{1}{2} \times 376$	(135)	98	5	$7\frac{1}{2} \times 7013$
(98)	15	17	$8\frac{3}{4} \times 914$	(136)	86	8	5×5678

	£.	s.	d.		£.	s.	d.	
(137)	75	4	$3\frac{1}{4} \times$	2345	(169)	38	13 $2\frac{1}{2} \times$	6669
(138)	44	14	$5\frac{1}{4} \times$	1766	(170)	27	9 $1\frac{1}{2} \times$	7068
(139)	41	7	$8\frac{1}{2} \times$	1968	(171)	616	9 $7\frac{1}{4} \times$	507
(140)	1	16	$9\frac{1}{2} \times$	2963	(172)	372	3 $11\frac{1}{2} \times$	692
(141)	2	13	$10\frac{1}{2} \times$	1594	(173)	116	4 $11\frac{3}{4} \times$	315
(142)	1	15	$11\frac{1}{4} \times$	4444	(174)	902	14 $9\frac{1}{2} \times$	869
(143)	1	14	$10\frac{1}{2} \times$	3786	(175)	729	13 6 \times	926
(144)	2	12	$6\frac{1}{4} \times$	9218	(176)	1586	16 5 \times	705
(145)	3	13	$5\frac{1}{4} \times$	5007	(177)	929	4 $4\frac{1}{2} \times$	434
(146)	7	17	$6\frac{3}{4} \times$	3037	(178)	721	5 $3\frac{1}{4} \times$	698
(147)	1	16	$7\frac{3}{4} \times$	3700	(179)	672	6 8 \times	591
(148)	5	13	$9\frac{1}{2} \times$	8609	(180)	344	4 9 \times	376
(149)	4	14	10 \times	9805	(181)	849	12 $7\frac{1}{2} \times$	590
(150)	4	11	$11\frac{3}{4} \times$	19615	(182)	407	2 $6\frac{3}{4} \times$	603
(151)	4	10	$9\frac{1}{2} \times$	72968	(183)	1403	3 $11\frac{1}{4} \times$	721
(152)	3	11	$1\frac{1}{4} \times$	38672	(184)	8307	8 $9\frac{3}{4} \times$	699
(153)	11	14	$7\frac{1}{4} \times$	4796	(185)	7206	16 $7\frac{1}{2} \times$	472
(154)	16	13	$6\frac{3}{4} \times$	956	(186)	113	17 $8\frac{3}{4} \times$	4004
(155)	19	16	$9\frac{3}{4} \times$	721	(187)	96	19 $6\frac{1}{2} \times$	3158
(156)	17	13	$7\frac{1}{2} \times$	801	(188)	83	13 $5\frac{1}{2} \times$	7296
(157)	13	15	$0\frac{3}{4} \times$	903	(189)	909	11 7 \times	8036
(158)	25	18	$5\frac{1}{2} \times$	5013	(190)	736	3 9 \times	6945
(159)	76	13	$0\frac{1}{4} \times$	2960	(191)	198	14 11 \times	5269
(160)	13	19	10 \times	1776	(192)	72	15 $6\frac{1}{2} \times$	9680
(161)	29	15	8 \times	4480	(193)	86	16 9 \times	40769
(162)	68	16	6 \times	8003	(194)	92	17 $10\frac{1}{4} \times$	50316
(163)	5	17	$7\frac{3}{4} \times$	729	(195)	999	9 $10\frac{3}{4} \times$	2116
(164)	7	19	$5\frac{1}{2} \times$	8203	(196)	76	8 7 \times	82037
(165)	19	15	$4\frac{1}{2} \times$	7156	(197)	294	7 $8\frac{3}{4} \times$	9500
(166)	8	19	$3\frac{1}{4} \times$	4031	(198)	3031	5 $4\frac{1}{2} \times$	4005
(167)	13	11	$4\frac{1}{4} \times$	7967	(199)	869	1 8 \times	30608
(168)	23	12	$4\frac{3}{4} \times$	8380	(200)	7215	19 $11\frac{3}{4} \times$	99987

(201) Multiply 2000 crowns by 15, and reduce the result to account money

(202) Find the cost of a lb. of tea at $3\frac{1}{2}d.$ per ounce.

(203) What is the cost of 14 books at three half-crowns each ?

- (204) Find the value of 13 lbs. of silver at £3. 1. 3 per lb.
- (205) What is the wages of 17 men for a week if each man earns £2. 13. 6½?
- (206) What is the cost of 5 tons of hay at £4. 13. 4 per ton?
- (207) What is the wages of a labourer for 72 hours at 8¼d. an hour?
- (208) If a man spends daily 2s. 6¼d., what would he spend in a year (365 days)?
- (209) Find the total cost of 13 cwt. of sugar at £1. 17. 8½ per cwt. and 11 chests of tea each 96 lbs. at 4s. per lb.
- (210) What is the cost of 13 parcels of flannel, each 36 yards, at 1s. 9½d. per yard?
- (211) What is the entire cost of 11 lbs. beef at 10½d. per lb., 2 legs of mutton each 9½ lbs. at 11d. per lb., and 13½ lbs. veal at 9d.?
- (212) Bought 29 gallons of whiskey at 28s. 6d. per gallon, 10 ditto at 25s. per gallon, and 13 gallons rum at 24s. 9d. What was the total cost?
- (213) Bought 15 sheep at £3 15. 8 each: what did they cost?
- (214) Find the cost of a Salver of silver weighing 13 oz. at 5s. 10¾d. an ounce, £2. 12. 0 being also paid for its manufacture.
- (215) What should be paid for 43 cwt. of cheese at £1. 12. 7½ per cwt.?
- (216) Bought 13 tons of coal at £1. 3. 6 per ton and 5 tons at £1. 1. 6 per ton. What was the total cost?
- (217) Bought 31 cwt. of tobacco at £23. 6. 8 per cwt. and sold the whole for £800. What did I gain?
- (218) Multiply the sum of 50 shillings, 50 pence and 50 farthings by 15.
- (219) A certain mill requires on the average 17 tons of coal per working day. What would be the cost of the supply for 15 weeks at 11s. 6d. per ton?
- (220) Find the cost of 71 tons of turnips at £2. 15. 8 per ton.

- (221) What is the rent of 119 acres of land at £5. 15. 6 per acre ?
- (222) Bought 131 gross of pens at 2s. 6*d.* a gross and sold them for 18 guineas. What was my gain ?
- (223) How much greater is the amount of £1. 1. 9½ × 17 than £2. 4. 7¼ × 7 ?
- (224) Find in account money the value of 969 farthings multiplied by 73.
- (225) What cost 11 tons of iron railings at £11. 15. 0 per ton ?
- (226) Find the whole cost of 11 lbs. butter at 1s. 5½*d.*, 3½ lbs. tea at 3s. 4*d.*, 13 lbs. cheese at 8½*d.*, 2½ lbs. coffee at 1s. 8*d.*, and 5 bars, each 3 lbs., soap at 4*d.* per lb.
- (227) A person spends £1. 2. 10 per week, pays 5s. 6*d.* per week rent, and saves £24. 10. 0 a year. What is his annual income, there being 52 weeks in a year ?
- (228) Find the equivalent in English money of 15000 rupees, each worth 1s. 11½*d.*
- (229) Find the cost of 301 tons of merchandize at £4. 19. 4 per ton.
- (230) What is the total cost of 11¼ lbs. nails at 8*d.*, 15 lbs. No. 5 shot at 5*d.* per lb., 8 packets of screws at 1s. 6*d.* per packet, and 9 lbs. cut nails at 6*d.* ?
- (231) Find the cost of 15½ tons of sea-biscuit at 4s. 6*d.* a stone, there being 160 stones in a ton.
- (232) What amount of money will be required to purchase 19 tons of hay at £3. 16. 0 per ton, and 31 tons of straw at £2. 15. 0 per ton ?
- (233) By how much does 7 times £13. 10. 10 exceed 15 times 5½ guineas ?
- (234) From 11s. 6½*d.* take 5s. 9¾*d.* and multiply the remainder by 32 times 7.
- (235) A tradesman deducts 8*d.* on every £1 for prompt payment. What should he deduct on a bill of £30. 10. 0 ?
- (236) A farmer gets 27 bushels of wheat per acre from 143 acres which he sells at 6s. 9*d.* per bushel. What does it produce ?

(237) How many times is seven times $10\frac{1}{2}d.$ contained in 17 times $3\frac{1}{2}$ guineas?

(238) What is the total cost of 13 doz. Sherry at 30s. a doz., 7 doz. Port at 49s. 6d., 18 doz. Claret at 21s., and 20 doz. Champagne at £3. 12. 0?

(239) Find the cost of 11 casks of alum, each $3\frac{1}{2}$ cwt., at £1. 7. 9 per cwt.

(240) The weight of an eighteenpenny packet of note paper is half a pound: find the price per ton.

(241) Find the whole cost of 13 dozen $2\frac{1}{2}$ inch flower pots at 5d. per doz., 18 doz. 3 in. ditto at $7\frac{1}{2}d.$, 23 doz. ditto at $9\frac{3}{4}d.$, 15 lbs. wall nails at $4\frac{1}{2}d.$ per lb., 3 gross shreds at $2\frac{1}{2}d.$ a dozen, and 1 pr. shears at 7s. 6d.

(242) By how much does the cost of 14 bullocks at 23 guineas each exceed the price of $5\frac{1}{2}$ score sheep at 55s. each?

(243) How much cash in addition to 35 bushels of barley at 5s. 3d. per bushel must be given for 42 bushels of wheat at 6s. 9d. a bushel?

(244) Find the whole cost of 13 stones seed potatoes at 2s. 6d. a stone, $8\frac{1}{2}$ pints broad beans at 4d., $2\frac{1}{2}$ quarts peas at 6d., 5 oz. onion seed at 8d., and $8\frac{1}{2}$ score plants at $2\frac{1}{2}d.$ per score.

(245) What is the whole cost of 18 gallons of ale at 1s. a gallon, 18 ditto at 1s. 2d., 18 ditto at 1s. 4d., and 18 ditto at 1s. 8d. per gallon?

(246) How much would be gained by buying 36 gallons of ale for 48 shillings and retailing it at three half-pence a glass, there being three glasses to a pint?

(247) Find the cost of keeping seven horses for a month if each consumes in that period $2\frac{1}{2}$ bushels of oats at 4s. 9d. per bushel.

(248) Find the cost of 18 hams, each $14\frac{1}{2}$ lbs., at $8\frac{1}{2}d.$ per lb.

(249) If a merchant buys 31 cwt. of jute at £2. 11. 0 per cwt. and exchanges it for $11\frac{1}{4}$ tons of soda at four guineas per ton, what cash payment will he require in addition?

(250) What amount will pay the wages of 48 workmen at the rate of $8\frac{1}{2}d.$ an hour if half of them work 56 hours a week and the remainder 47 hours?

(251) A soldier receives 1s. 3*d.* per day pay and two pence per day good conduct money; if he pays 10*d.* a day mess money, what does he save in a year?

(252) A person is in the habit of taking $1\frac{1}{2}$ pints of ale daily at a cost of 3*d.* per pint, and seven glasses of spirits weekly at a cost of 4*d.* a glass. What is the total cost for a year?

(253) What sum will a rate of 7*d.* in the £ produce on £296. 10. 0?

(254) Three friends take rooms at an hotel for the months of July and August at the rate of £1. 15. 0 per day for each person. What did they pay?

(255) Find the cost of 5 rolls, each 87 yards, of calico at 6 $\frac{1}{2}$ *d.* per yard.

(256) Find the whole cost of 15 chests of tea, each 96 lbs., at 2s. 3*d.* per lb., and ten chests, each 56 lbs., at 3s. 4*d.* a lb.

(257) The thirtieth part of the cargo of a vessel was worth £471. 12. 8. What was the value of the whole cargo?

(258) Find the amount of 3 years wages at £1. 5. 6 a week.

(259) *A* has 8s. 9 $\frac{1}{2}$ *d.*, *B* has 3s. 6*d.* more than twice as much as *A*, and *C* has 5s. 8*d.* less than three times as much as *B*. What sum do they possess altogether?

(260) What sum would be paid for reaping 114 acres, half at 27s. and half at 23s. an acre?

(261) What is the cost of carriage of 23 cwt. of goods for ten miles at 1s. 1 $\frac{1}{2}$ *d.* per cwt.?

(262) What is the cost of 9 trucks of coal, each 9 $\frac{1}{2}$ tons, at 15s. 6*d.* per ton?

(263) In a manufactory where 700 workmen are employed, 150 earn £1. 18. 0 each per week, 450 earn 33 shillings, and the rest £2. 2. 0 per week each. What sum will be sufficient to pay them a week's wages?

(264) What sum of money must be divided amongst 63 persons so that each may receive five half-crowns and 5 half-pence?

(265) Find the cost of an acre of land (4840 sq. yards) at 7 $\frac{1}{4}$ *d.* per square yard.

(266) What does a person gain by letting each of seven houses for 43 guineas, if he reckons interest on outlay to be £169, repairs £2. 1. 4, and rates paid during the year £24. 12. 0?

(267) If sugar be raised $\frac{3}{4}d.$ per lb., what is the difference in price on a hundredweight (112 lbs.)?

(268) On a rateable value of £7704, what would a rate of $7d.$ in the £ produce?

(269) Find the total cost of $3\frac{1}{2}$ dozen and $4\frac{1}{4}$ score at $5s. 6\frac{1}{2}d.$ each.

(270) What is the cost of $7\frac{1}{2}$ dozen oranges at two for $1\frac{1}{2}d.$?

(271) Find the cost of 113 tons of nitrate of soda at £10. 9. 10 per ton.

(272) What amount of money divided amongst 19 persons will give £3. 2. 6 each?

(273) Find the whole cost of $5\frac{1}{2}$ tons of hay at £4. 14. 0, 10 tons of straw at £2. 15. 6, and 12 bushels of oats at $5s. 10d.$ per bushel.

(274) Find the cost of 3103 cubic feet of timber at $1s. 3\frac{1}{4}d.$ per cubic foot.

(275) A person pays $6d.$ a week for $17\frac{1}{2}$ years as subscription to a provident club; he receives $17s.$ a week during 11 weeks he is ill, and at his death the club pays £10 to his friends. By how much has the club benefited?

(276) From £10 take £9. 11. $10\frac{1}{4}$ and multiply the remainder by 36.

(277) If *A* earns £2. 10. 0 per week, and *B* £120 a year, how much will *A* earn more than *B* in $12\frac{1}{2}$ years?

(278) Find the cost of $11\frac{1}{2}$ hundredweights (each 112 lbs.) of honey at $11\frac{1}{2}d.$ per lb.

(279) Sold goods at $1s. 7\frac{1}{2}d.$ per lb. which I bought at 7 guineas per hundredweight. How much did I lose or gain on a hundredweight?

(280) Find the sum of £1. 7. 9 + £2. 6. 8 and £10. 12. 11, and multiply the result by 40.

(281) Find the cost of 23 yards of muslin, half the quantity being at $9\frac{1}{2}d.$ per yard, and the remainder at $1s. 7\frac{1}{2}d.$ per yard.

(282) What will be the cost of laying a floor, 193 square feet in extent, with wood at $3\frac{1}{2}d.$ per square foot?

(283) If a shilling in the £ is deducted for cash, how much money would pay for 5 articles each marked seven guineas?

(284) If the cost of $13\frac{1}{2}$ yards of cloth is £6. 9. $1\frac{1}{2}$, how much would seven times the quantity cost?

(285) A sum of £4. 14. $3\frac{1}{2}$ is paid to each of eleven persons: what sum remains of 93 guineas?

(286) What sum must be divided amongst 29 persons so that each may receive $8s. 9d.$?

(287) Paid for an article by 19 equal instalments of £2. 1. $4\frac{1}{2}$ each. What did I give for it?

(288) Find the whole cost of $3\frac{1}{2}$ doz. Reading books at $7\frac{1}{2}d.$ each, 4 doz. ditto at $9d.$ each, $2\frac{1}{2}$ gross Copy books at $1s. 10d.$ per doz., and 2 gallons ink at $3s. 6d.$

(289) Find the entire cost of 3 legs of mutton, each $9\frac{1}{2}$ lbs., at $8d.$, 23 lbs. beef at $10\frac{1}{2}d.$, and a ham weighing 17 lbs. at $7\frac{1}{2}d.$

(290) By an expenditure of £1. 19. $9\frac{1}{2}$ a week a person lays by £203. 12. 6 a year. What is his annual income?

(291) How many times must the sum of £11. 2. 8 + 31 guineas + 31 sixpences be added to 3050 half-guineas to produce £2045. 16. 8?

(292) What sum of money will be paid in a year by an average of 3075 passengers daily crossing a ferry at the rate of $1\frac{1}{2}d.$ each?

(293) Find the cost of laying a line of rails three-quarters of a mile long at £2. 9. 4 per yard, there being 1760 yards in a mile.

(294) If A had £9. 10. 0 more he would have 5 times as much as B, instead of 4 times as much as at present. What has each?

(295) A shipowner buys 2000 bags of rice at $5s. 9d.$ per bag, and sells it in England at $17s. 3d.$ per bag. He pays 250 guineas for wages and provisions, £27. 15. 0 for coals, and £15. 13. 6 other expenses. What was his net gain?

(296) Bought 11 yards of linen at 2s. 3d., 9 yds. at 2s. 6d., and 10 yards at 3s. 3d. per yd. For what should the whole be sold so as to gain 10s. 9d.?

(297) Find the total cost of 19 trees, each containing on the average 173 cubic feet of wood, at $11\frac{3}{4}$ d. per cubic foot.

(298) If $1\frac{1}{2}$ pints of Colza oil at 1s. 6d. per quart, or 125 cub. ft. of gas at 4s. 6d. per thousand feet, suffice to light a household for a week, how much would be saved in a year by using gas?

(299) From the sum of £20. 10. 11 + £19 16. 8 + £10. 10. 0 + £2. 18. 6 take 50 guineas and multiply the remainder by 83.

(300) A mail steamer brought £35000 sterling in gold, 1449 ounces of gold at £3. 17. $10\frac{1}{2}$ per ounce, and 889 bars of silver, each $5\frac{1}{2}$ ounces, at 5s. 10d. per ounce; she also brought 1998 cwts. of goods, for which 13s. 6d. per cwt. was obtained, and a general cargo worth £10196. 15. 6. What was the value of the entire cargo?

COMPOUND DIVISION.

	£.	s.	d.		£.	s.	d.		
(1)	5	10	6	÷ 2	(31)	200	10	6	÷ 8
(2)	4	7	9	÷ 3	(32)	156	11	5	÷ 9
(3)	8	6	10	÷ 4	(33)	300	12	6½	÷ 2
(4)	7	16	3	÷ 5	(34)	117	13	6½	÷ 3
(5)	7	18	6	÷ 6	(35)	159	11	8½	÷ 4
(6)	14	14	7	÷ 7	(36)	75	17	9¾	÷ 5
(7)	32	16	8	÷ 8	(37)	168	16	7½	÷ 6
(8)	63	2	3	÷ 9	(38)	392	14	8¾	÷ 7
(9)	20	10	9	÷ 2	(39)	111	10	11	÷ 8
(10)	17	11	6	÷ 3	(40)	209	15	8¼	÷ 9
(11)	18	19	5	÷ 4	(41)	763	19	5	÷ 2
(12)	15	11	4	÷ 5	(42)	507	14	6	÷ 3
(13)	29	16	8	÷ 6	(43)	1092	13	6	÷ 4
(14)	31	14	7	÷ 7	(44)	886	17	9¾	÷ 5
(15)	69	14	9	÷ 8	(45)	5021	19	6	÷ 6
(16)	11	17	6	÷ 9	(46)	7036	15	9	÷ 7
(17)	29	13	7½	÷ 2	(47)	1598	17	7	÷ 8
(18)	19	16	8½	÷ 3	(48)	9026	13	8	÷ 9
(19)	20	2	4½	÷ 4	(49)	40210	16	8½	÷ 2
(20)	17	10	11	÷ 5	(50)	7321	15	5¼	÷ 3
(21)	38	16	10	÷ 6	(51)	90106	12	6	÷ 4
(22)	137	16	4	÷ 7	(52)	82105	13	8	÷ 5
(23)	210	11	6	÷ 8	(53)	7563	17	6	÷ 6
(24)	58	19	4	÷ 9	(54)	9638	14	7¼	÷ 7
(25)	272	17	6½	÷ 2	(55)	5003	13	2	÷ 8
(26)	139	12	11	÷ 3	(56)	7321	19	9	÷ 9
(27)	501	17	6	÷ 4	(57)	90311	13	7	÷ 2
(28)	199	12	7	÷ 5	(58)	87209	19	6	÷ 3
(29)	310	19	8	÷ 6	(59)	9304	14	4	÷ 4
(30)	119	13	4	÷ 7	(60)	58603	17	9¾	÷ 5

	£.	s.	d.		£.	s.	d.	
(61)	96003	16	6	÷ 6	(99)	114	4 0	÷ 64
(62)	58013	17	9	÷ 7	(100)	441	6 1½	÷ 66
(63)	8969	15	8	÷ 8	(101)	21073	14 4½	÷ 70
(64)	90316	17	9¾	÷ 9	(102)	13793	5 0	÷ 72
(65)	296	13	9	÷ 10	(103)	53700	3 1½	÷ 75
(66)	186	14	5	÷ 11	(104)	3063	14 4¼	÷ 77
(67)	909	17	3	÷ 12	(105)	8008	8 4	÷ 80
(68)	1000	13	4	÷ 10	(106)	5915	0 6	÷ 81
(69)	762	18	6	÷ 11	(107)	1565	12 9	÷ 84
(70)	902	13	5	÷ 12	(108)	92	2 6	÷ 88
(71)	210	13	7	÷ 14	(109)	18837	5 7½	÷ 90
(72)	147	11	6¾	÷ 15	(110)	712	9 4	÷ 96
(73)	139	13	8	÷ 16	(111)	348	15 4½	÷ 99
(74)	503	7	3	÷ 18	(112)	199	17 11	÷ 100
(75)	212	18	4	÷ 20	(113)	8174	7 2¼	÷ 105
(76)	205	17	3¾	÷ 21	(114)	602	13 3	÷ 108
(77)	255	2	7½	÷ 22	(115)	21	15 3½	÷ 110
(78)	2400	10	6	÷ 24	(116)	154	4 8	÷ 112
(79)	99	19	5¾	÷ 25	(117)	1084	15 0	÷ 120
(80)	326	1	7½	÷ 27	(118)	326	0 4¾	÷ 121
(81)	69	14	9	÷ 28	(119)	1407	0 7½	÷ 125
(82)	233	16	3	÷ 30	(120)	967	8 10½	÷ 126
(83)	191	19	4	÷ 32	(121)	2204	0 0	÷ 128
(84)	3822	10	8¼	÷ 33	(122)	556	12 0	÷ 132
(85)	3251	8	6½	÷ 35	(123)	13714	11 10½	÷ 135
(86)	140	3	6	÷ 36	(124)	10	1 3	÷ 140
(87)	3868	15	0	÷ 40	(125)	2853	15 0	÷ 144
(88)	494	1	4½	÷ 42	(126)	2052	16 3	÷ 150
(89)	3991	19	10	÷ 44	(127)	3060	1 3	÷ 165
(90)	5887	9	0¾	÷ 45	(128)	1720	6 3	÷ 225
(91)	955	13	0	÷ 48	(129)	2058	0 0	÷ 252
(92)	3463	2	6¼	÷ 49	(130)	146013	18 0	÷ 288
(93)	5847	8	11½	÷ 50	(131)	6086	8 0	÷ 512
(94)	3987	0	0	÷ 54	(132)	38760	15 8¾	÷ 343
(95)	5502	2	4¾	÷ 55	(133)	58157	9 10½	÷ 729
(96)	646	0	10	÷ 56	(134)	170458	4 0	÷ 1728
(97)	1000	17	6	÷ 60	(135)	7021	0 9½	÷ 41
(98)	62	13	5¼	÷ 63	(136)	„	„	÷ 23

	£.	s.	d.		£.	s.	d.
(137)	7021	0	$9\frac{1}{2} \div$	83	(169)	72158	2 6 \div 7132
(138)	"	"	" \div	89	(170)	9106	13 $7\frac{1}{2} \div$ 8246
(139)	"	"	" \div	71	(171)	"	" " \div 144
(140)	9680	13	11 \div	177	(172)	"	" " \div 321
(141)	"	"	" \div	117	(173)	"	" " \div 9047
(142)	"	"	" \div	59	(174)	"	" " \div 596
(143)	"	"	" \div	341	(175)	110217	16 $6\frac{1}{2} \div$ 4032
(144)	"	"	" \div	573	(176)	"	" " \div 3126
(145)	7238	16	$8\frac{1}{2} \div$	895	(177)	"	" " \div 4025
(146)	"	"	" \div	623	(178)	"	" " \div 7159
(147)	"	"	" \div	306	(179)	"	" " \div 66380
(148)	"	"	" \div	417	(180)	302147	13 $8\frac{1}{4} \div$ 79
(149)	"	"	" \div	999	(181)	"	" " \div 821
(150)	15702	18	6 \div	909	(182)	"	" " \div 9049
(151)	"	"	" \div	796	(183)	"	" " \div 9999
(152)	"	"	" \div	318	(184)	"	" " \div 8989
(153)	"	"	" \div	441	(185)	203116	13 $6\frac{1}{4} \div$ 7915
(154)	"	"	" \div	836	(186)	"	" " \div 476
(155)	3021	15	$5\frac{1}{2} \div$	987	(187)	"	" " \div 395
(156)	"	"	" \div	789	(188)	"	" " \div 846
(157)	"	"	" \div	897	(189)	"	" " \div 1071
(158)	"	"	" \div	513	(190)	2031	14 $4\frac{1}{2} \div$ 596
(159)	"	"	" \div	325	(191)	"	" " \div 318
(160)	3806	19	10 \div	119	(192)	"	" " \div 15587
(161)	"	"	" \div	726	(193)	"	" " \div 5093
(162)	"	"	" \div	444	(194)	"	" " \div 7215
(163)	"	"	" \div	663	(195)	169013	7 $7\frac{1}{2} \div$ 1311
(164)	"	"	" \div	1909	(196)	"	" " \div 70213
(165)	72158	2	6 \div	1178	(197)	"	" " \div 15968
(166)	"	"	" \div	223	(198)	"	" " \div 24680
(167)	"	"	" \div	706	(199)	"	" " \div 13998
(168)	"	"	" \div	5093	(200)	1900009	0 9 \div 92196

(201) How many times is the difference of 5s. $6\frac{1}{2}d.$ and ten shillings contained in £2. 13. 6?

(202) Find the value of the tenth part of £11. 18. 4.

(203) What is the 17th part of £102. 4. 3?

(204) From the seventh part of £29. 1. 7 take the fourth part of £17. 3. 0 less £2. 1. 6½.

(205) The rent of a house is £13. 4. 4 a year: what is the rent per week?

(206) Divide the half of £20. 10. 7½ by 9.

(207) What weekly salary is equal to 120 guineas a year?

(208) How many lbs. of sugar at 5½*d.* may be bought for £2. 9. 6?

(209) Divide £312. 16. 3 equally amongst 84 persons.

(210) A person having £220 a year saves 50 guineas annually: what sum does he spend weekly?

(211) The rate on £150 is £2. 3. 9: how much is that in the £?

(212) Find the sum of 30 guineas, £30, 30 half-guineas, 30 crowns, and 30 florins, and divide the result by 25.

(213) Find the value of £20 - 120 farthings ÷ 15.

(214) What weight of gold is there in a nugget worth £66. 3. 10½ at £3. 17. 10½ per ounce Troy?

(215) An hotel bill for the month of May amounted to £45. 1. 7: what was the charge per day?

(216) Divide 2*s.* 6*d.* between two boys, giving one 3½*d.* more than the other.

(217) How many pairs of gloves at 3*s.* 6*d.* may be bought for 3½ guineas?

(218) Find the price of calico per yard when 3 rolls, each 84 yards, cost £6. 16. 6.

(219) Eight miners working in a gang hew 150 tons of coal in a week, for which they receive 4*s.* 6*d.* per ton. What was each man's share?

(220) To the thirtieth part of £11. 12. 6 add the twelfth part of 17*s.* 6*d.*

(221) Divide the third part of £9. 19. 6 by 24.

(222) A sailor receives £175. 4. 0 as payment of wages for 3 years and 73 days during which the ship has been in commission. What are his daily wages?

(223) Divide £5. 5. 0 into two parts so that one shall be three half-crowns more than the other.

(224) Nine men agree to reap 142 acres, for which they are to receive 17s. 6d. an acre. What is each man's share?

(225) By how much does the twenty-fifth part of £119. 16. 0½ exceed the third part of £10. 10. 9?

(226) Divide £20. 10. 0 among 4 men and 3 women, giving a man three times as much as a woman.

(227) How many times is £11. 19. 7½ contained in £227. 12. 10½?

(228) Find the cost of 150 bushels of malt at 7s. 8¼d. per seven bushels.

(229) Find the sixth part of the cost of 19½ tons of coal at £1. 10. 0 per ton, if a shilling in the £ be allowed for prompt payment.

(230) How much should a person lay by weekly to pay £8. 9. 0 rent yearly?

(231) How many instalments of 2s. 9d. each will pay a sum of £8. 5. 0?

(232) A sum of thirteen hundred guineas is sufficient to pay 700 workmen. What is the average amount of wages earned by each?

(233) Find the value of £103. 11. 6 ÷ 37.

(234) Four men earn respectively £1. 14. 6, £1. 3. 9, £1. 5. 0, and 1½ guineas: what is the average rate of wages?

(235) What is the cost of tobacco per lb. when a hundredweight (112 lbs.) costs £23. 11. 4?

(236) A row of 16 houses cost £1103. 12. 6: at what weekly rent per house must they be let so as to secure a return of £65 yearly?

(237) What is the cost of lime per hundredweight when 2½ tons (each 20 hundredweights) cost £10. 14. 7?

(238) How many roubles, each worth 2s. $7\frac{1}{2}d.$, may be exchanged for thirty-one thousand five hundred pounds sterling?

(239) If 25 francs are equivalent to £1 sterling, how many £s may be obtained for $1\frac{1}{4}$ millions of francs?

(240) How many times is 13 times 17s. $9\frac{1}{2}d.$ contained in £2775. 10. 0?

(241) How many lbs. of tobacco at 4s. $2d.$ per lb. can be got in exchange for 25 lbs. of tea at 3s. $4d.$?

(242) How many pairs of gloves at 2s. $9d.$ may be bought for £3. 8. 9?

(243) How many half-crowns, florins, pence and farthings, there being the same number of each, are contained in the sum of £5 and half a guinea?

(244) Divide £5. 11. 6 between *A* and *B*, giving *B* 7s. $3d.$ more than twice as much as *A*.

(245) Find the value of £4. 10. 9 + £2. 12. 6 + £4. 17. 6 - £9. 19. 6, and divide the result by 18.

(246) From the twentieth part of £15. 10. 10 take the 30th part of £17. 10. 0.

(247) Divide £3017. 12. $10\frac{1}{2}$ equally among 27 persons.

(248) Divide £54. 1. $8\frac{1}{2}$ among 3 men, 4 women and 7 children, giving a man twice as much as a woman, and a woman twice as much as a child.

(249) A tea dealer mixes 55 lbs. of tea at 3s. $4d.$ per lb. with 46 lbs. at 4s. per lb. At what price must the whole be sold per lb. so as to make a gain of £1. 16. 8?

(250) How many lbs. of coffee at 1s. $8d.$ may be exchanged for $11\frac{1}{2}$ lbs. of tea at 3s. $4d.$ per lb.?

(251) A person loses two guineas by selling 148 lbs. of tea at 3s. $2d.$ per lb.: at what rate per lb. should it be sold so as to gain £4. 16. 9 on what it cost?

(252) If brandy at 48s. a gallon be mixed with another kind at 27s., there being eight gallons of each in the mixture and two gallons of water, at what price per gallon must the mixture be sold so as to gain £3. 6. 0 on the whole cost?

(253) Divide the half of $12\frac{1}{4}$ guineas by 9.

(254) The duty on whiskey at 10s. 5d. per gallon amounted to £375: on how many gallons was it paid?

(255) Divide 20 guineas among *A*, *B*, and *C*, giving *A* 5s. more than the joint shares of *B* and *C*.

(256) The rateable value of a parish is £3050: at how much in the £ should a rate be made so as to produce £63. 10. 10?

(257) A Railway Company has 10965 officials, and pays yearly £598689 in salaries. What is the average weekly wages of each?

(258) How many oranges should I have if I purchased a shilling's worth at the rate of 3 for 2d. and a shilling's worth at 2 for three halfpence?

(259) How many times is £1. 11. 6½ contained in £760. 3. 1?

(260) Divide £5 among *A*, *B*, and *C*, giving *A* half as much as *B*, and *C* as much as *A* and *B* together.

(261) Find the value of soap per lb. which cost £1. 9. 2 for 5 stones, each 14 lbs.

(262) What amount of money is 5 times the difference of £10. 11. 9¾ and 9000 farthings?

(263) How many yards of linen at 2s. 4d. per yard may be bought for 12 guineas?

(264) Divide the seventieth part of £221. 7. 6 by 6.

(265) What amount of money multiplied by 73 will give £149. 19. 1?

(266) The carriage of 34 tons for 46 miles is £34. 10. 0: what is that per mile?

(267) A stockbroker on selling 109 shares in a gas company realised a total of £10968. 2. 6. What was the average price per share?

(268) A farmer bought 115 sheep for £235. 15. 0, and 303 for £636. 6. 0. What was the average price per sheep?

(269) How many payments of £1. 19. $7\frac{1}{2}$ each will pay a debt of £59. 8. 9?

(270) At $13\frac{1}{2}$ half-crowns for 81, find the cost of 1.

(271) A earns 120 guineas a year, B £105. 4. 0. How much does A earn more than B each week?

(272) A person buys goods at 11s. 6d. per cwt.: at what price should he retail them per lb. so as to gain £2. 10. 0 on every ton, there being 20 hundredweights in a ton?

(273) If a first class boy in the Royal Navy is paid £10. 12. 11 a year, what is that per day?

(274) At three half-crowns a dozen, how many plants may be bought for £2. 12. 6?

(275) Four workmen are paid £18. 17. 6 for 3 weeks wages: what amount is that each per week?

(276) When wheat is selling at 56s. per quarter, what is the price per peck, there being 32 pecks in a quarter?

(277) How many penny, twopenny, threepenny, sixpenny, and shilling postage stamps, there being an equal number of each, may be bought for £5?

(278) If £78. 15. 0 will pay the wages of 5 men for 7 weeks, working 60 hours per week, what is the rate of pay per hour?

(279) By how much does three times the seventh part of $11\frac{3}{4}$ guineas exceed £2. 19. $11\frac{3}{4}$?

(280) How many passengers, half paying 3s. 6d., and the rest 4s. 6d., may be booked for £6. 16. 0?

(281) A ton and a half of goods is bought for £84 and sold for 100 guineas. What is the gain per lb., there being 2240 lbs. in a ton?

(282) How many pairs of boots at 7s. 3d. per pair may be bought for £47. 17. 0?

(283) If 103 acres be rented for £411. 14. 0, and produce per acre on the average 27 bushels of barley, which is sold at 5s. 10d. per bushel, what is the gross profit per acre?

(284) If 1004 people are maintained at a cost of £493. 12. 8, what is that per head?

(285) A sum of £7. 5. 0 is expended in the purchase of calico, some at $6\frac{1}{2}d.$, and an equal number of yards at 8d. per yard. How many yards were there of each?

(286) Find the value of 300 guineas + 300 florins + 304 pence divided by 56.

(287) If 130 lbs. of salt cost 8s. $1\frac{1}{2}d.$, at what price should it be retailed per lb. so as to gain 4s. 8d. on the hundredweight?

(288) What amount multiplied by 360 will give £901. 17. 6?

(289) Find the weekly wages of 19 men who collectively earn £3383. 18. 0 per annum.

(290) Divide £1. 4. 0 into two parts so that one shall be 2s. 3d. more than the other.

(291) The expense of paving a street $131\frac{1}{4}$ yards long is £434. 15. 9, and is borne by 7 property owners equally. What is the share of each?

(292) A sum of £193. 11. $2\frac{1}{2}$ is lent by *A* to *B*, of which *B* returns £123. 4. 7, and pays the rest by equal instalments of £7. 16. $3\frac{1}{2}$ each. How many instalments are paid?

(293) How many rupees, each 2s. sterling, may be exchanged for four thousand five hundred francs, if there be 25 francs to the £1 sterling?

(294) Divide £7002. 2. 8 by 38.

(295) How many yards of cloth at 5s. 9d. should be given in exchange for 69 yards at 12s. 1d. per yard?

(296) How often may £4. 13. 6 be subtracted from £119. 18. 4, and what final remainder is there ?

(297) If the annual revenue be £79840990 and the expenditure exceeds it by £2007000, what is the daily expenditure ?

(298) The liabilities of a bankrupt are £2019 and his assets £440 : how much can he pay in the £.

(299) How many times is $3\frac{1}{4}$ guineas contained in £242. 5. 9 ?

(300) A person worth £15000, left half his property to his relatives, half the remainder to charitable institutions, and the rest in legacies of £250 each. How many of these did he leave ?

REDUCTION (WEIGHTS AND MEASURES).

- (1) Reduce 75 tons to cwts.
- (2) „ 159 tons 13 cwt. to cwts.
- (3) „ 11 tons 16 cwt. 3 qrs. to lbs.
- (4) „ 9 tons 13 cwt. 7 lbs. to lbs.
- (5) „ 8 cwt. 3 qrs. 17 lbs. to oz.
- (6) „ 9 tons 7 cwt. 3 qrs. 26 lbs. 15 oz. to drams.
- (7) „ 316 m. 3 fur. to furlongs.
- (8) „ 158 m. 2 fur. 5 poles to yards.
- (9) „ 1720 m. 3 fur. 16 p. 3 yds. to inches.
- (10) „ 110 poles 5 yds. 2 ft. 11 in. to inches.
- (11) „ 1961 m. 7 fur. 38 p. 3 yds. 2 ft. to feet.
- (12) „ 107 poles 3 yds. $2\frac{1}{2}$ ft. to inches.
- (13) „ 13 yds. 2 ft. 5 in. to inches.
- (14) „ 29 m. 5 fur. 36 p. 4 yds. to feet.
- (15) „ 138 m. 4 fur. 18 poles 2 ft. 11 in. to inches.
- (16) „ 1009 m. 7 fur. 13 p. 5 yds. 2 ft. 3 in. to inches.
- (17) „ 90 m. 4 fur. 4 yds. to feet.
- (18) „ 6 fur. 39 p. 5 yds. to yards.
- (19) „ 10 m. 1 fur. 10 poles 1 yd. to feet.
- (20) „ 2566 m. 3 fur. 33 poles 11 in. to inches.
- (21) „ 399 poles 3 yds. to feet.
- (22) „ $1000\frac{1}{4}$ m. 115 yds. to feet.
- (23) „ $20\frac{3}{4}$ m. 21 feet to inches.
- (24) „ 213 tons 11 cwt. 3 qrs. 27 lbs. to lbs.
- (25) „ 19 tons 1 qr. 5 lbs. 7 oz. to ounces.
- (26) „ 113 cwt. 3 qrs. 2 lbs. 8 oz. to half-pounds.
- (27) „ 21 qrs. 17 lbs. 15 oz. to drams.
- (28) „ 119 cwts. 3 qrs. 11 lbs. 12 oz. to quarter-pounds.
- (29) „ 73 tons 17 cwt. 3 qrs. 27 lbs. 14 oz. to ounces.
- (30) „ $106\frac{1}{4}$ cwt. to lbs.

- (31) Reduce 313 ac. 2 r. to roods.
 (32) " 114 ac. 3 r. 13 poles to poles.
 (33) " 17 ac. 3 r. 13 p. 20 yards to yards.
 (34) " 106 ac. 1 r. 29 p. 13 yds. 7 ft. to feet.
 (35) " 1091 ac. 3 r. 36 p. to poles.
 (36) " 715 ac. 3 r. 21 p. 28 yds. 3 ft. 104 in. to inches.
 (37) " 13 ac. 0 r. 17 p. 7 ft. to inches.
 (38) " 109 ac. 2 r. 13 p. 6 ft. 113 in. to inches.
 (39) " 36 ac. 3 r. 24 p. 19 yards to feet.
 (40) " 11 poles 13 yds. 2 ft. 29 in. to inches.
 (41) " 3 roods 19 poles 29 yards to feet.
 (42) " 109 ac. 3 r. 37 p. 5 yds. to yards.
 (43) " $214\frac{1}{4}$ ac. to yards.
 (44) " $113\frac{3}{4}$ ac. 176 yds. to yards.
 (45) " 20 sq. yds. 3 ft. 6 in. to inches.
 (46) " 1094 sq. miles 324 ac. 2 r. to roods.
 (47) " 1 hour 23 min. to seconds.
 (48) " $2\frac{3}{4}$ hours to minutes.
 (49) " 12 days $17\frac{3}{4}$ hours to minutes.
 (50) " 73 hours 58 min. 30 sec. to seconds.
 (51) " 19 days 17 hours $37\frac{1}{2}$ m. to seconds.
 (52) " 50 years 113 days to days.
 (53) " $119\frac{1}{2}$ weeks to hours.
 (54) " 21 years 15 wks. 3 days to hours.
 (55) " 111 years 27 wks. 5 days to days.
 (56) " 33 wks. $2\frac{1}{2}$ days to hours.
 (57) " 1 year 12 wks. $3\frac{3}{4}$ dys. to half-hours.
 (58) " 49 years $32\frac{1}{4}$ wks. to days.
 (59) " 36 yrs. 13 wks. 3 days 14 hrs. 12 min. to minutes.
 (60) " 10 yrs. 49 wks. 6 days 11 hrs. 30 sec. to half-minutes.
 (61) " 53 hours $29\frac{3}{4}$ minutes to seconds.
 (62) " 19 weeks 6 days 23 hours 59 m. to minutes.
 (63) " 93 bushels 3 pecks to gallons.
 (64) " 103 bushels to pecks.
 (65) " 29 pecks 1 gallon 1 qt. to quarts.
 (66) " 136 bushels 2 qts. to pints.
 (67) " 21 loads 3 bus. 2 pks. to pecks.
 (68) " 19 loads 2 bus. 3 pks. 1 gal. to gallons.
 (69) " 7 quarters 3 bus. to pecks.

- (70) Reduce 18 loads 3 qrs. 2 bus. to bushels.
 (71) „ 19½ loads to pecks.
 (72) „ 306¾ quarters to bushels.
 (73) „ 115¼ loads to gallons.
 (74) „ 29 lds. 3 qrs. 3 bus. 1 pk. to pecks.
 (75) „ 13 gallons 3 qts. 1 pt. to pints.
 (76) „ 20 loads 1½ bus. to pecks.
 (77) „ 17 quarters 3 bus. 1 pk. 1¾ gals. to pints.
 (78) „ 133 loads 4 qrs. 7 bus. 3½ pks. to gallons.
 (79) „ 15 cub. yds. to cub. ft.
 (80) „ 78 cub. ft. to cub. in.
 (81) „ 103 cub. yds. 3 cub. ft. to cub. in.
 (82) „ 209 cub. yds. 7 cub. ft. to cub. ft.
 (83) „ 111 cub. yds. 20 cub. ft. to cub. in.
 (84) „ 9 cub. yds. 17 cub. ft. 53 cub. in. to cub. in.
 (85) „ 103 cub. yds. 22 cub. ft. 198 cub. in. to cub. in.
 (86) „ 21 cub. yds. 26 cub. ft. 1013 cub. in. to cub. in.
 (87) „ 20½ cub. yds. to cub. in.
 (88) „ 110 cub. yds. 19¾ cub. ft. to cub. in.
 (89) „ 33¼ cub. yds. to cub. ft.
 (90) „ 112¾ cub. yds. to cub. in.
 (91) „ 37 yards to inches.
 (92) „ 18 yds. 2 qrs. to inches.
 (93) „ 13 yds. 3 qrs. 3 nails to nails.
 (94) „ 105 yds. 1 qr. 1 nail to inches.
 (95) „ 29 yds. 2 qrs. 2 nails 1 in. to inches.
 (96) „ 157 yds. 1 nail to inches.
 (97) „ 38 yds. 3 qrs. 0¼ inches to inches.
 (98) „ 2031 yds. 1 qr. 1 nl. 2 inches to inches.
 (99) „ 750 yds. 3 qrs. 1½ in. to inches.
 (100) „ 38 E. ells 2 qrs. to nails.
 (101) „ 104 E. ells 3 nails 1¼ in. to inches.
 (102) „ 73¾ yds. to nails.
 (103) „ 1057 qrs. 2 nails 1¼ in. to inches.
 (104) „ 190 nails to half-inches.
 (105) „ 27 lbs. Troy to ounces.
 (106) „ 316 lbs. Troy 11 oz. to ounces.
 (107) „ 93 lbs. Troy 8 oz. 13 dwts. to dwts.
 (108) „ 17 lbs. Troy 7 oz. 17 dwts. to grains.

- (109) Reduce $73\frac{1}{2}$ lbs. Troy to grains.
 (110) „ 113 lbs. Troy 6 oz. 17 grs. to grains.
 (111) „ 76 lbs. Troy 10 oz. 13 dwts. to grains.
 (112) „ 11 lbs. Troy 15 dwts. 3 grs. to grains.
 (113) „ $107\frac{3}{4}$ lbs. Troy to dwts.
 (114) „ 96 lbs. Troy 11 oz. $0\frac{3}{4}$ dwts. to grains.
 (115) „ 203 oz. Troy $19\frac{1}{4}$ dwts. to grains.
 (116) „ 71 oz. Troy 13 dwts. 11 grs. to grains.
 (117) „ 36 lbs. Apoth. 10 oz. to ounces.
 (118) „ 17 lbs. Apoth. 11 oz. 4 drs. to drams.
 (119) „ $9\frac{3}{4}$ lbs. Apoth. to scruples.
 (120) „ 7 lbs. Apoth. 7 oz. 7 drs. 1 sc. to grains.
 (121) „ 103 lbs. Apoth. 5 oz. 2 sc. 18 grs. to grains.
 (122) „ 11 lbs. Apoth. 11 oz. $1\frac{1}{2}$ sc. to grains.
 (123) „ 19 lbs. Apoth. 6 oz. $4\frac{1}{2}$ drs. to grains.
 (124) „ $1\frac{1}{2}$ lbs. Apoth. $1\frac{1}{2}$ sc. to grains.
 (125) „ 29 lbs. Apoth. 4 oz. 6 dr. $0\frac{3}{4}$ sc. to grains.
 (126) „ 3156 lbs. Apoth. 3 drs. 2 sc. 15 grs. to grains.
 (127) „ 19 $\frac{3}{4}$ oz. Apoth. to scruples.
 (128) „ 107 oz. 3 drs. $2\frac{1}{2}$ sc. to grains.
 (129) „ 21731 oz. Av. to cwts.
 (130) „ 9698 drs. Av. to lbs.
 (131) „ 907163 drs. to cwts.
 (132) „ 59176 oz. to cwts.
 (133) „ 3169 lbs. to cwts.
 (134) „ 1769 lbs. to qrs.
 (135) „ 30136 lbs. to tons.
 (136) „ 1117968 oz. to tons.
 (137) „ 7121061 drs. to tons.
 (138) „ 9061317 oz. to tons.
 (139) „ 37215 lbs. to tons.
 (140) „ 9687 lbs. to cwts.
 (141) „ 3816 qrs. to tons.
 (142) „ 1496 stones to tons.
 (143) „ 1316 oz. to stones.
 (144) „ 699 half-cwts. to tons.
 (145) „ 1000000 oz. to tons.
 (146) „ 300002 drs. to lbs.
 (147) „ 7906 in. to yds.

(148)	Reduce	19603 feet to poles.
(149)	"	7916 feet to miles.
(150)	"	19000 inches to furlongs.
(151)	"	7002 feet to miles.
(152)	"	10000 inches to poles.
(153)	"	29002 feet to miles.
(154)	"	1000000 inches to miles.
(155)	"	79061 yards to furlongs.
(156)	"	3916 yards to miles.
(157)	"	4041 feet to poles.
(158)	"	3991 poles to miles.
(159)	"	14716 feet to half-miles.
(160)	"	30126 feet to furlongs.
(161)	"	12317 half-inches to yards.
(162)	"	1946 sq. in. to sq. ft.
(163)	"	7091 sq. in. to sq. yds.
(164)	"	123023 sq. in. to sq. poles.
(165)	"	71960 sq. in. to sq. yds.
(166)	"	21780 sq. ft. to roods.
(167)	"	6272640 sq. in. to acres.
(168)	"	10000000 sq. in. to acres.
(169)	"	92016 sq. yds. to acres.
(170)	"	7916 sq. yds. to acres.
(171)	"	590617 sq. ft. to roods.
(172)	"	12000000 sq. yds. to sq. miles.
(173)	"	391611 sq. yds. to acres.
(174)	"	59172 sq. ft. to roods.
(175)	"	107000 sq. in. to sq. poles.
(176)	"	36210 sq. ft. to sq. poles.
(177)	"	7919161 sq. ft. to acres.
(178)	"	31216 seconds to hours.
(179)	"	79003 hours to weeks.
(180)	"	190316 sec. to days.
(181)	"	9217 days to years.
(182)	"	218210 sec. to hours.
(183)	"	170113 hours to years.
(184)	"	7158 sec. to hours.
(185)	"	35169 min. to days.
(186)	"	17005 sec. to hours.

(187)	Reduce	179002 hours to years.
(188)	"	92106 hours to weeks.
(189)	"	7021 weeks to years.
(190)	"	1399096 min. to years.
(191)	"	50715 hours to weeks.
(192)	"	13906158 sec. to weeks.
(193)	"	7921586 min. to years.
(194)	"	921860 pints to gallons.
(195)	"	37699 gallons to bushels.
(196)	"	3016 bushels to loads.
(197)	"	9218 pints to pecks.
(198)	"	704 pecks to quarters.
(199)	"	99816 gallons to bushels.
(200)	"	159684 half-gallons to quarters.
(201)	"	137206 gallons to loads.
(202)	"	5903 quarts to quarters.
(203)	"	8726 pecks to loads.
(204)	"	3876 bushels to loads.
(205)	"	4414 pecks to quarters.
(206)	"	3619 quarts to bushels.
(207)	"	731 pecks to quarts.
(208)	"	1895 half-gallons to pecks.
(209)	"	3075 gallons to quarters.
(210)	"	39163 cub. in. to cub. ft.
(211)	"	40313 cub. ft. to cub. yds.
(212)	"	50000 cub. in. to cub. yds.
(213)	"	73210 cub. in. to cub. yds.
(214)	"	9021 cub. in. to cub. ft.
(215)	"	3726 cub. ft. to cub. yds.
(216)	"	80219 cub. in. to cub. yds.
(217)	"	1800000 cub. in. to cub. yds.
(218)	"	1760 inches to yards.
(219)	"	318 inches to quarters.
(220)	"	9900 nails to yards.
(221)	"	796 inches to yards.
(222)	"	7021 nails to E. ells.
(223)	"	363 inches to E. ells.
(224)	"	9001 quarters to E. ells.
(225)	"	579 inches to nails.

(226)	Reduce	13002	Troy grains to lbs.
(227)	"	7206	" grains to lbs.
(228)	"	1396	" dwts. to lbs.
(229)	"	7012	" ounces to lbs.
(230)	"	11591	" grains to ounces.
(231)	"	73956	" grains to lbs.
(232)	"	19000	" grains to lbs.
(233)	"	59163	" grains to lbs.
(234)	"	7113	" dwts. to lbs.
(235)	"	3121	ounces Apoth. to lbs.
(236)	"	17000	grains " to lbs.
(237)	"	29206	grains " to lbs.
(238)	"	446	scruples " to lbs.
(239)	"	31313	grains " to ounces.
(240)	"	5136	grains " to ounces.
(241)	"	2140	drams " to lbs.
(242)	"	70300	grains " to lbs.
(243)	"	71933	grains Troy to lbs. Avoirdupois.
(244)	"	963	lbs. 4 oz. Av. to lbs. Troy.
(245)	"	118 $\frac{1}{4}$	lbs. Troy to lbs. Avoirdupois.
(246)	"	4 $\frac{3}{4}$	lbs. Avoirdupois to Troy ounces.
(247)	"	701	lbs. 5 oz. 19 dwts. 13 grs. to lbs. Av.
(248)	"	19706	sheets to reams.
(249)	"	5471	sheets to quires.
(250)	"	330	scores to dozens.
(251)	"	1000000	ounces to cwts., &c.
(252)	"	"	grs. Troy to lbs., &c.
(253)	"	"	grs. Apoth. to lbs., &c.
(254)	"	"	sq. yds. to acres, &c.
(255)	"	"	hours to years, &c.
(256)	"	"	feet to miles, &c.
(257)	"	"	pecks to loads, &c.
(258)	"	"	cub. in. to cub. yds., &c.
(259)	"	"	inches to English ells, &c.
(260)	"	139091216	drams to tons.
(261)	"	"	grs. Troy to lbs.
(262)	"	"	grs. Apoth. to lbs.
(263)	"	"	inches to miles.
(264)	"	"	sq. in. to acres.

- (265) Reduce 139091216 seconds to years.
 (266) " " pints to loads.
 (267) " " cub. in. to cub. yds.
 (268) " " in. to English ells.
 (269) " 1301416511 drams to tons.
 (270) " " grs. Troy to lbs.
 (271) " " grs. Apoth. to lbs.
 (272) " " inches to miles.
 (273) " " square inches to acres.
 (274) " " seconds to years.
 (275) " " gallons to quarters.
 (276) " " cub. in. to cub. yds.
 (277) " 713369400 drs. to tons.
 (278) " " grs. Troy to lbs.
 (279) " " grs. Apoth. to lbs.
 (280) " " in. to miles.
 (281) " " sq. in. to acres.
 (282) " " seconds to years.
 (283) " " gallons to bushels.
 (284) " " cub. in. to cub. yds.
 (285) " 413419019 ounces to tons.
 (286) " " grs. Troy to lbs.
 (287) " " grs. Apoth. to lbs.
 (288) " " in. to miles.
 (289) " " sq. inches to acres.
 (290) " " seconds to years.
 (291) " " quarts to loads.
 (292) " " cub. in. to cub. yds.
 (293) " 580469322 drs. to tons.
 (294) " " grs. Troy to lbs.
 (295) " " grs. Apoth. to lbs.
 (296) " " in. to miles.
 (297) " " sq. in. to acres.
 (298) " " seconds to years.
 (299) " " pints to loads.
 (300) " " cub. in. to cub. yds.
 (301) " 15 stones 6 lbs. to lbs.
 (302) How many cwts. are there in 30215 ounces?
 (303) Find the difference of 3 lbs. 5 oz. Troy and 6984 grains.

(304) Express in lbs. the difference of 1 ton 12 cwt. 3 qrs. 15 lbs. and 96032 ounces.

(305) Express in grains the difference of $2\frac{1}{2}$ lbs. Avoirdupois and 3 lbs. Troy.

(306) Mont Blanc is 15732 ft. high, Snowdon 3571. Express the difference in miles, &c.

(307) How many yards, &c. are there in 4041 inches ?

(308) Find the weight in cwts., &c. of 15 parcels of goods each weighing 102 lbs.

(309) Reduce 11 tons 13 cwt. 3 qrs. 12 lbs. 9 oz. 14 drs. to drams.

(310) The highest known point, Mt Everest, is 29002 ft. above sea level : express this in miles.

(311) How many cubic inches are contained in a vessel a yard long, broad, and deep ?

(312) How many acres are contained in 12 plots of ground, each 2000 sq. yards ?

(313) Reduce $4\frac{1}{2}$ acres to yards, and divide the result by 80.

(314) How many seconds are there in the sum of $1\frac{3}{4}$ hours + $1\frac{3}{4}$ minutes ?

(315) Reduce $13^{\circ} 16' 30''$ to seconds.

(316) How many bushels are there in 1301 pints ?

(317) How many days are there in 59600 minutes ?

(318) If 84 lbs. of flour be given to each of 150 persons, how many stones weight were distributed, and find the value at half-a-crown the stone ?

(319) How many seconds in a year containing 365 days 5 hours 48 min. 49 sec. ?

(320) How many imperial pints may be bottled from a hhd. of ale ?

(321) If a brewer brews on the average 1000 quarts of ale each working day, how many hhds. does he brew in a year ?

(322) How many sq. yards are there in 43200 sq. inches ?

(323) Reduce 4096 sq. ft. to sq. poles.

(324) Seven plots of land are sold, measuring respectively $5\frac{1}{4}$ acres, 3 ac. 2 r. 12 p., 4 ac. 1 r. 11 poles, 3002 sq. yards, 4 p., $3\frac{1}{2}$ acres and 23 p. 11 yds. : reduce these to yards, find their sum and reduce the result to acres, &c.

(325) How many times is 9 m. 1 fur. 113 yds. contained in 73 miles 4 fur. 24 yds. ?

(326) Reduce 43 cubic yards 8 cub. ft. to cubic inches.

(327) If a person can excavate 1 cub. yd. 5 cub. ft. of soil in an hour, how many hours will it take him to dig out 64 cub. yds. ?

(328) How many qrs. of wheat are contained in 3176 pecks ?

(329) How many hours have elapsed from 6 a.m. on Jan. 12th to 6 p.m. on Feb. 17th of the same year ?

(330) Reduce 5 lbs. 3 oz. 5 drams 2 sc. 15 grains Apothecaries' weight to Troy weight.

(331) How many tons of provisions will be required for a crew of 313 men for 3 years if each man's daily allowance be 3 lbs. 4 oz. ?

(332) If a person walks 33000 yds. each day for three successive days, how many miles has he gone altogether ?

(333) How many square miles are there in a tract of land comprising 12 millions of perches ?

(334) How many yards of calico are there in 7 pieces, each containing 336 nails ?

(335) If 16 lbs. of bread may be made from a peck of flour, what weight may be made from 4 qrs. 3 bus. ?

(336) Reduce 3 cwt. 2 qrs. 11 lbs. to lbs.

(337) How many times is $3\frac{1}{4}$ lbs. contained in 52 stones ?

(338) Find the cost of 7 cwt. 3 qrs. of tea at 4s. per lb.

(339) What is the value of 31 parcels of calico, each 12 pieces, and each piece 72 yards, at $5\frac{1}{4}d.$ per yard ?

(340) If 8 bushels of potatoes are raised on a rood of ground, what quantity can be raised on 10 ac. 3 roods ?

(341) Reduce 350 lbs. Troy to Avoirdupois weight.

- (342) By how many lbs. is 3 cwt. 1 qr. 11 lbs. short of half a ton?
- (343) Find the cost of a hhd. of wine containing 63 gallons at half-a-crown per pint.
- (344) A wine merchant sold 3 pipes of port at 21s. 9d. per gallon; 3 pipes of sherry at 18s. 6d. per gallon; and 2 pipes of claret at 11s. 6d. per gallon. Find the cost of the whole.
- (345) Find the cost of 7 lbs. 11 oz. of gold at £3. 17. 10½ per oz.
- (346) Reduce $11\frac{1}{4}$ tons, $11\frac{1}{4}$ cwt., and $11\frac{1}{4}$ lbs. to quantities of the same denomination: find the sum of these quantities: multiply the sum by four and reduce the result to tons, &c.
- (347) What is the cost of 3 ac. 3r. 25 poles of land at 9d. per sq. yd.?
- (348) A chemist receives a parcel containing 3 lbs. 5 oz. 13 grs. of calomel, 1 lb. 11 oz. 13 dwts. 8 grs. of arsenic, 2 lbs. 9 oz. 19 grs. of gamboge, and 18 oz. 3 dwts. 3 grs. of corrosive sublimate: find the weight of the parcel in Avoirdupois weight.
- (349) How many yards of cloth are contained in 3 pieces, each 55 ells long?
- (350) How much does an innkeeper gain by purchasing 11 casks of ale, each 18 gallons, at £1. 4. 0 per cask, and retailing the whole at three halfpence per half-pint?
- (351) What is the whole cost of laying a wooden platform to cover 25 poles of ground at 2d. per sq. foot, the labour costing 28 guineas?
- (352) How many times is 5 min. 22 sec. contained in 1 hr. 41 min. 58 sec.?
- (353) How many acres are contained in 83 times 1140 yards?
- (354) Find the value of a silver cup weighing 3 lbs. $11\frac{1}{2}$ oz. Troy at 7s. $9\frac{1}{2}$ d. per ounce.
- (355) What amount will pay the wages of 5 men for 17 days $4\frac{1}{2}$ hours at 8d. per hour, there being nine working hours to the day?
- (356) Reduce 10000 sq. yards to poles.
- (357) Express 2 lbs. Avoirdupois in Troy weight.
- (358) What is the cost of potatoes per ton when they are selling at 1s. $3\frac{1}{2}$ d. per stone?

(359) What is the cost of reaping 11 ac. 3 r. 13 poles of land at $2\frac{3}{4}d.$ per pole?

(360) At sixteen pence per day what will be the amount for 3 years 113 days?

(361) What is the cost of laying 3 miles 5 fur. 115 yards of gas-piping at $7\frac{3}{4}d.$ per yard?

(362) What cost $13\frac{1}{2}$ yards of lead piping, 17 lbs. to the yard, at $6d.$ per lb.?

(363) What would a plumber charge for lining a cistern with 7 cwt. 2 qrs. 19 lbs. of lead at $8\frac{1}{2}d.$ per lb.?

(364) What is the whole cost of 250 tons of scrap-iron at $\frac{3}{4}d.$ per lb.?

(365) What cost 14 cwt. 3 qrs. 10 lbs. of soda crystals at a half-penny per lb.?

(366) Find the cost of 3 tons $17\frac{1}{2}$ cwts. of coal at $8d.$ per cwt.

(367) Find in Avoirdupois weight the weight of a cubic yard of water if a cubic inch weighs 253 Troy grains.

(368) Reduce 3 ac. 3 r. 3 p. 13 yds. to square ft.

(369) Reduce 840609 seconds to working days of ten hours each.

(370) Find the cost of 1 cwt. 3 qrs. $11\frac{1}{2}$ lbs. of butter at eighteen pence per lb.

(371) Find the number of days from Jan. 20th, 1862, to July 23rd, 1866, both inclusive.

(372) What is the cost of excavating a tunnel 3 miles 3 fur. 145 yds. long at a cost of £2. 12. 9 per yard?

(373) Reduce 11021 lbs. to tons.

(374) How many times is $9\frac{1}{4}$ lbs. contained in 37 stones?

(375) If $1\frac{1}{4}$ lbs. of biscuit is allowed daily to each of the 63217 seamen in the Royal Navy, what weight would be required for a year's consumption?

(376) Reduce 75 times 315 grains Troy to lbs.

(377) How many square miles are there in 3636000000 sq. feet?

(378) A part of the sea is found to be $17\frac{1}{2}$ fathoms deep : express this in yards.

(379) From 30317 grains take 2019 grains Troy, and reduce the remainder to Avoirdupois weight.

(380) How many miles are there in 30217 yards ?

(381) Reduce the sum of $1\frac{1}{4}$ cwt., $1\frac{1}{4}$ lbs., $1\frac{1}{4}$ qrs. and $1\frac{1}{4}$ oz. to drams.

(382) In 110613 sq. ft. how many square poles ?

(383) Find the weight in tons, &c. of 16 hogsheads of tobacco, each weighing 596 lbs.

(384) Reduce 3195 lbs. to stones.

(385) How many miles are there in 307169 half inches ?

(386) Reduce 31 yds. 3 qrs. 3 nls. 1 in. to inches.

(387) How many weeks are there in 3012063 seconds ?

(388) How many square yards are there in $11\frac{1}{4}$ acres ?

(389) Reduce 11 poles 5 sq. yds. 9 in. to square inches.

(390) Find in lbs., &c. the eighth part of 374560 Troy grains.

(391) Reduce 496376 hours to years.

(392) How many tons are there in 4791 stones ?

(393) How many working days of $9\frac{1}{2}$ hours each are there in 5130 minutes ?

(394) How many ells are there in 474 inches ?

(395) Find the total weight of 33 parcels, each 29 lbs. ; 18 parcels, each $17\frac{1}{2}$ lbs ; and 23 parcels, each 16 lbs.

(396) If the Times newspaper weighs 4 oz., find the weight of an edition consisting of a hundred thousand copies.

(397) A bushel of coke weighs $13\frac{1}{2}$ lbs. : what is the weight of 31 bushels ?

(398) How many yards of silk can be made by 17 weavers in 8 days, if each weaver has charge of 3 looms and can make 121 inches on each loom per day ?

(399) Reduce $2\frac{1}{4}$ millions of square feet to acres.

(400) Reduce $13\frac{1}{2}$ lbs. Avoirdupois to Troy weight.

COMPOUND ADDITION

(WEIGHTS AND MEASURES).

(1)	(2)	(3)	(4)	(5)
tons cwt. qrs.	cwt. qrs. lbs.	qrs. lbs. oz.	lbs. oz. drs.	cwt. qrs. lbs.
13 19 3	15 3 26	17 27 15	102 15 15	27 1 5
7 0 2	37 0 2	5 26 14	36 13 1	3 3 27
16 13 1	6 2 10	93 20 12	7 9 0	19 0 20
11 11 3	11 3 11	6 25 10	15 0 5	104 3 16
26 17 2	38 3 5	2 24 6	7 11 10	76 1 17
13 19 0	17 2 17	1 12 3	13 13 6	38 2 13
7 3 3	26 1 27	1 11 13	18 10 5	38 0 24
4 11 3	19 3 16	5 7 15	5 13 6	13 0 15
14 15 1	28 0 3	8 13 14	27 14 14	9 3 19
11 16 3	17 3 11	17 9 10	3 12 9	6 2 20
13 0 2	3 2 6	36 16 9	8 9 7	15 2 15
8 9 0	139 2 22	12 7 4	6 15 4	8 3 14
9 7 3	58 1 19	44 15 8	3 10 2	17 1 16
6 5 1	66 1 13	16 14 7	5 14 3	3 3 22
(6)	(7)	(8)	(9)	(10)
tons cwt. qrs. lbs.	cwt. qrs. lbs. oz.	tons cwt. qrs. lbs.	cwt. qrs. lbs. oz.	qrs. lbs. oz. drs.
37 13 3 26	105 3 27 15	200 12 3 6	107 3 20 12	12 20 13 1
13 14 0 19	99 2 24 14	17 19 3 26	69 1 16 8	7 21 1 7
28 17 0 3	16 3 13 3	29 17 1 17	84 2 13 9	19 16 10 9
103 1 1 16	12 1 17 2	18 14 2 16	93 3 25 10	28 26 9 3
79 3 3 24	113 2 29 14	76 13 1 19	78 3 19 11	17 27 5 13
59 17 2 20	76 1 16 3	13 12 0 20	192 1 17 9	16 13 7 10
76 19 1 24	93 3 14 13	25 11 3 21	69 2 13 13	38 0 3 9
19 13 3 23	76 1 23 2	78 10 3 6	5 0 18 6	16 19 13 5
38 14 1 17	58 2 22 0	66 7 3 13	13 2 11 7	45 7 14 7
57 12 3 15	94 3 15 10	79 9 0 7	118 1 16 10	68 16 2 12
56 16 0 13	79 2 16 11	50 17 1 16	15 3 15 12	92 21 5 13
19 19 1 19	58 1 13 5	11 13 1 13	66 1 17 13	36 15 8 15
28 8 3 26	119 3 19 9	112 6 2 10	51 3 24 15	15 17 10 10
17 5 1 3	38 0 19 6	78 0 1 11	19 3 14 14	17 19 7 5

(11)			(12)			(13)			(14)			(15)		
lbs.	oz.	dwts.	lbs.	oz.	dwts.	lbs.	oz.	dwts.	oz.	dwts.	grs.	lbs.	oz.	dwts.
17	11	17	98	10	19	204	3	19	11	19	20	102	10	16
109	10	13	17	10	2	13	4	2	5	15	19	90	11	17
98	7	19	103	11	0	962	3	17	7	16	16	70	10	2
136	6	16	15	0	13	13	1	13	9	13	17	38	9	12
58	3	2	96	7	6	27	2	12	16	7	23	62	9	13
99	9	11	54	10	17	113	1	6	8	17	19	17	8	10
210	8	5	1017	5	5	96	7	15	3	2	5	69	7	7
112	4	15	201	6	19	158	6	14	17	11	15	167	6	6
38	7	14	7025	7	4	96	3	13	20	5	16	29	3	9
116	2	13	962	9	13	702	8	19	19	9	2	58	1	19
99	0	2	117	8	6	13	2	2	13	18	0	117	5	13
135	9	11	53	4	2	98	1	8	17	2	11	15	6	6
75	1	5	186	3	11	119	5	6	6	3	3	38	7	7
86	5	5	95	1	5	17	9	4	7	12	8	17	2	5

(16)			(17)			(18)			(19)			(20)		
lbs.	oz.	dwts.	oz.	dwts.	grs.	oz.	dwts.	grs.	lbs.	oz.	dwts.	oz.	dwts.	grs.
172	3	15	109	17	17	10	2	20	117	11	19	9	19	21
96	9	17	5	2	9	3	12	17	38	3	13	19	16	22
86	5	9	38	2	20	17	19	13	93	7	14	6	13	20
179	10	19	117	0	21	3	6	10	17	9	2	17	10	23
96	11	16	38	1	3	16	16	3	473	10	9	3	11	19
72	10	14	79	5	17	3	13	17	58	11	16	17	5	19
38	11	3	132	19	6	18	17	15	17	3	17	3	19	13
59	9	7	76	6	9	7	12	9	63	11	13	29	16	19
167	7	9	99	13	19	11	13	16	172	10	9	16	17	7
75	6	18	298	17	3	15	2	23	98	9	18	3	2	16
38	3	13	172	2	7	29	9	22	76	3	18	17	11	3
19	8	10	36	3	17	17	6	17	91	7	19	10	15	17
196	8	7	159	13	13	10	7	13	19	9	10	13	9	6
77	7	2	104	17	11	19	6	5	30	3	7	11	6	18

COMPOUND ADDITION (WEIGHTS AND MEASURES). 111

(21)			(22)			(23)			(24)			(25)		
lbs.	oz.	drs.	oz.	drs.	sc.	drs.	sc.	grs.	lbs.	oz.	drs.	lbs.	oz.	drs.
20	5	7	17	7	2	17	2	17	17	7	7	10	11	7
17	4	1	3	3	1	13	2	3	13	3	3	13	9	4
13	3	5	9	4	0	9	1	9	12	6	6	76	10	6
29	7	4	6	3	1	15	2	19	109	9	4	29	5	3
16	11	3	16	4	1	37	2	10	58	5	4	138	7	0
75	9	1	15	2	0	86	1	3	76	1	3	66	6	2
116	6	2	17	1	2	19	0	17	19	4	5	59	3	1
79	4	0	9	5	1	5	1	3	12	3	6	176	11	7
119	7	1	6	4	2	76	0	13	113	1	7	58	7	5
78	3	7	28	3	2	15	1	14	76	6	2	79	10	6
99	1	6	15	1	1	9	2	15	55	4	0	11	9	5
33	5	5	7	5	2	15	1	14	16	3	1	38	6	3
88	9	4	9	4	1	7	2	11	17	2	4	115	4	4
67	4	3	19	7	0	1	2	10	2	0	3	77	7	4

(26)			(27)			(28)			(29)			(30)		
drs.	sc.	grs.	drs.	sc.	grs.	oz.	drs.	sc.	lbs.	oz.	drs.	drs.	sc.	grs.
16	2	16	17	2	16	71	7	2	171	11	7	18	2	15
124	1	14	16	1	3	13	2	2	38	5	4	15	1	15
33	2	10	2	0	1	3	3	2	19	7	3	14	0	14
2	0	12	13	2	4	8	4	1	15	10	7	37	2	13
7	2	13	119	1	14	6	5	2	53	5	4	31	2	10
19	1	17	63	0	7	92	6	0	17	4	5	19	2	11
77	1	19	44	0	15	14	2	0	16	11	6	27	1	7
16	1	16	19	2	19	55	1	1	219	10	7	38	2	3
13	2	13	38	1	19	54	3	1	61	3	6	16	2	19
18	0	2	17	2	13	13	1	2	72	9	3	23	1	16
126	2	11	63	1	10	17	5	2	59	10	7	11	2	12
13	2	9	72	1	11	13	5	2	63	3	5	19	2	11
17	0	5	15	2	13	2	6	1	98	7	4	10	1	10
10	2	16	16	1	10	20	4	1	18	6	4	75	0	9

(31)			(32)			(33)			(34)			(35)		
m.	fur.	po.	fur.	po.	yds.	fur.	po.	yds.	po.	yds.	ft.	yds.	ft.	in.
1	7	37	7	32	5	19	36	$1\frac{1}{2}$	38	4	2	36	2	11
2	4	26	1	31	3	1	26	3	29	3	1	17	0	10
3	3	13	5	18	2	16	11	2	16	4	1	19	0	9
7	6	38	6	16	1	17	6	$3\frac{1}{2}$	17	3	2	20	1	7
6	4	29	3	27	4	30	0	$1\frac{1}{4}$	30	2	1	19	1	5
9	3	17	6	14	3	15	3	2	11	1	2	38	2	3
5	4	15	9	13	4	20	13	4	5	5	2	17	1	4
9	5	19	4	29	3	80	29	5	51	4	1	16	2	9
8	0	36	1	35	5	31	39	5	29	3	0	19	1	11
7	0	11	4	16	5	16	16	$3\frac{1}{4}$	93	2	1	39	2	10
6	3	17	9	26	5	2	15	4	16	1	2	58	1	5
4	1	15	8	11	4	11	17	$5\frac{1}{4}$	72	2	2	29	1	6
3	5	29	5	10	3	5	36	3	11	4	1	57	2	7
9	4	16	6	27	2	9	19	$1\frac{3}{4}$	13	2	1	55	2	6

(36)			(37)			(38)			(39)			(40)		
yds.	ft.	in.	m.	fur.	po.	fur.	po.	yds.	po.	yds.	ft.	fur.	po.	yds.
1107	2	0	17	7	38	15	36	$5\frac{1}{4}$	4	4	2	90	31	4
309	1	0	29	4	12	16	23	4	96	4	1	36	31	5
5004	1	7	38	3	0	23	17	$3\frac{1}{2}$	13	3	1	73	37	3
746	0	11	27	5	25	14	19	3	11	4	2	89	16	$3\frac{1}{2}$
38	2	9	53	1	17	38	17	$2\frac{1}{4}$	53	4	2	62	10	$3\frac{3}{4}$
696	2	5	18	4	13	19	13	3	19	3	1	58	9	2
1921	2	6	96	3	11	24	24	$4\frac{1}{2}$	38	3	0	63	19	$2\frac{1}{2}$
684	2	7	76	7	21	16	38	2	27	2	1	70	6	$1\frac{1}{4}$
72	1	6	59	6	18	55	17	3	64	2	2	59	17	1
1017	0	3	63	3	19	16	16	1	95	1	2	82	15	4
914	2	1	15	7	16	37	27	$1\frac{1}{2}$	27	2	1	15	3	3
9026	1	10	38	6	23	16	19	$5\frac{1}{4}$	11	3	2	63	29	2
1103	2	9	17	7	16	96	16	4	30	4	1	77	18	4
795	1	4	63	5	15	37	17	$0\frac{1}{4}$	62	5	2	66	34	5

(41)				(42)			(43)			(44)			(45)		
yds.	qrs.	nls.	in.	yds.	qrs.	nls.	qrs.	nls.	in.	qrs.	nls.	in.	qrs.	nls.	in.
111	3	3	2	1105	3	3	7	3	2	501	3	2	104	3	1 $\frac{1}{2}$
36	3	2	1	906	2	1	3	3	1 $\frac{1}{2}$	73	2	1 $\frac{1}{4}$	73	3	0 $\frac{1}{4}$
18	3	1	1	779	1	2	8	3	1	84	2	1 $\frac{1}{2}$	86	2	2
92	2	1	2	816	2	1	19	2	2	196	2	2	92	3	2
36	1	3	1	902	1	2	15	2	1 $\frac{3}{4}$	75	1	2	111	3	2
55	2	2	1	13	1	3	7	2	0 $\frac{1}{2}$	83	2	1 $\frac{3}{4}$	59	2	1 $\frac{3}{4}$
773	2	1	2	1107	2	3	16	2	0	97	1	1 $\frac{1}{4}$	68	2	0 $\frac{1}{4}$
369	2	2	1	908	1	3	35	1	1	66	3	1	75	0	0 $\frac{1}{2}$
58	2	0	2	76	2	2	2	2	2	38	3	0 $\frac{3}{4}$	116	1	1 $\frac{1}{2}$
137	3	0	1	9031	2	1	11	1	2	113	3	1 $\frac{1}{2}$	73	1	1 $\frac{1}{2}$
266	1	1	1	736	2	2	55	0	1 $\frac{3}{4}$	72	3	0 $\frac{1}{2}$	96	2	0 $\frac{1}{4}$
78	1	3	1	15	2	1	72	0	1	111	3	1	74	3	1 $\frac{3}{4}$
92	3	3	2	196	1	3	84	2	1 $\frac{1}{4}$	57	1	0	319	3	1
195	1	2	2	200	1	3	17	1	1 $\frac{1}{2}$	68	0	2	112	3	2

(46)				(47)			(48)			(49)			(50)		
yds.	qrs.	nls.	in.	yds.	qrs.	nls.	yds.	qrs.	nls.	qrs.	nls.	in.	qrs.	nls.	in.
7	3	1	2	136	3	2	176	3	2	104	3	2	71	3	1 $\frac{1}{4}$
1	3	3	1	714	3	2	1015	2	2	76	2	1 $\frac{1}{2}$	17	3	2
3	2	2	1	809	3	2	963	1	3	38	1	0 $\frac{1}{4}$	38	2	2
8	2	2	2	36	2	1	715	2	3	75	1	1 $\frac{1}{4}$	83	1	2
9	2	1	1	175	1	0	73	1	3	67	0	1 $\frac{3}{4}$	19	3	1 $\frac{3}{4}$
4	3	3	1	96	2	0	86	3	2	138	0	0 $\frac{1}{2}$	91	1	1 $\frac{1}{4}$
6	3	2	2	138	2	2	119	1	3	96	3	1 $\frac{1}{4}$	74	1	1 $\frac{1}{4}$
7	2	2	2	29	1	3	73	3	1	75	3	1 $\frac{1}{4}$	76	3	0 $\frac{1}{2}$
3	2	1	2	71	2	3	59	2	1	19	3	0	67	1	1 $\frac{1}{4}$
8	3	3	1	96	1	3	196	1	1	309	3	2	10	1	0 $\frac{1}{2}$
9	3	2	2	38	3	2	38	3	3	17	1	2	5	2	2
6	3	2	2	196	1	1	111	3	2	67	3	0 $\frac{3}{4}$	11	2	1 $\frac{3}{4}$
7	1	1	1	99	2	0	59	3	2	139	0	1	23	3	0 $\frac{3}{4}$
5	0	3	1	44	2	1	704	2	2	65	2	0 $\frac{1}{4}$	70	3	1 $\frac{1}{2}$

(51)				(52)			(53)				(54)				(55)			
ac.	r.	po.	yds.	r.	po.	yds.	ft.	po.	yds.	ft.	in.	ac.	r.	po.	yds.	ac.	r.	po.
310	3	30	20	11	36	30	7	17	20	7	119	115	3	31	21	1021	3	36
177	2	20	13	10	32	27	5	38	21	3	76	92	2	13	19	716	2	19
906	3	17	2	7	1	20	6	47	19	4	31	11	1	23	6	92	1	31
55	3	5	11	19	15	16	3	68	16	5	12	36	3	16	30	736	2	17
23	1	6	5	13	17	13	5	93	30	8	99	38	1	17	11	984	1	36
111	2	9	30	7	33	6	4	86	29	3	64	19	3	16	3	6946	3	15
76	3	19	2	16	24	7	3	17	16	0	38	14	2	9	16	712	2	25
96	3	24	12	15	16	19	4	36	15	6	77	76	2	5	15	108	1	27
137	1	19	17	4	19	13	7	11	17	4	64	38	2	24	29	11	3	26
66	2	26	16	7	27	12	6	15	20	3	99	196	3	16	16	73	2	11
79	2	13	24	16	38	21	3	99	0	7	104	75	3	22	17	59	2	3
193	3	36	17	19	11	11	7	66	3	2	131	69	1	11	36	68	1	19
74	1	11	16	13	5	9	4	55	11	1	27	60	3	9	11	73	1	5
16	2	2	19	10	6	15	5	40	2	5	16	44	3	5	4	17	3	36

(56)				(57)			(58)			(59)			(60)				
ac.	r.	po.	yds.	s.	yds.	ft.	in.	po.	yds.	ft.	ac.	r.	po.	ac.	r.	po.	yds.
96	1	31	30	114	7	113		9	27	7	400	3	26	5	3	37	30
17	2	37	27	38	8	79		7	26	2	51	2	19	7	3	36	20
98	3	16	15	146	8	140		19	13	5	315	3	17	9	2	12	10
17	3	19	16	699	6	96		3	3	6	703	1	36	6	2	11	20
99	1	27	15	38	4	11		7	17	3	11	0	37	8	1	9	11
63	2	15	24	414	3	83		6	30	8	599	3	11	4	3	19	5
75	2	36	23	599	2	0		9	11	7	83	2	16	7	2	16	9
69	1	37	27	63	6	59		8	5	6	76	1	15	9	1	30	6
38	2	25	16	79	7	126		7	6	3	19	2	19	9	3	32	3
96	3	11	19	87	8	75		5	9	1	385	1	38	8	3	22	13
75	1	10	16	196	7	59		6	29	4	75	2	17	9	1	19	18
92	3	9	13	58	6	83		3	18	5	69	1	9	2	3	16	28
13	1	29	23	138	5	114		8	15	3	115	2	16	1	2	15	24
95	3	17	24	901	1	21		5	15	6	68	2	3	3	1	27	16

COMPOUND ADDITION (WEIGHTS AND MEASURES). 115

(61)			(62)			(63)			(64)			(65)		
lds.	qrs.	bus.	qrs.	bus.	pkts.	bus.	pkts.	gals.	pkts.	gals.	qts.	gals.	qts.	pts.
103	4	7	20	4	3	9	3	1	5	1	3	15	3	1
97	3	6	11	3	2	5	2	1	9	0	2	20	2	1
908	2	3	9	2	1	19	1	1 $\frac{1}{2}$	7	1	1	11	1	1
39	1	1	5	5	3	23	3	0	13	0	1	13	0	1
12	1	2	113	6	2		3	1 $\frac{1}{2}$	3	1	0	17	3	0
13	2	5	2	4	2	11	2	1	6	1	2	6	3	1
72	3	5		3	3	1	3	0	11	1	3	19	3	0
66	4	4	5	7	3	5	1	0	5	1	1	13	3	1
11	3	3	6	7	2		3	1	7	0	3	28	2	1
119	4	1	7	5	1	16	3	0 $\frac{1}{2}$	9	0	2	11	3	1
68	2	5		1	2	38	2	1	19	1	1	9	1	0
73	0	3	3	6	3	2	1	0	6	0	3	5	3	1
114	1	1	6	3	3	11	1	1	3	1	3	17	2	1
139	3	4	4	7	3	6	3	1	8	1	3	6	2	1

(66)			(67)			(68)			(69)			(70)		
lds.	qrs.	bus.	qrs.	bus.	pkts.	qrs.	bus.	pkts.	gals.	qts.	pts.	lds.	qrs.	bus.
27	4	7	136	6	3	96	4	3	7	1	1	304	4	2
18	3	2	79	4	2	13	3	3	3	0	0	11	3	3
39	2	3	87	3	1	27	3	1	9	1	0	79	0	6
16	1	4	39	2	2	11	4	3	11	0	0	80	3	7
75	1	4	156	2	3	19	5	1	3	0	1	157	0	3
11	3	7	92	7	1	38	7	2	8	1	1	299	1	3
23	4	6	11	6	1	55	6	2	6	0	1	38	1	7
19	3	7	84	3	2	29	6	2	4	1	1	153	4	3
38	3	3	76	3	3	13	7	1	7	1	1	71	3	6
43	3	1	31	7	2	17	3	0	6	0	1	69	3	3
17	4	4	58	5	3	16	3	3	9	1	0	386	4	3
19	4	3	97	5	3	29	7	1	3	1	1	925	4	4
53	3	2	38	4	2	33	2	0	8	0	1	67	4	5
29	2	2	17	4	3	14	3	3	2	1	1	115	3	5

(71)			(72)			(73)			(74)			(75)		
c. yds.	ft.	in.	c. yds.	ft.	in.	c. yds.	ft.	n.	c. yds.	ft.	in.	c. yds.	ft.	in.
3	20	51	50	2	104	49	24	1400	30	0	790	114	20	519
7	11	54	19	11	396	3	13	500	1	15	700	70	11	116
9	9	196	37	3	115	7	13	728	9	4	172	24	15	75
8	3	75	83	7	72	9	11	316	8	7	300	24	16	312
4	26	1000	70	17	495	6	10	44	4	6	456	33	13	78
7	14	376	17	20	382	3	16	11	17	3	73	81	23	62
11	13	210	5	16	116	8	26	119	6	13	70	62	19	940
6	6	1215	112	14	73	7	13	38	9	9	80	14	26	322
9	5	90	63	13	195	5	14	276	5	17	44	30	17	111
8	15	35	69	13	608	9	15	445	18	16	212	66	13	58
4	8	68	118	13	195	9	17	916	2	5	32	89	12	63
6	7	157	69	11	44	8	3	119	9	18	196	92	11	99
7	4	96	69	9	632	10	26	70	1	23	501	10	19	87
7	11	407	58	5	98	11	14	55	6	24	14	74	16	510

(76)			(77)			(78)			(79)			(80)		
c. yds.	ft.	in.	c. yds.	ft.	in.	c. yds.	ft.	in.	c. yds.	ft.	in.	c. yds.	ft.	in.
7	20	1703	5	16	413	36	13	48	3	14	199	37	13	144
3	13	795	9	13	29	23	7	52	7	7	715	16	2	156
3	17	62	8	1	735	24	17	921	6	0	136	13	7	372
1	20	314	7	7	196	7	16	984	9	13	556	96	19	296
4	16	435	3	9	514	19	20	732	8	2	496	18	5	118
7	13	699	9	18	512	3	11	70	2	1	713	43	16	96
8	23	75	11	23	62	18	15	69	1	11	96	76	2	173
6	12	199	3	17	175	7	6	365	5	3	185	15	8	96
9	11	38	39	24	98	9	23	54	6	8	964	73	24	146
5	21	935	18	5	114	19	16	193	7	9	137	86	20	38
7	15	78	17	15	432	6	18	714	6	6	98	27	13	936
9	18	143	5	10	58	11	2	0	5	13	99	5	19	73
6	16	195	67	11	69	5	13	56	4	7	146	9	25	96
3	7	80	4	3	20	2	5	93	9	15	77	19	26	75

(81)	(82)	(83)	(84)	(85)
yrs. wks. dys.	yrs. wks. dys.	dys. hrs. min.	dys. hrs. min.	hrs. min. sec.
3 11 6	19 16 4	11 16 53	90 20 30	3 50 17
1 5 4	3 17 3	5 23 17	13 0 30	3 39 16
7 7 3	37 13 2	6 13 2	11 10 40	3 40 20
9 38 2	16 14 2	9 11 44	5 11 45	3 45 37
2 19 1	29 13 4	3 9 12	6 3 15	3 44 20
11 7 1	13 10 3	1 6 18	19 7 15	3 40 13
3 28 6	7 11 6	71 13 20	31 17 45	4 45 17
8 39 4	5 5 6	5 7 40	17 15 38	4 43 16
6 50 3	80 17 6	9 14 13	6 13 37	4 40 23
4 21 2	76 9 5	2 10 19	9 10 6	4 13 14
3 16 1	11 26 5	3 0 16	3 10 9	3 10 31
7 44 3	19 3 4	3 3 7	1 7 5	4 50 51
5 36 2	5 17 3	7 5 19	4 6 15	4 53 59
1 12 3	16 5 4	6 6 5	7 4 30	3 17 16

(86)	(87)	(88)	(89)	(90)
yrs. dys. hrs.	dys. hrs. min.	wks. dys. hrs.	dys. hrs. min.	hrs. min. sec.
17 104 10	5 12 50	8 4 10	7 23 40	11 40 16
13 76 20	7 12 13	7 4 15	3 17 20	10 0 30
20 300 20	3 12 36	6 6 3	8 13 15	9 30 30
21 73 21	9 10 17	3 3 20	4 10 30	5 31 12
7 65 14	8 11 30	7 6 17	6 20 20	4 45 40
9 19 14	14 12 30	6 6 4	4 17 11	7 40 40
14 4 14	7 17 45	4 4 14	3 4 19	3 37 48
2 204 10	6 17 10	3 3 9	2 14 59	8 30 40
11 76 23	9 10 15	9 2 19	1 10 40	9 11 45
6 11 20	4 11 8	6 2 6	9 11 50	6 17 43
7 5 17	3 10 43	4 3 17	6 9 40	11 40 20
4 3 3	7 9 19	3 3 20	4 6 30	10 13 17
3 30 13	2 19 6	1 2 14	3 5 35	5 7 16
6 180 5	1 6 7	5 1 10	4 1 15	8 20 14

(91)	(92)	(93)	(94)	(95)
tons cwts. qrs.	ewts. qrs. lbs.	mi. fur. yds.	fur. po. yds.	sq. m. ac. r.
37 10 3	17 2 26	3 4 170	4 36 4	7 200 0
5 12 2	13 2 20	7 6 35	3 20 5	3 75 3
19 12 3	2 2 27	2 7 200	2 11 3	9 380 2
36 12 1	36 3 14	5 3 136	7 9 3	6 600 1
20 10 3	14 3 7	1 3 28	6 10 3	8 159 3
21 2 2	3 3 16	6 6 194	3 10 5	3 400 2
20 3 1	17 1 11	3 7 63	6 20 4	1 450 1
11 13 1	5 2 3	7 3 200	3 13 5	7 470 2
9 17 1	19 2 18	3 1 37	7 17 5	9 530 2
6 6 3	6 3 19	8 3 40	6 6 4	5 536 1
17 12 0	7 3 13	2 3 50	9 6 5	8 590 3
6 10 3	13 3 14	1 7 56	6 20 5	6 384 3
19 11 3	11 2 15	6 5 79	3 14 4	7 210 3
30 3 2	12 1 16	4 4 36	1 36 2	5 111 3

(96)	(97)	(98)	(99)	(100)
qrs. bus. pks.	yds. ft. in.	sq.yds. ft. in.	yrs. dys. hrs.	c.yds. ft. in.
17 4 3	10 2 11	16 7 100	7 300 20	13 17 1700
13 4 3	10 1 10	13 2 20	5 17 10	7 20 1400
20 3 2	9 0 9	10 4 130	9 116 9	9 20 1396
14 4 1	10 1 7	11 3 110	6 190 10	6 21 876
11 7 3	10 0 8	5 4 112	3 37 10	3 13 595
9 6 2	11 2 6	6 6 76	9 300 11	6 7 170
16 6 2	5 1 3	7 3 70	6 76 5	9 16 316
7 4 3	7 0 4	19 4 73	13 98 19	6 19 916
19 3 3	6 2 5	36 4 80	6 340 10	9 20 145
3 3 3	3 2 2	70 5 88	11 34 19	6 14 316
18 6 2	18 2 1	3 6 109	9 220 13	7 10 929
14 2 3	4 1 7	13 8 74	5 210 10	3 11 100
13 1 3	7 1 9	9 7 80	7 78 11	1 12 700
6 4 2	4 0 11	16 4 60	6 16 5	2 1 969

(101) Find the sum of $11\frac{1}{2}$ yds. + $11\frac{1}{2}$ feet + 23 inches.

(102) Add together 13 tons 11 cwt., 1 ton 10 cwt. 3 qrs., 9 cwt. 11 lbs., 3 qrs. 15 lbs. 8 oz., and 23 qrs. 15 lbs. 8 oz.

(103) A coal merchant sold on Monday 103 tons 11 cwt. 3 qrs., on Tuesday 53 tons 9 cwt., on Wednesday $83\frac{1}{4}$ tons, on Thursday 18 tons 11 cwt. 2 qrs., on Friday 109 tons, and on Saturday 118 tons 13 cwt. What was the whole weight sold in the week?

(104) Three fields have an area respectively of 13 ac. 2 r. 11 p. 19 yds., 19 ac. 1 r. 35 p. 18 yds., and 35 ac. 14 p. 30 yds. What is the total area?

(105) A person bought 17 yds. 3 qrs. 3 n., 15 yds. 2 qrs., 18 yds. 3 n. 1 in., 14 yds. 2 n. $1\frac{1}{2}$ in., and 11 yds. 3 qrs. 2 n. of cloth: find the total length.

(106) Add together 1 m. 3 fur. 25 yds., 7 fur. 142 yds., $2\frac{3}{4}$ m., 11 m. 7 fur. 19 p., and 63 m. 1 fur. 200 yds.

(107) Find the total weight of five loads of hay weighing respectively 19 cwt. 3 qrs., 1 ton 2 cwt. 1 qr., 18 cwt. 3 qrs. 5 lbs., 17 cwt. 2 qrs. 11 lbs., and 19 cwt. 1 qr. 26 lbs.

(108) Find the sum of $8\frac{1}{2}$ oz., $3\frac{3}{4}$ oz., 1 lb. 5 oz., 6 lbs. $11\frac{1}{2}$ oz., and $3\frac{3}{4}$ lbs. Troy.

(109) Find the total acreage of 31 ac. 3 r. 19 p. + 17 ac. 2 r. 25 p. + 13 ac. 0 r. 11 p. + 16 ac. 3 r. 12 p. + 19 ac. 5 p. + 10 ac. 13 p.

(110) Add together 9 c. yds. 5 ft. 110 in., 8 c. yds. 11 ft. 1170 in., 11 c. yds. 4 ft. 723 in., and 18 c. yds. 14 ft. 1000 in.

(111) Add together 3 miles, 33 furlongs, 5126 yards and 176 feet.

(112) What is the entire length of 5 lines of railway measuring respectively 119 m. 3 fur. 13 p. 10 ft., 114 m. 5 fur. 7 p., 362 m. 1 fur. 111 yards, 46 m. 7 fur. 14 p. 3 yds., and 246 m. 3 fur. 37 yards?

(113) Reduce the sum of 1190 sq. yds., 496 sq. yds., 8909 sq. yds., and 7173 sq. ft. to acres.

(114) How many grains are there in the sum of 11 lbs. 5 oz. 6 dwts., 5 lbs. 3 oz., 7 lbs. 2 oz. 13 dwts., and 5 oz. 7 dwts. 20 grains?

(115) An estate consists of 7369 ac. 3 r. 24 p. arable land, 9476 ac. 2 r. $27\frac{1}{2}$ p. grass land, and 246 ac. 3 r. 39 p. woods and plantations. What is the acreage of the whole?

(116) A farmer sells 35 bus. 3 pks., 4 qrs. 7 bus. 2 pks., 81 bus. 3 pks., and 4 qrs. 6 bus. 2 pks. of wheat : how much altogether ?

(117) Find the sum of $30^{\circ} 3' 3'' + 23^{\circ} 7' 27'' + 13^{\circ} 14' 15'' + 36^{\circ} 37' 36'' + 83^{\circ} 12' 11'' + 11^{\circ} 13' 26''$.

(118) Find how many days in the sum of 3027 hours, 3027 minutes, and 3027 seconds.

(119) Find the sum of 363 cub. yds., 3630 cub. ft., and 36300 cub. in.

(120) A wine merchant sells 103 gallons 3 qts. 1 pt. of a certain wine, and has still remaining 43 gallons 1 pint of the same. What quantity had he at first ?

(121) A railway runs over 37 miles 3 fur. 191 yds. of embankment, through 86 m. 2 fur. 104 yds. of cuttings, and 7 miles 5 fur. 200 yds. of tunnels : what is its length ?

(122) Sold at one time 37 tons 11 cwt. 1 qr. of old iron, at another 86 tons 5 cwt. 3 qrs., and at another 113 tons 11 cwt. 1 qr. : what weight did I sell ?

(123) At a certain mill 37 tons 11 cwt. 3 qrs. of paper was made in one week, 43 tons 5 cwt. 1 qr. the next, 47 tons. 8 cwt. the next, and 42 tons 4 cwt. the next. What quantity was made in the four weeks ?

(124) A ship sails 195, 192, 187, 245, 243, 203 and 226 knots on seven successive days. Find the total distance sailed in miles if a knot be 2000 yards.

(125) A wine merchant has 23 pipes, 11 hogsheads, and 105 gallons of port in wood, and 115 dozens in bottle, each bottle measuring $1\frac{1}{2}$ pints. What quantity had he altogether ?

(126) Find the sum of 5 ft. 6 in. + 3 ft. 9 in. + 11 yds. 5 in. + 7 ft. 9 in. + 18 ft. 10 in.

(127) Add together 103 miles, 103 furlongs, 103 poles, 103 yds. and 103 ft.

(128) Find the weight of nine trucks of lime :

No. 1.	8 tons 11 cwt.	No. 2.	5 tons 7 cwt. 3 qrs.
No. 3.	9 tons 10 cwt. 1 qr.	No. 4.	7 tons 16 cwt. 2 qrs.
No. 5.	10 tons 5 cwt. 3 qrs.	No. 6.	8 tons 13 cwt. 1 qr.
No. 7.	5 tons 17 cwt. 1 qr.	No. 8.	11 tons 19 cwt. 3 qrs.
and No. 9.	8 tons 19 cwt. 3 qrs.		

(129) A draper buys six pieces of linen measuring respectively $36\frac{1}{2}$ yards, 81 yds. 3 qrs., 72 yds. 1 qr. 1 nl., 45 yds. 3 qrs. 3 nls., $28\frac{3}{4}$ yds., and 73 yds. 1 qr. 1 nl. : find the whole length.

(130) Add together 21 tons, 21 cwt., 21 qrs., 21 lbs., 21 oz., and 21 drams.

(131) A person walked 17 miles 313 yds. one day, 13 miles 213 yds. the next, and had still 18 miles 3 furlongs to go to finish his journey. What was the length of the journey ?

(132) Having sold 1305 lbs. of cheese, I have still 6 cwt. 27 lbs. left : how much had I at first ?

(133) Add together 31 qrs. 4 bus. 3 pks., 27 qrs. 5 bus., 13 qrs. 7 bus. 1 pk., 3 qrs. 3 bus. 3 pks., and 303 pks.

(134) How many acres, &c. are there in the sum of 47 roods, 47 poles, 47 yds., 47 ft., and 47 sq. in. ?

(135) Find the sum of $2^{\circ} 31' 31''$, $4^{\circ} 37' 32''$, $18^{\circ} 13'$, $17^{\circ} 3' 29''$ and $11^{\circ} 13' 14''$.

(136) Reduce the sum of 306 lbs., 306 oz., 306 dwts., and 306 grs. Troy to Avoirdupois weight.

(137) A merchant sold 1113 cub. yds. 19 ft. 1114 in. of timber at one sale, 1376 cub. yds. 1600 c. in. at another, and had 776 cub. yds. 20 ft. 1700 in. remaining. What quantity had he at first ?

(138) Find the whole cost of 4 trucks of pig-iron weighing respectively 13 tons 11 cwt., 8 tons 19 cwt., 17 tons 11 cwt. 3 qrs., and 16 tons 5 cwt. 1 qr., at 8s. 6d. per cwt.

(139) How many times is the sum of 11 lbs. 8 oz., 15 lbs. 9 oz., 13 lbs. 6 oz., 8 lbs. 9 oz., and 17 lbs. 5 oz. contained in 5 cwt. 3 qrs. 19 lbs. 2 oz. ?

(140) Find the sum of the following weights : 11 lbs. 6 oz., 5 lbs. 9 oz., 7 lbs. 3 oz., 10 lbs. 14 oz., 9 lbs. 8 oz., and 7 lbs. 8 oz. of beef ; and find the cost at 10d. per lb.

(141) If 3 miles 3 fur. 113 yds. be taken three times from a certain distance and there yet remains 1 m. 5 fur. 210 yds., what was the original distance ?

(142) A cistern has 101 gallons 3 qts. 1 pt. remaining after 504 gallons 1 pint has been drawn from it. What quantity will it hold ?

(143) The bank at Melbourne received 103 oz., 7 lbs. 5 oz., 9 lbs. 11½ oz., 18 lbs. 7½ oz., 19 lbs. 6 oz., and 14 lbs. 11 oz. of gold dust in six days. What was the average value received per day at £3. 15s. per ounce?

(144) A basket of butter containing 75 lbs. and 138 half-pounds is found to be ½ oz. short of weight on each of the lbs., and ¼ oz. on each of the half-pounds. Find the difference in money between selling the whole at its nominal and its true weight at 1s. 6d. per lb.

(145) A grocer buys 3 cwt., 703 lbs., 19 stones, and a quarter of a ton of tea at different times at an average rate of 2s. 2d. per lb. By selling the whole at 3s. 4d. per lb. what does he gain?

(146) A farm consists of the following fields : No. 1. 17 ac. 3 r. 13 p.; No. 2. 17 ac. 1 r. 19 p.; No. 3. 58 p.; No. 4. 37 ac. 3 r. 37 p.; No. 5. 98 ac.; No. 6. 11 ac. 2 r. 27 p.; No. 7. 113 p.; and No. 8. 13 ac. 0 r. 9 p. What is the extent of the whole, and its value at an average of 3s. 1d. per pole?

(147) Add together 6 cwt. 1 qr., 19 cwt. 3 qrs., 11 cwt. 1 qr. 16 lbs., 5 qrs. 3 lbs., 19 cwt. 3 qrs. 14 lbs., 2 cwt. 7 lbs., and 3 qrs. 6 lbs.

(148) A ship sails 2° 31' one day, 2° 25' the next, 2° 33' the next, and 2° 20' on the fourth. What distance does it traverse, reckoning 60 miles to a degree in that latitude?

(149) Find the sum of 1100 sq. poles, 1100 sq. yds., 1100 sq. ft., and 1100 sq. in.

(150) Add together 3 qrs. 5 bus. 2 pks., 5 loads 2 qrs. 3 bus. 1 pk., 103 pecks, 716 bushels, and 11 qr. 0 bus. 3 pks.

COMPOUND SUBTRACTION

(WEIGHTS AND MEASURES).

(1)	(2)	(3)	(4)
cwts. qrs. lbs.	tons cwts. qrs.	qrs. lbs. oz.	lbs. oz. drs.
17 1 13	19 13 3	7 13 12	16 8 0
6 2 19	7 14 2	2 17 14	3 12 9
(5)	(6)	(7)	(8)
tons cwts. qrs. lbs.	tons cwts. qrs. lbs.	cwts. qrs. lbs. oz.	qrs. lbs. oz. drs.
10 1 3 7	11 5 1 3	24 0 24 12	17 0 3 3
5 7 0 19	5 12 2 17	7 2 27 14	5 13 3 14
(9)	(10)	(11)	(12)
tons cwts. qrs. lbs.	cwts. qrs. lbs. oz.	cwts. qrs. lbs. oz.	qrs. lbs. oz. drs.
101 11 1 5	176 3 13 13	10 0 0 0	59 11 3 1
90 15 2 17	76 3 13 15	3 0 2 7	7 17 11 2
(13)	(14)	(15)	(16)
tons cwts. qrs. lbs. oz.	tons cwts. qrs. lbs. oz.	tons cwts. qrs. lbs. oz.	tons cwts. qrs. lbs. oz.
200 0 0 0 0	5 6 0 0 1	7 14 1 3 3	20 1 2 3 6
17 3 3 27 5	1 19 3 7 7	3 17 3 27 1	16 3 13 14
(17)	(18)	(19)	(20)
cwt. qrs. lbs. oz. drs.	cwts. qrs. lbs. oz. drs.	cwts. qrs. lbs. oz. drs.	cwts. qrs. lbs. oz. drs.
1 0 0 0 0	15 1 23 6 11	103 0 12 0 3	78 2 22 14 9
2 17 3 13	7 2 25 9 15	71 3 19 6 14	39 2 24 13 11
(21)	(22)	(23)	(24)
tons cwts. qrs. lbs. oz.	tons cwts. qrs. lbs. oz.	tons cwts. qrs. lbs. oz.	cwts. qrs. lbs. oz. drs.
700 3 0 11 5	93 12 1 0 7	33 1 2 11 4	100 0 25 3 11
37 0 1 5 9	7 17 1 15 9	17 2 2 11 9	18 3 26 9 12

(25)	(26)	(27)	(28)
lbs. oz. dwts. grs.	lbs. oz. dwts. grs.	lbs. oz. dwts. grs.	lbs. oz. dwts. grs.
5 0 0 0	3 1 7 6	16 3 15 20	9 10 7 13
3 2 16 20	2 11 9 17	7 9 16 23	2 11 14 17
(29)	(30)	(31)	(32)
lbs. oz. dwts. grs.	lbs. oz. dwts. grs.	lbs. oz. dwts. grs.	lbs. oz. dwts. grs.
33 6 0 8	8 0 3 4	25 4 0 13	173 2 0 3
4 5 8 18	7 1 5 8	7 10 10 17	16 7 18 19
(33)	(34)	(35)	(36)
lbs. oz. dwts. grs.	lbs. oz. dwts. grs.	lbs. oz. dwts. grs.	lbs. oz. dwts. grs.
30 7 10 1	17 5 0 8	20 0 0 3	83 3 16 12
4 9 17 8	9 7 16 21	7 15 16	4 7 18 18
(37)	(38)	(39)	(40)
lbs. oz. dwts. grs.	lbs. oz. dwts. grs.	lbs. oz. dwts. grs.	lbs. oz. dwts. grs.
13 1 0 5	10 0 0 0	18 2 13 11	15 3 6 4
7 4 11 17	3 1 19 13	7 3 14 15	7 5 0 19
(41)	(42)	(43)	(44)
lbs. oz. drs. sc.	lb. oz. drs. sc.	lbs. oz. drs. sc.	lbs. oz. drs. sc.
11 1 2 2	1 0 0 0	93 4 4 1	5 1 0 0
2 1 3 2	3 4 1	12 5 3 2	3 7 7 2
(45)	(46)	(47)	(48)
oz. drs. sc. grs.	oz. drs. sc. grs.	oz. drs. sc. grs.	oz. drs. sc. grs.
11 3 0 17	9 4 1 3	9 0 1 0	103 3 1 13
5 1 19	3 6 2 17	2 1 0 1	7 5 2 17
(49)	(50)	(51)	(52)
oz. drs. sc. grs.	oz. drs. sc. grs.	lbs. oz. drs. sc.	lbs. oz. drs. sc.
1000 0 0 0	14 2 0 14	27 11 5 0	5 0 3 1
7 3 2 18	2 3 1 19	6 11 7 1	2 7 5 2
(53)	(54)	(55)	(56)
m. fur. po.	m. fur. po.	fur. po. yds.	fur. po. yds.
100 5 13	100 0 0	17 1 1	10 1 5
13 1 37	3 6 13	16 6 2	3 2 5½

COMPOUND SUBTRACTION (WEIGHTS AND MEASURES). 125

(57)

yds. ft. in.
30 2 6
7 1 9

(58)

yds. ft. in.
100 1 3
29 2 9

(59)

yds. ft. in.
11 0 6
5 0 10

(60)

yds. ft. in.
106 2 2
105 2 5

(61)

m. fur. po. yds.
10 0 0 0
7 3 13 4

(62)

m. fur. po. yds.
17 3 21 1
3 7 19 5

(63)

m. fur. po. yds.
103 6 38 2
27 7 39 3

(64)

m. fur. po. yds.
1000 0 0 0
111 3 17 3½

(65)

fur. po. yds. ft.
19 13 3 1
7 19 4 2

(66)

fur. po. yds. ft.
6 0 2 1
4 27 3 2

(67)

fur. po. yds. ft.
20 1 1 1
19 1 2

(68)

fur. po. yds. ft.
706 3 2 0
17 13 2 2

(69)

m. fur. po. yds.
1 1 2 3
3 1 4

(70)

po. yds. ft. in.
90 3 2 5
2 4 1 7

(71)

po. yds. ft. in.
18 0 0 4
3 5 0 7

(72)

po. yds. ft. in.
14 0 2 6
1 2 9

(73)

m. fur. po. yds.
70 3 11 2
7 3 11 3

(74)

fur. po. yds. ft.
5 0 0 1
3 11 5 2

(75)

fur. po. yds. ft.
109 1 2 1
17 3 0 2

(76)

po. yds. ft. in.
10 1 1 11
6 3 2 9

(77)

ac. r. po.
35 3 1
7 3 20

(78)

ac. r. po.
100 0 20
70 2 31

(79)

ac. r. po.
3013 2 23½
1107 3 17

(80)

ac. r. po.
3 2 0¼
2 1 7

(81)

sq.yds. ft. in.
13 0 17
7 4 119

(82)

sq.yds. ft. in.
110 2 61
76 6 136

(83)

sq.yds. ft. in.
130 1 5
75 7 126

(84)

sq.yds. ft. in.
100 0 30
4 5 76

(85)

p. sq.yds. ft. in.
13 10 7 13
7 9 8 96

(86)

p. sq.yds. ft. in.
20 20 2 21
6 21 5 26

(87)

p. sq.yds. ft. in.
3 0 0 0
1 12 3 7

(88)

p. sq.yds. ft. in.
40 26 2 6
13 29 7 113

(89)			(90)			(91)			(92)		
ac.	r.	po. yds.	ac.	r.	po. yds.	ac.	r.	po. yds.	ac.	r.	po. yds.
1031	1	3 20	209	1	13 6	111	2	0 13	201	2	0 3
117	1	3 29	17	3	19 $7\frac{1}{2}$	27	2	36 16	72	0	7 11
(93)			(94)			(95)			(96)		
r.	po.	sq.yds. ft.	r.	po.	sq.yds. ft.	r.	po.	sq.yds. ft.	r.	p.	sq.yds. ft.
32	16	16 7	2	0	0 0	5	0	13 6	60	13	19 5
11	32	16 8	1	30	1	2	2	26 7	12	18	22 7
(97)			(98)			(99)			(100)		
sq.m.	ac.	r. po.	sq.m.	ac.	r. po.	sq.m.	ac.	r. po.	ac.	r.	po. yds.
131	30	2 36	60	0	0 0	114	2	1 15	106	3	20 11
7	119	3 37	2	12	2 13	76	11	2 18	71	2	15 29
(101)			(102)			(103)			(104)		
po.	sq.yds.	ft. in.	po.	sq.yds.	ft. in.	po.	sq.yds.	ft. in.	ac.	r.	po. yds.
3	0	0 0	6	13	3 60	50	0	2 18	10	0	3 30
1	30	5 19	4	26	5 76	16	28	5 113	1	1	33 17
(105)			(106)			(107)			(108)		
yrs.	mo.	wks.	yrs.	mo.	wks.	mo.	wks.	dys.	mo.	wks.	dys.
30	0	0	111	3	2	19	2	5	110	2	2
17	2	3	76	7	3	7	3	6	7	3	4
(109)			(110)			(111)			(112)		
wks.	dys.	hrs.	wks.	dys.	hrs.	wks.	dys.	hrs.	dys.	hrs.	min.
76	0	3	11	3	15	1093	2	12	90	1	35
7	6	19	6	4	16	764	3	17	17	13	56
(113)			(114)			(115)			(116)		
dys.	hrs.	min.	hrs.	min.	sec.	hrs.	min.	sec.	hrs.	min.	sec.
100	2	11	20	13	13	110	5	30	107	31	17
73	12	19	16	13	17	36	36	36	26	26	29
(117)			(118)			(119)			(120)		
yrs.	wks.	dys.	yrs.	wks.	dys.	yrs.	dys.	hrs.	yrs.	dys.	hrs.
30	15	4	193	40	4	10	112	14	109	100	13
29	26	5	116	29	6	4	196	3	11	119	21

COMPOUND SUBTRACTION (WEIGHTS AND MEASURES). 127

(121)	(122)	(123)	(124)
wks. dys. hrs. min.	wks. dys. hrs. min.	wks. dys. hrs. min.	wks. dys. hrs. min.
10 1 2 12	92 3 13 4	100 0 0 0	129 3 20 29
4 3 18 34	37 5 17 34	3 3 3 33	39 6 21 13

(125)	(126)	(127)	(128)
dys. hrs. min. sec.	dys. hrs. min. sec.	yrs. wks. dys. hrs.	yrs. dys. hrs. min.
17 0 13 30	11 0 2 10	19 13 3 20	90 2 1 4
6 13 30 45	2 4 13 27	6 29 4 22	7 3 16 38

(129)	(130)	(131)	(132)
lds. qrs. bus.	lds. qrs. bus.	lds. qrs. bus.	lds. qrs. bus.
80 2 4	50 0 0	18 2 5	1131 2 2
7 4 7	13 3 4	9 3 6	127 3 6

(133)	(134)	(135)	(136)
qrs. bus. pks.	qrs. bus. pks.	qrs. bus. pks.	qrs. bus. pks.
100 0 0	70 1 2	1000 0 0	90 3 2
33 1 3	16 3 3	772 2 1	40 3 3

(137)	(138)	(139)	(140)
gals. qts. pts.	gals. qts. pts.	gals. qts. pts.	gals. qts. pts.
10 0 0	19 1 1	130 1 0	17 0 0
3 1 1	3 2 0	4 1 1	2 1 0

(141)	(142)	(143)	(144)
lds. qrs. bus. pks.	lds. qrs. bus. pks.	lds. qrs. bus. pks.	lds. qrs. bus. pks.
7 0 3 1	1216 3 0 0	19 3 3 2	141 0 1 1
2 3 7 3	74 4 6 2	7 3 3 3	7 3 0 2

(145)	(146)	(147)	(148)
bus. pks. gals. qts.	bus. pks. gals. qts.	pks. gals. qts. pts.	pks. gals. qts. pts.
1110 2 1 2	21 1 0 0	14 1 0 0	12 0 0 0
36 3 1 3	17 2 1 2	3 1 2 1	3 0 1 1

(149)	(150)	(151)	(152)
gals. qts. pts.	gals. qts. pts.	lds. qrs. bus. pks.	qrs. bus. pks. gals.
32 1 0	1010 1 0	730 0 3 0	102 4 3 0
13 1 1	101 1 1	29 4 5 2	73 0 3 1

(153)	(154)	(155)	(156)
c. yds. ft. in.	c. yds. ft. in.	c. yds. ft. in.	c. yds. ft. in.
10 0 0	210 20 111	195 0 21	1001 2 902
2 13 139	127 24 716	76 13 181	123 17 1000
(157)	(158)	(159)	(160)
c. yds. ft. in.	c. yds. ft. in.	c. yds. ft. in.	c. yds. ft. in.
312 0 131	9091 20 1700	36 0 31	500 0 0
57 17 736	172 20 1721	14 7 131	3 21 71
(161)	(162)	(163)	(164)
c. yds. ft. in.	c. yds. ft. in.	c. yds. ft. in.	c. yds. ft. in.
704 3 12	116 13 20	404 1 1	2027 14 1405
75 19 196	30 26 711	37 19 19	136 19 966
(165)	(166)	(167)	(168)
yds. qrs. nls.	qrs. nls. in.	yds. qrs. nls.	qrs. nls. in.
12 0 0	7 1 0	102 3 $1\frac{1}{2}$	200 2 $0\frac{1}{4}$
3 3 1	3 3 2	27 3 2	71 2 $1\frac{1}{2}$
(169)	(170)	(171)	(172)
E. ells qrs. nls.	E. ells qrs. nls.	yds. qrs. nls.	yds. qrs. nls.
100 1 0	1200 3 2	16 0 0	401 0 2
72 3 2	107 4 1	3 2 3	36 2 3
(173)	(174)	(175)	(176)
yds. qrs. nls. in.	yds. qrs. nls. in.	yds. qrs. nls. in.	yds. qrs. nls. in.
40 3 0 0	17 2 2 1	80 1 1 0	530 2 2 0
11 3 0 $1\frac{1}{2}$	2 0 3 $1\frac{1}{4}$	66 2 2 $1\frac{3}{4}$	131 2 3 $0\frac{3}{4}$
(177)	(178)	(179)	(180)
tons cwts. qrs. lbs.	cwts. lbs. oz. drs.	cwts. lbs. oz. drs.	tons cwts. qrs. lbs.
200 13 2 11	70 15 3 10	3 0 0 0	58 2 1 13
76 19 3 14	14 21 7 12	1 5 7 7	1 2 27
(181)	(182)	(183)	(184)
ac. sq. yds. ft. in.	ac. sq. yds. ft. in.	m. yds. ft. in.	m. yds. ft. in.
1301 130 6 4	3 1409 2 131	20 171 2 5	1 0 0 0
117 906 7 98	1 4501 5 141	7 318 2 11	729 1 1

COMPOUND SUBTRACTION (WEIGHTS AND MEASURES). 129

(185)	(186)	(187)	(188)
m. fur. yds. ft.	m. fur. yds. ft.	ac. sq.yds. ft. in.	ac. r. po.sq.yds.
60 3 20 0	115 0 101 1	50 110 2 72	19 0 3 20
30 6 210 2	7 2 200 2	7 1960 7 38	6 1 36 28

(189)	(190)	(191)	(192)
qrs. bus. pks.	gals. qts. pts.	bus. pks. gals.	po. yds. ft.
171 0 1	20 3 0	90 1 0	25 0 0
17 3 2	6 1 1	37 1 1	7 5 1

(193)	(194)	(195)	(196)
sq.yds. ft. in.	c.yds. ft. in.	sq.yds. ft. in.	c.yds. ft. in.
700 6 111	700 3 500	98 3 11	9001 1 27
136 7 112	74 17 694	3 4 37	105 21 376

(197)	(198)	(199)	(200)
yds. ft. in.	yds. qrs. nls.	qrs. nls. in.	yrs. dys. hrs.
20 2 1	31 1 1	3 0 $0\frac{1}{4}$	20 11 5
7 0 3	16 2 3	1 2 $1\frac{3}{4}$	17 113 16

(201) From 1 ton take the sum of 375 lbs. + 209 oz. + 3 cwt. 1 qr.

(202) Bought 110 yards of silk and sold 95 yards 3 qrs. 1 n. 1 in. : what length remains?

(203) From 375 loads of barley 909 qrs. 3 bus. 2 pks. are sold : what is left?

(204) A train leaves King's Cross at 11.10 a.m., and arrives at Manchester at 4.3 p.m. : in what time does it perform the distance?

(205) The University Boat race began at 2 h. 12 m. 11 sec., and ended at 2 h. 31 m. $5\frac{1}{2}$ sec. : what was the duration of the race?

(206) From 3 acres take 1 ac. 0 r. 0 p. 25 yards.

(207) A piece of common land measuring $3300\frac{1}{4}$ acres has 1215 ac. 27 p. $1\frac{1}{2}$ yards waste, and the remainder grass land. How much grass land is there?

(208) From $2\frac{3}{4}$ tons take the sum of $2\frac{3}{4}$ cwt. + $2\frac{3}{4}$ qrs. + $2\frac{3}{4}$ lbs.

(209) A ship going on a voyage of 1313 leagues has already accomplished $1327\frac{1}{2}$ miles. How far has she still to go?

(210) The lead line gives at one cast 25 fathoms of water, and at the next $17\frac{3}{4}$ fathoms. Find the difference of depth in yards, &c.

(211) Looking at my watch I find it shows 23 minutes past 8 in the morning. What time will have elapsed if on looking again I find it indicates 13 minutes past 2 in the afternoon?

(212) From 113 tons 11 cwt. 3 qrs. 5 lbs. take 112 tons 19 cwt. 1 qr. 27 lbs.

(213) Reduce the difference of 3 miles 5 fur. and 2 miles 20 p. 3 yds. to yards.

(214) How many times is the difference of 3 lbs. 5 oz. 1 dwt. and 2 lbs. 11 oz. 11 dwts. contained in 33 lbs.?

(215) Bought 3 hams, each weighing $15\frac{1}{2}$ lbs., and sold 1 qr. 12 lbs.: find the value of the remainder at $7\frac{1}{2}d.$ per lb.

(216) *A* works $9\frac{1}{2}$ days of 8 hours each, *B* $8\frac{1}{2}$ days of 9 hours each; how much does one earn more than the other at $10d.$ an hour?

(217) Two steamboats make the same trip: one starts at 5.15 a.m. and arrives at 7.36 p.m.; the other starts at 9.26 a.m. and reaches its destination at 11.44 p.m. How much time is saved in going by the latter?

(218) Find the value of 3 ac. 3 r. 31 p. + 5 ac. 21 p. - 4 ac. 1 r. 27 p.

(219) A person having an estate of 940 acres sells 153 ac. 1 r. 19 p. for £2191. 14. 10. What would he realise altogether if he sold the remainder at the rate £1. 11. 6 per pole?

(220) If 13 cwt. 1 qr. 12 lbs. 8 oz. added to a certain weight make up 1 ton 10 cwt., what is that weight?

(221) A field of 31 ac. 2 r. 11 p. 3 yds. is 12 ac. 15 p. 4 yards larger than another: what is the size of the latter?

(222) From the sum of 202 lbs. + 21 cwt. 3 qrs. 17 lbs. take 1 ton 1 cwt. $13\frac{1}{2}$ lbs.

(223) What remains after taking 3 lbs. 5 oz. 13 dwts. 11 grs. from 6 lbs. 9 grains?

(224) From 4 acres take one hundred and fifty thousand square inches.

COMPOUND SUBTRACTION (WEIGHTS AND MEASURES). 131

(225) Add 2 cwt. 1 qr. 3 lbs. to the difference of 3 tons 5 cwt. and 7500 lbs.

(226) Subtract 1 m. 3 fur. $11\frac{1}{2}$ poles from 4968 yards.

(227) Express in miles, &c. the difference of the heights of Mt Everest 29002 ft. and Mont Blanc 15732 ft.

(228) Twenty tons of Esparto grass is placed upon two railway trucks; one contains 9 tons 3 qrs. 15 lbs.; what weight does the other sustain?

(229) From ten cubic yards take 26000 cub. inches.

(230) From 1 cwt. 1 qr. 1 lb. of cheese take 3 qrs. 11 lbs., and find the value of the remainder at 9*d.* per lb.

(231) A grocer sells 25 lbs. 3 oz. of tea on Monday, 18 lbs. 11 oz. on Tuesday, 19 lbs. 6 oz. on Wednesday, 33 lbs. 14 oz. on Thursday, 115 lbs. 10 oz. on Friday, and 98 lbs. 6 oz. on Saturday, out of a stock of $5\frac{1}{4}$ cwt. What has he remaining, and what is its value at 3*d.* per oz.?

(232) Out of a piece of silver weighing 7 lbs. 6 oz. two cups were made, one weighing $3\frac{1}{4}$ lbs., the other $2\frac{3}{4}$ lbs.: find the value of the remainder at 5*s.* 10*d.* per ounce.

(233) From 11 ac. 1 r. 11 p. take 32140 sq. yards.

(234) A workman goes to work at 6.30 a.m. each morning and leaves at 8.15 p.m. What does he earn in four days if he be paid 9*d.* per hour till 6 p.m. and after that time 1*s.* per hour, but loses $1\frac{1}{2}$ hrs. of working time each day for breakfast and dinner?

(235) Take 19 hrs. 12 min. 15 sec. from $21\frac{1}{2}$ hours.

(236) A goldsmith buys 3 lbs. 4 oz. 5 dwts. and 1 lb. $3\frac{1}{2}$ oz. of gold, and uses 3 lbs. 10 oz. 11 grains. What has he left?

(237) From $1\frac{1}{4}$ lbs. Apoth. take 5 oz. 7 drs. 2 sc. 15 grains.

(238) Bought a hogshead of sugar weighing 11 cwt. 1 qr. 9 lbs., and sold 7 cwt. 14 lbs. Find the value of the remainder at 3*d.* per lb.

(239) A person going on a journey of 120 miles travels 110 m. 3 fur. 117 yds. by train and walks the remainder. How far does he walk?

(240) Three cottagers rent $5\frac{1}{2}$ acres of garden land; one has $1\frac{1}{4}$ ac. and another 7216 sq. yards. How much has the third?

(241) Two hundred cubic yards of soil have to be removed: what remains after removing 111 cub. yds. 17 cub. ft.?

(242) After drawing 39 quarts and three half-pints from a barrel of ale, what remains?

(243) From $1\frac{1}{2}$ yrs. take 44 wks. 13 hrs. 30 min.

(244) From a piece of linen measuring 30 yds. 1 qr. there is cut off 24 yds. 3 qrs. 1 n. 2 in.: what is the length of the remnant?

(245) Take 1000 ounces from 100 cwt.

(246) Find the cost of the difference between $11\frac{3}{4}$ lbs. and 3 lbs. 5 oz. Troy, at £3. 17. $10\frac{1}{2}$ per ounce.

(247) Express in Troy weight the difference of $1\frac{1}{4}$ cwt. and 2120 ounces Avoirdupois.

(248) What added to 4 ac. 3 r. 21 p. 19 yds. 1 ft. will give a total of $12\frac{3}{4}$ acres?

(249) At a certain market 903 qrs. 5 bus. remained unsold out of 33103 pecks brought to market. What quantity was sold?

(250) A merchant received on Monday 111 cwt. 3 qrs. 14 lbs. of rice and sold 3 tons 13 cwt. 19 lbs., on Wednesday received $4\frac{1}{4}$ tons and sold 98 cwt. 11 lbs., and on Saturday received 8 tons 11 cwt. 3 qrs. 15 lbs. and sold 18 tons 19 cwt. 25 lbs. He had 25 tons 14 cwt. 1 qr. in stock at the beginning of the week: what had he at the close?

COMPOUND MULTIPLICATION

(WEIGHTS AND MEASURES).

- (1) 3 tons 5 cwt. 3 qrs. 19 lbs. 8 oz. \times 2
- (2) " " " " \times 4
- (3) " " " " \times 6
- (4) " " " " \times 8
- (5) " " " " \times 10
- (6) " " " " \times 12
- (7) 11 cwt. 3 qrs. 14 lbs. 5 oz. 6 drs. \times 3
- (8) " " " " \times 5
- (9) " " " " \times 7
- (10) " " " " \times 9
- (11) " " " " \times 11
- (12) 5 lbs. 3 oz. 11 dwts. 9 grs. \times 2
- (13) " " " " \times 4
- (14) " " " " \times 6
- (15) " " " " \times 8
- (16) " " " " \times 10
- (17) " " " " \times 12
- (18) 16 lbs. 3 oz. 7 drs. 2 sc. 11 grs. \times 3
- (19) " " " " \times 5
- (20) " " " " \times 7
- (21) " " " " \times 9
- (22) " " " " \times 11
- (23) 31 yds. 2 ft. $10\frac{1}{2}$ in. \times 2
- (24) " " " " \times 4
- (25) " " " " \times 6
- (26) " " " " \times 8
- (27) " " " " \times 10
- (28) " " " " \times 12

EXAMPLES IN ARITHMETIC.

- (29) 5 m. 3 fur. 14 po. 2 yds. \times 3
 (30) " " " \times 5
 (31) " " " \times 7
 (32) " " " \times 9
 (33) " " " \times 11
 (34) 21 ac. 3 r. $21\frac{3}{4}$ po. \times 2
 (35) " " " \times 4
 (36) " " " \times 6
 (37) " " " \times 8
 (38) " " " \times 10
 (39) " " " \times 12
 (40) 7 ac. 2 r. 5 po. 11 yds. 4 ft. \times 3
 (41) " " " \times 5
 (42) " " " \times 7
 (43) " " " \times 9
 (44) " " " \times 11
 (45) " " " \times 2
 (46) 11 yds. 3 qrs. 2 nls. 2 in. \times 4
 (47) " " " \times 6
 (48) " " " \times 8
 (49) " " " \times 10
 (50) " " " \times 12
 (51) 13 yrs. 103 dys. 5 h. 40 m. \times 3
 (52) " " " \times 5
 (53) " " " \times 7
 (54) " " " \times 9
 (55) " " " \times 11
 (56) 103 lds. 3 qrs. 3 bus. 3 pks. \times 7
 (57) " " " \times 8
 (58) " " " \times 9
 (59) " " " \times 6
 (60) " " " \times 4
 (61) 13 tons 4 cwt. 3 qrs. 9 lbs. \times 14
 (62) " " " \times 16
 (63) " " " \times 15
 (64) " " " \times 18
 (65) 7 m. 3 fur. 3 po. $2\frac{1}{2}$ yds. \times 21
 (66) " " " \times 22
 (67) " " " \times 20

- (68) 9 cub. yds. 13 ft. 196 in. \times 24 (107)
 (69) " " " \times 28 (108)
 (70) " " " \times 27 (109)
 (71) " " " \times 30 (110)
 (72) 17 yds. 1 ft. $9\frac{1}{2}$ in. \times 36 (111)
 (73) " " " \times 32 (112)
 (74) " " " \times 33 (113)
 (75) " " " \times 40 (114)
 (76) 8 lbs. 13 dwts. 5 grs. \times 42 (115)
 (77) " " " \times 45 (116)
 (78) " " " \times 48 (117)
 (79) " " " \times 50 (118)
 (80) 41 yds. 3 qrs. 1 nl. 1 in. \times 54 (119)
 (81) " " " \times 56 (120)
 (82) " " " \times 60 (121)
 (83) " " " \times 63 (122)
 (84) 73 ac. 3 r. 37 po. \times 64 (123)
 (85) " " " \times 66 (124)
 (86) " " " \times 70 (125)
 (87) " " " \times 72 (126)
 (88) 19 ac. 1 r. 11 po. 27 yds. \times 75 (127)
 (89) " " " \times 81 (128)
 (90) " " " \times 84 (129)
 (91) 11 lbs. 5 oz. 6 drs. 1 sc. 7 grs. \times 77 (130)
 (92) " " " \times 88 (131)
 (93) " " " \times 90 (132)
 (94) " " " \times 96 (133)
 (95) 103 cwt. 3 qrs. 27 lbs. \times 99 (134)
 (96) " " " \times 110 (135)
 (97) " " " \times 108 (136)
 (98) " " " \times 120 (137)
 (99) 7 cwt. 1 qr. 9 lbs. 6 oz. \times 121 (138)
 (100) " " " \times 132 (139)
 (101) " " " \times 144 (140)
 (102) " " " \times 180 (141)
 (103) 31 yrs. 115 dys. 19 hrs. \times 200 (142)
 (104) " " " \times 240 (143)
 (105) " " " \times 225 (144)
 (106) " " " \times 192 (145)

- (107) 73 tons 13 cwt. 19 lbs. \times 210
 (108) " " " \times 150
 (109) " " " \times 512
 (110) " " " \times 640
 (111) 13 po. 4 yds. 1 ft. 5 in. \times 960
 (112) " " " \times 1008
 (113) " " " \times 315
 (114) 3 lbs. 5 oz. 14 drs. \times 17
 (115) " " " \times 13
 (116) " " " \times 19
 (117) " " " \times 29
 (118) 17 yds. 2 ft. 11 in. \times 23
 (119) " " " \times 31
 (120) " " " \times 37
 (121) 13 cub. yds. 5 ft. 114 in. \times 41
 (122) " " " \times 47
 (123) " " " \times 46
 (124) " " " \times 91
 (125) 116 sq. yds. 7 ft. 41 in. \times 41
 (126) " " " \times 83
 (127) " " " \times 119
 (128) " " " \times 59
 (129) 9 lbs. 11 oz. 5 dwts. 13 grs. \times 93
 (130) " " " \times 74
 (131) " " " \times 79
 (132) " " " \times 111
 (133) 15 yrs. 3 mo. 2 wks. \times 128
 (134) " " " \times 133
 (135) " " " \times 303
 (136) 76 yds. 1 ft. $4\frac{1}{2}$ in. \times 969
 (137) " " " \times 345
 (138) " " " \times 327
 (139) " " " \times 441
 (140) 36 m. 4 fur. 3 po. 2 yds. \times 902
 (141) " " " \times 713
 (142) " " " \times 868
 (143) " " " \times 749
 (144) 3 wks. 5 dys. 4 h. 25 m. \times 699
 (145) " " " \times 518

COMPOUND MULTIPLICATION (WEIGHTS AND MEASURES). 137

- (146) 3 wks. 5 dys. 4 h. 25 m. $\times 223$
 (147) " " " $\times 319$
 (148) 1 lb. 3 oz. 4 drs. 2 sc. 9 grs. $\times 746$
 (149) " " " $\times 647$
 (150) " " " $\times 337$
 (151) " " " $\times 733$
 (152) 2 cwt. 1 qr. 11 lbs. 8 oz. $\times 737$
 (153) " " " $\times 197$
 (154) " " " $\times 791$
 (155) " " " $\times 719$
 (156) 3 sq. yds. 4 ft. 113 in. $\times 302$
 (157) " " " $\times 709$
 (158) " " " $\times 641$
 (159) " " " $\times 725$
 (160) 11 ac. 2 r. 35 po. 27 yds. $\times 318$
 (161) " " " $\times 992$
 (162) " " " $\times 467$
 (163) " " " $\times 107$
 (164) 17 yds. 3 qrs. 2 nls. 2 in. $\times 707$
 (165) " " " $\times 323$
 (166) " " " $\times 691$
 (167) " " " $\times 457$
 (168) 31 qrs. 2 bus. 2 pks. 1 gal. $\times 517$
 (169) " " " $\times 704$
 (170) " " " $\times 1936$
 (171) " " " $\times 1842$
 (172) 15 gals. 3 qts. 1 pt. $\times 9674$
 (173) " " " $\times 8864$
 (174) " " " $\times 7193$
 (175) 2 tons 13 cwt. 3 qrs. 15 lbs. 8 oz. 8 drs. $\times 9995$
 (176) " " " " $\times 7846$
 (177) " " " " $\times 9315$
 (178) 1 lb. 5 oz. 13 dwts. 13 grs. $\times 11195$
 (179) " " " $\times 968$
 (180) " " " $\times 70155$
 (181) 3 lbs. 11 oz. 5 drs. 2 sc. 13 grs. $\times 69280$
 (182) " " " $\times 1966$
 (183) " " " $\times 38477$
 (184) 3 m. 3 fur. 34 po. 3 yds. 2 ft. 6 in. $\times 404$

- (185) 3 m. 3 fur. 34 po. 3 yds. 2 ft. 6 in. \times 5796
 (186) " " " " " \times 97
 (187) 12 ac. 3 r. 13 po. 20 yds. 5 ft. 110 in. \times 216
 (188) " " " " " \times 4328
 (189) " " " " " \times 5021
 (190) 19 cub. yds. 11 ft. 119 in. \times 7026
 (191) " " " " " \times 8864
 (192) " " " " " \times 90911
 (193) 12 lds. 4 qrs. 5 bus. 2 pks. 1 gal. \times 7013
 (194) " " " " " \times 9684
 (195) " " " " " \times 7215
 (196) 2 yrs. 111 dys. 13 hrs. 12 min. 30 sec. \times 38
 (197) " " " " " \times 943
 (198) " " " " " \times 8725
 (199) 51 yds. 3 qrs. 3 nls. 2 in. \times 5163
 (200) " " " " " \times 8219

Find the value of

- (201) 1 ft. 6 in. \times 1 ft. 6 in.
 (202) 3 ft. 4 in. \times 3 ft. 4 in.
 (203) 5 ft. 9 in. \times 3 ft. 8 in.
 (204) 6 ft. 7 in. \times 5 ft. 11 in.
 (205) 7 ft. 10 in. \times 6 ft. 3 in.
 (206) 8 ft. 10 in. \times 8 ft. 10 in.
 (207) 17 ft. 4 in. \times 6 ft. 3 in.
 (208) 11 ft. 5 in. \times 4 ft. 9 in.
 (209) 19 ft. 6 in. \times 19 ft. 6 in.
 (210) 16 ft. 3 in. \times 16 ft. 7 in.
 (211) 8 ft. 9 in. \times 8 ft. 6 in.
 (212) 11 ft. 4 in. \times 7 ft. 3 in.
 (213) 17 ft. 3 in. \times 16 ft. 3 in.
 (214) 18 ft. 9 in. \times 13 ft. 7 in.
 (215) 6 ft. $3\frac{1}{2}$ in. \times 4 ft. 3 in.
 (216) 9 ft. 6 in. \times 2 ft. $4\frac{1}{2}$ in.
 (217) 18 ft. $7\frac{1}{4}$ in. \times 5 ft. 11 in.
 (218) 3 yds. 2 ft. \times 4 ft. 7 in.
 (219) 5 yds. 1 ft. \times 5 yds. 1 ft.
 (220) 11 yds. 2 ft. \times 8 yds. 11 in.
 (221) 6 yds. 1 ft. \times 8 yds. 1 ft. 3 in.

- (222) 7 yds. 2 ft. \times 3 yds. 2 ft. 10 in.
- (223) 19 yds. 1 ft. \times 6 ft. $6\frac{1}{2}$ in.
- (224) 3 yds. 1 ft. 4 in. \times 5 ft. 6 in.
- (225) 8 yds. 1 ft. 7 in. \times 4 yds. 2 ft. 4 in.
- (226) 3 yds. 2 ft. 6 in. \times 3 yds. 1 ft. 9 in.
- (227) 9 yds. 1 ft. 4 in. \times 2 yds. 1 ft. 6 in.
- (228) 7 yds. 2 ft. 3 in. \times 4 ft. $7\frac{1}{2}$ in.
- (229) 11 yds. 1 ft. 4 in. \times 3 ft. 8 in.
- (230) 18 yds. 2 ft. 10 in. \times 3 ft. 11 in.
- (231) 6 ft. $7\frac{1}{2}$ in. \times 5 ft. 9 in.
- (232) 16 ft. 8 in. \times 2 ft. $4\frac{1}{2}$ in.
- (233) 16 ft. 8 in. \times 3 ft. $1\frac{1}{4}$ in.
- (234) 2 ft. 6 in. \times 1 ft. \times 3 ft. 4 in.
- (235) 1 ft. 8 in. \times 2 ft. \times 4 ft. 6 in.
- (236) 9 yds. \times 2 ft. 8 in. \times 7 ft. 6 in.
- (237) 13 yds. \times 1 ft. 4 in. \times 3 ft. 4 in.
- (238) 11 yds. \times 2 ft. 10 in. \times 2 ft. 6 in.
- (239) 18 yds. \times 1 ft. 9 in. \times 1 ft. 9 in.
- (240) $11\frac{1}{4}$ yds. \times 2 ft. 6 in. \times 1 ft. 8 in.
- (241) $12\frac{3}{4}$ yds. \times 3 ft. \times 7 ft. 4 in.
- (242) $2\frac{1}{2}$ yds. \times $1\frac{1}{2}$ yds. \times $3\frac{1}{2}$ yds.
- (243) $1\frac{1}{4}$ yds. \times $1\frac{1}{2}$ yds. \times $2\frac{1}{2}$ yds.
- (244) $2\frac{3}{4}$ yds. \times 4 ft. \times 4 ft. 6 in.
- (245) 11 yds. \times $3\frac{1}{2}$ ft. \times 2 ft. 10 in.
- (246) 6 ft. 6 in. \times 3 ft. \times 1 ft. 6 in.
- (247) 1 ft. 6 in. \times 2 ft. 6 in. \times 4 ft. 4 in.
- (248) 2 ft. $10\frac{1}{2}$ in. \times 3 ft. 4 in. \times 5 ft. 7 in.
- (249) 3 yds. 2 ft. \times 5 ft. 6 in. \times 3 ft. 10 in.
- (250) 8 yds. 1 ft. 6 in. \times 3 ft. $9\frac{1}{2}$ in. \times 1 ft. 10 in.

(251) Sold 31 pieces, each 5 yards 1 qr. 1 n., from a piece of alpaca measuring 165 yards. What is the length of the remnant?

(252) A marine engine consumes 5 tons 11 cwt. of coal daily: how much must be put on board for a voyage of 32 days?

(253) Find the weight of 7 pieces of plate, each 3 lbs. 7 oz. 9 dwts. 11 grs.

(254) A chemist dispenses on the average 2 lbs. 11 oz. 5 drs. 2 sc. 15 grs. of drugs daily. What is the weight dispensed in 21 days?

- (255) Find the weight of 17 packages, each 2 cwt. 3 qrs. 13 lbs. 8 oz.
- (256) How far would a person travel in 13 days if he travels 19 m. 3 fur. 114 yds. in a day ?
- (257) Find the area of 29 plots of land, each 1 ac. 1 r. 13 p. 4 yds.
- (258) What quantity of wheat may be thrashed from 15 stacks if each averages 3 qrs. 3 bus. 1 pk. ?
- (259) Multiply 5 barrels 13 gallons 1 pt. by 43.
- (260) If a man excavates 9 cub. ft. 417 in. in an hour, what quantity would 13 men excavate in the same time ?
- (261) Twenty-five persons have an average age of 31 years 131 days : what is the sum of their ages ?
- (262) Find the whole weight of 33 loads of lime, each 18 cwt. 3 qrs. 12 lbs.
- (263) How many times is 9 times 3 lbs. 6 oz. Troy contained in 630 lbs. ?
- (264) By how much is 17 times $11\frac{1}{2}$ poles greater than 13 times $23\frac{1}{2}$ yards ?
- (265) How many half pints are there in 53 gallons 1 qt. 1 pt. ?
- (266) Multiply 3 times 1 yr. 12 days 11 hrs. 30 min. by 64.
- (267) How many cwt., &c. are equivalent to 15 times 107 lbs. 5 oz. 5 dwts. 5 grs. Troy ?
- (268) By how much does 12 times 8 yrs. 121 dys. 11 hrs. differ from 19 times the same ?
- (269) Add together 1 cwt. 1 qr., 3 cwts. 27 lbs., and 4 cwts. 1 qr. 18 lbs., and multiply the result by 7.
- (270) How many sq. ft. of wood are there in a plank 15 ft. 6 in. by 2 ft. 7 in. ?
- (271) Find the cost of 12 loads of coal, each 15 cwt. 3 qrs., at 7*d.* per cwt.
- (272) How many days are there in 63 times 11 hours 30 min. ?
- (273) How many acres, &c. could be reaped in a day by 16 men if one man can reap 2 ac. 3 r. 12 poles in that time ?
- (274) Find the total weight of 109 packages of tea, each half a cwt. and 12 lbs.

COMPOUND MULTIPLICATION (WEIGHTS AND MEASURES). 141

(275) A train travelling 45 miles an hour continues its journey for $2\frac{1}{2}$ hours, stopping twice for 7 min. 30 sec. each time in the course of the journey. What distance is traversed?

(276) A train leaving London at 8.5 a.m. arrives at York at 2.45 p.m., travelling on the average half a mile per minute. What is the distance from London to York?

(277) A fortified town of 80,000 inhabitants is victualled for a year, allowing each person 3 lbs. 7 oz. of solid food per day. What weight of provisions must be stored up?

(278) A watch gains 13 sec. each hour: what will it gain in a fortnight?

(279) A cart wheel 13 ft. 9 in. round makes 2000 revolutions in an hour. What distance does the cart go in an hour?

(280) Multiply the sum of 11 ft. 6 in., 5 ft. 9 in., 3 ft. 7 in., and 8 ft. 4 in. by 14.

(281) What wall surface will a-roll of paper 12 yards long by 21 in. broad cover?

(282) Find the solid content of a block 2 ft. 9 in. long, 3 ft. 6 in. broad and 2 ft. 8 in. thick.

(283) A person walks $3\frac{1}{4}$ miles to work each week day: how far does he travel in a year (52 weeks)?

(284) Find the solid content of a beam 19 yards long and 12 inches square.

(285) Find the total weight of 163 bags of letters, each weighing 13 lbs. 5 oz.

(286) What is the length of 32 rails, each 18 ft. $6\frac{1}{2}$ in. long?

(287) Multiply $3^{\circ} 15' 14''$ by 35.

(288) How many feet of surface has a floor measuring 40 ft. by 18 ft. 9 in.?

(289) What length of desks will be required to accommodate 325 scholars, allowing 2 ft. 4 in. to each?

(290) What is the weight of 140 sacks of potatoes, each 107 lbs.?

(291) From 4 years 113 days 1 h. 20 min. take 2 years 119 days 1 h. 35 min. and multiply the remainder by 10.

(292) Find the sum of 14 ac. 3 r. 12 p. \times 36, and 5 p. 3 yds. \times 37.

(293) What weight of water will a tank 30 ft. long 20 ft. broad and 10 ft. deep contain, reckoning 62 lbs. 8 oz. to the cubic foot?

(294) What weight of water does the Suez Canal contain if it be 100 miles long with an average width of 100 ft. and a depth of 25 ft.?

(295) If 2 gallons 1 quart 1 pint of water be allowed daily to each of 290 persons on board a ship, what will be the supply required for 6 weeks?

(296) What weight divided by 73 will give 2 cwt. 3 qrs. 5 lbs.?

(297) How many sq. ft. of surface have the walls of a room 14 ft. long, 11 ft. 6 in. broad, and 9 ft. 3 in. high?

(298) The walls of a room 15 ft. long by 14 ft. 6 in. broad and 8 ft. 6 in. high are to be painted; a window 5 ft. 6 in. by 4 ft. and a fireplace 3 ft. 6 in. by 4 ft. being deducted. How many sq. yds. of surface remain to be painted?

(299) Find the value of 7 times the sum of 3 lbs. 6 oz. 5 dwts + 2 oz. 7 dwts.

(300) How many quarters of barley are there in 117 sacks, each 3 bushels 1 pk.?

COMPOUND DIVISION

(WEIGHTS AND MEASURES).

- | | | |
|------|---------------------------------------|------|
| (1) | 112 tons 13 cwt. 3 qrs. 12 lbs. 8 oz. | ÷ 2 |
| (2) | ” ” ” | ÷ 3 |
| (3) | ” ” ” | ÷ 4 |
| (4) | ” ” ” | ÷ 5 |
| (5) | ” ” ” | ÷ 6 |
| (6) | ” ” ” | ÷ 7 |
| (7) | ” ” ” | ÷ 8 |
| (8) | ” ” ” | ÷ 9 |
| (9) | ” ” ” | ÷ 10 |
| (10) | ” ” ” | ÷ 11 |
| (11) | ” ” ” | ÷ 12 |
| (12) | 15 lbs. 1 oz. 13 dwts. 18 grs. | ÷ 2 |
| (13) | ” ” | ÷ 3 |
| (14) | ” ” | ÷ 4 |
| (15) | ” ” | ÷ 5 |
| (16) | ” ” | ÷ 6 |
| (17) | ” ” | ÷ 7 |
| (18) | ” ” | ÷ 8 |
| (19) | ” ” | ÷ 9 |
| (20) | ” ” | ÷ 10 |
| (21) | ” ” | ÷ 11 |
| (22) | ” ” | ÷ 12 |
| (23) | 103 lbs. 6 oz. 3 drs. 2 sc. 15 grs. | ÷ 2 |
| (24) | ” ” | ÷ 3 |
| (25) | ” ” | ÷ 4 |
| (26) | ” ” | ÷ 5 |
| (27) | ” ” | ÷ 6 |
| (28) | ” ” | ÷ 7 |

EXAMPLES IN ARITHMETIC.

- (29) 103 lbs. 6 oz. 3 drs. 2 sc. 15 grs. \div 8
 (30) " " " " \div 9
 (31) " " " " \div 10
 (32) " " " " \div 11
 (33) " " " " \div 12
 (34) 1017 m. 3 fur. 36 po. 3 yds. 2 ft. 6 in. \div 2
 (35) " " " " \div 3
 (36) " " " " \div 4
 (37) " " " " \div 5
 (38) " " " " \div 6
 (39) " " " " \div 7
 (40) " " " " \div 8
 (41) " " " " \div 9
 (42) " " " " \div 10
 (43) " " " " \div 11
 (44) " " " " \div 12
 (45) 75 ac. 3 r. 31 po. 19 yds. 6 ft. 11 in. \div 2
 (46) " " " " \div 3
 (47) " " " " \div 4
 (48) " " " " \div 5
 (49) " " " " \div 6
 (50) " " " " \div 7
 (51) " " " " \div 8
 (52) " " " " \div 9
 (53) " " " " \div 10
 (54) " " " " \div 11
 (55) " " " " \div 12
 (56) 306 yrs. 193 dys. 18 hrs. 3 sec. \div 2
 (57) " " " " \div 3
 (58) " " " " \div 4
 (59) " " " " \div 5
 (60) " " " " \div 6
 (61) " " " " \div 7
 (62) " " " " \div 8
 (63) " " " " \div 9
 (64) " " " " \div 10
 (65) " " " " \div 11
 (66) " " " " \div 12
 (67) 37 lds. 3 qrs. 3 bus. 3 pks. \div 2

- (68) 37 lbs. 3 qrs. 3 bus. 3 pks. $\div 3$
 (69) " " $\div 4$
 (70) " " $\div 5$
 (71) " " $\div 6$
 (72) " " $\div 7$
 (73) " " $\div 8$
 (74) " " $\div 9$
 (75) " " $\div 10$
 (76) " " $\div 11$
 (77) " " $\div 12$
 (78) 310 gals. 2 qts. 1 pint $\div 2$
 (79) " " $\div 3$
 (80) " " $\div 4$
 (81) " " $\div 5$
 (82) " " $\div 6$
 (83) " " $\div 7$
 (84) " " $\div 8$
 (85) " " $\div 9$
 (86) " " $\div 10$
 (87) " " $\div 11$
 (88) " " $\div 12$
 (89) 512 cub. yds. 21 ft. 119 in. $\div 2$
 (90) " " $\div 3$
 (91) " " $\div 4$
 (92) " " $\div 5$
 (93) " " $\div 6$
 (94) " " $\div 7$
 (95) " " $\div 8$
 (96) " " $\div 9$
 (97) " " $\div 10$
 (98) " " $\div 11$
 (99) " " $\div 12$
 (100) 213 yds. 3 qrs. 3 nls. 1 in. $\div 2$
 (101) " " $\div 3$
 (102) " " $\div 4$
 (103) " " $\div 5$
 (104) " " $\div 6$
 (105) " " $\div 7$
 (106) " " $\div 8$

- (107) 213 yds. 3 qrs. 3 nls. 1 in. \div 9
 (108) " " \div 10
 (109) " " \div 11
 (110) " " \div 12
 (111) 6 cwt. 3 qrs. 11 lbs. 8 oz. \div 9
 (112) " " \div 7
 (113) " " \div 8
 (114) 111 yds. 2 ft. 6 in. \div 6
 (115) " " \div 7
 (116) " " \div 8
 (117) 31 ac. 3 r. 37 po. 14 yds. \div 5
 (118) " " \div 9
 (119) " " \div 7
 (120) " " \div 6
 (121) 30 yds. 1 ft. 9 in. \div 15
 (122) " " \div 22
 (123) " " \div 25
 (124) " " \div 36
 (125) " " \div 108
 (126) 117 tons 3 qrs. 15 lbs. \div 54
 (127) " " \div 56
 (128) " " \div 72
 (129) " " \div 32
 (130) " " \div 100
 (131) 2900 ac. 1 r. 440 yds. \div 132
 (132) " " \div 96
 (133) " " \div 81
 (134) " " \div 35
 (135) " " \div 64
 (136) 319 cub. yds. 11 ft. 1032 in. \div 63
 (137) " " \div 105
 (138) " " \div 512
 (139) " " \div 162
 (140) " " \div 75
 (141) 2907 yds. 3 qrs. 1 nl. 1 in. \div 36
 (142) " " \div 121
 (143) " " \div 144
 (144) " " \div 27
 (145) " " \div 150

(146)	1112 qrs. 4 bus. 3 pks. 1 gal.	÷ 168
(147)	” ” ” ”	÷ 270
(148)	” ” ” ”	÷ 343
(149)	” ” ” ”	÷ 60
(150)	” ” ” ”	÷ 99
(151)	350 tons 9 cwt. 1 qr. 15 lbs.	÷ 19
(152)	” ” ” ”	÷ 51
(153)	” ” ” ”	÷ 62
(154)	” ” ” ”	÷ 29
(155)	” ” ” ”	÷ 83
(156)	374 lds. 3 qrs. 3 bus. 2 pks.	÷ 13
(157)	” ” ” ”	÷ 117
(158)	” ” ” ”	÷ 58
(159)	” ” ” ”	÷ 141
(160)	” ” ” ”	÷ 143
(161)	1877 yrs. 113 dys. 5 hrs.	÷ 185
(162)	” ” ” ”	÷ 199
(163)	” ” ” ”	÷ 210
(164)	” ” ” ”	÷ 558
(165)	” ” ” ”	÷ 634
(166)	1121 lbs. 3 oz. 8 dwts. 12 grs.	÷ 925
(167)	” ” ” ”	÷ 704
(168)	” ” ” ”	÷ 111
(169)	” ” ” ”	÷ 300
(170)	” ” ” ”	÷ 569
(171)	9057 cub. yds. 20 ft. 310 in.	÷ 735
(172)	” ” ” ”	÷ 868
(173)	” ” ” ”	÷ 221
(174)	” ” ” ”	÷ 322
(175)	” ” ” ”	÷ 804
(176)	3009 ac. 2 r. 11 po. 15 yds.	÷ 691
(177)	” ” ” ”	÷ 715
(178)	” ” ” ”	÷ 551
(179)	” ” ” ”	÷ 998
(180)	” ” ” ”	÷ 999
(181)	39061 tons 11 cwt. 1 qr. 15 lbs. 8 oz. 13 drs.	÷ 5103
(182)	” ” ” ” ” ”	÷ 7296
(183)	” ” ” ” ” ”	÷ 8435
(184)	171 lbs. 8 oz. 13 dwts. 9 grs.	÷ 9926

(185)	171 lbs. 8 oz. 13 dwts. 9 grs. ÷ 803	
(186)	116071 ac. 3 r. 30 po. 14 yds. 2 ft. 120 in. ÷ 158	
(187)	" " " " ÷ 9684	
(188)	" " " " ÷ 310	
(189)	92091 cub. yds. 3 ft. 1231 in. ÷ 948	
(190)	" " " " ÷ 872	
(191)	7021 m. 3 fur. 37 po. 4 yds. 2 ft. 7 in. ÷ 9136	
(192)	" " " " ÷ 7938	
(193)	403 yrs. 196 dys. 11 hrs. 19 min. 19 sec. ÷ 6606	
(194)	" " " " ÷ 915	
(195)	55095 lds. 3 qrs. 3 bus. 2 pks. ÷ 5585	
(196)	" " " " ÷ 323	
(197)	47239 yds. 2 qrs. 0 n. 1½ in. ÷ 2219	
(198)	" " " " ÷ 5037	
(199)	503 lbs. 3 oz. 3 dr. 2 sc. 11 grs. ÷ 631	
(200)	" " " " ÷ 2947	

(201) What is the length of a chain three-fourths of which measures 13 yds. 9 in. ?

(202) How many times may 484 sq. yards be subtracted from 5½ acres ?

(203) If the length of desks in a school for 480 pupils measures 373 yards 1 ft. : what length is allowed for each pupil ?

(204) How many loads of coal, each 14 cwt. 3 qrs. 12 lbs., are contained in 5 trucks, each weighing 10 tons 8 cwt. ?

(205) How many pieces of paper, each 12 yards long by 21 in. wide, will be required for the walls of a room 5 yds. long by 14 ft. 9 in. broad and 9 ft. high ?

(206) How many times is 9 bus. 3 pks. 1 gall. contained in 22 qrs. 1 bus. 3 pks. ?

(207) How many posts placed 6 ft. apart will support a straight fence a furlong long ?

(208) Divide 30 tons 13 cwt. 2 qrs. 3 lbs. by 18.

(209) Add the ninth of 12 cwt. to the seventh part of 5 qrs.

(210) A's farm is one-eleventh the size of B's which measures 1000 ac. 1 r. 10 p. : what is the extent of A's ?

(211) From the third part of four times 5 lbs. 11 oz. 9 dwts. take four times 3791 grains.

(212) How many times 3 bushels 3 pks. is 10 loads 4 qrs. 6 bus. 3 pks. ?

(213) Seven horses consume 3 qrs. 2 pks. of oats in a certain time : what quantity does each horse eat ?

(214) Find the average age of a class of boys whose several ages are 11 yrs. 2 m., 15 yrs. 7 m., 12 yrs. 3 m., 10 yrs. 11 m., 11 yrs. 10 m., 9 yrs. 8 m., 13 yrs. 6 m., 13 yrs. 4 m., 14 yrs. 9 m., and 12 yrs. 10 m.

(215) What is the cost of the fourth part of 11 cwt. 3 qrs. of rice at $2\frac{1}{2}d.$ per lb. ?

(216) If 1563 tons 5 cwt. 1 qr. 24 lbs. of merchandise be carried yearly by a company, what is the average weight per week ?

(217) Divide the sum of 2 m. 1 fur. 30 yds. + 5 m. 1 fur. 40 yds. + 2 m. 5 fur. 200 yards + 38 fur. 191 yds. by 76.

(218) A piece of silver plate weighing 3 lbs. $6\frac{1}{2}$ oz. Troy is sold for £15. 18. 9: what is the price charged per oz. ?

(219) In how many days can 303 ac. 3 r. be ploughed at the rate of 25 ac. 1 r. 10 p. each day ?

(220) If 19 hams weigh 3 cwt. 1 qr. $6\frac{1}{2}$ lbs., what is the average weight of each ?

(221) If 29 qrs. 5 bus. $1\frac{1}{2}$ pks. of seed be sown on 211 acres of land, how much is that per acre ?

(222) From 11 ac. 3 r. 4 p. take 5 ac. 3 r. 14 p. and find the fifth part of the remainder.

(223) How many sleepers placed 2 ft. 6 in. apart would be required for a double line of rails 13 miles long ?

(224) A piece of land measuring 46 ac. 1 r. 25 p. is divided into 27 equal allotments for gardens. What is the size of each ?

(225) How many yards of carpet, 32 inches wide, will be required for a room 15 ft. long by 13 ft. 4 in. wide ?

(226) How many boards 12 ft. 6 in. long by 9 in. wide would be required for a room $11\frac{1}{4}$ ft. by 10 ft. ?

- (227) Divide 113 yds. by 36.
- (228) Find the value of five times the 40th part of 31 acres divided by four.
- (229) From the fourteenth part of 11 cwt. 3 qrs. take 1 qr. $4\frac{1}{2}$ lbs.
- (230) If 2 tons 6 cwt. 3 qrs. 14 lbs. of bread be distributed amongst 1000 persons, what is each one's share?
- (231) How many dress pieces, each $14\frac{3}{4}$ yards, may be cut from a piece measuring 354 yards long?
- (232) Find the ninth part of 17 ac. 1 r. 30 p.
- (233) What weight is the seventh part of 8 hhds. of sugar, each 5 $\frac{1}{2}$ cwt. 27 lbs.?
- (234) How many times does a wheel 15 ft. 6 in. in circumference revolve in traversing 1 m. 1340 yards?
- (235) Find the 16th part of 17 loads 4 qrs. 1 bus.
- (236) How many times is a chain of 66 ft. contained in a mile and a half?
- (237) What cash must be given with 23 yards of cloth at 11s. 8d. to pay for $13\frac{1}{2}$ dozens of wine at £1. 18. 6 per dozen?
- (238) How many times is 560 sq. in. contained in $1\frac{3}{4}$ ac.?
- (239) How many ropes, each 24 yds. 1 ft. 6 in., will reach to a depth of 294 fathoms?
- (240) What is the length of a room whose breadth is 15 ft. 6 in. and area 294 sq. ft. 72 in.?
- (241) Find the difference of the fifth part of 103 cwt. 0 qr. 4 lbs. and the seventh part of 30 tons 11 cwt.
- (242) If I gain £3. 17. on 3 cwt. what do I gain per lb.?
- (243) If I gain three half-pence per lb. by selling goods at £4. 7. 6 for 1 cwt. 1 qr., at what price per cwt. should they be sold to gain 4d. per lb.?
- (244) How many times is 9 ft. $7\frac{1}{2}$ in. contained in 320 yds. 2 ft. 6 in.?

(245) Find the area of a field in the form of a rectangle 1769 links long by 1200 links broad, and divide the result by 100.

(246) A gentleman wishing to dispose of part of an estate of 1000 acres reserves one-eighth of the whole for himself and sells the rest in 160 lots of equal size for building purposes : what is the area of each lot ?

(247) From the half of 196 cub. ft. take 1 cub. yd. 12 ft. and divide the remainder into twelve equal parts.

(248) A silkworm produces 28 Troy grains weight of silk : how many must be kept to produce a cwt. ?

(249) How many panes of glass each 15 inches by 12 in. would be required for 23 windows, each 5 ft. by 4 ft. ?

(250) Find the sum of 11 lbs. 5 oz., 16 lbs. 8 oz., 1 cwt. 2 lbs., 11 qrs. $3\frac{1}{2}$ lbs., $1\frac{1}{4}$ cwt. and $2\frac{1}{2}$ oz., and divide the result by 8.

GREATEST COMMON MEASURE.

Find the G. C. M. of :—

- | | | | |
|------|----------------|------|-------------------|
| (1) | 18 and 24 | (26) | 119 and 437 |
| (2) | 180 and 2400 | (27) | 4807 and 1309 |
| (3) | 791 and 1017 | (28) | 595 and 2185 |
| (4) | 836 and 926 | (29) | 12019 and 44137 |
| (5) | 512 and 6400 | (30) | 6307 and 23161 |
| (6) | 279 and 217 | (31) | 1104 and 10020 |
| (7) | 440 and 1269 | (32) | 88 and 1008 |
| (8) | 6993 and 8991 | (33) | 3212 and 9052 |
| (9) | 999 and 37 | (34) | 313441 and 111221 |
| (10) | 3717 and 2065 | (35) | 1067 and 3007 |
| (11) | 150 and 920 | (36) | 583 and 2907 |
| (12) | 634 and 3487 | (37) | 1448 and 7698 |
| (13) | 992 and 445 | (38) | 321 and 1177 |
| (14) | 9021 and 407 | (39) | 1917 and 1065 |
| (15) | 365 and 73 | (40) | 3835 and 6939 |
| (16) | 6307 and 10812 | (41) | 8910 and 4950 |
| (17) | 144 and 726 | (42) | 651 and 1023 |
| (18) | 413 and 531 | (43) | 7350 and 11550 |
| (19) | 1775 and 75 | (44) | 484 and 308 |
| (20) | 5472 and 4256 | (45) | 899 and 961 |
| (21) | 6327 and 7733 | (46) | 5515 and 12133 |
| (22) | 2517 and 3356 | (47) | 5423 and 7337 |
| (23) | 2023 and 7429 | (48) | 15453 and 20907 |
| (24) | 2261 and 8303 | (49) | 357 and 459 |
| (25) | 2737 and 10051 | (50) | 77143 and 259481 |

LEAST COMMON MULTIPLE.

Find the L. C. M. of:—

- | | |
|----------------------|--------------------------|
| (1) 4, 6 | (26) 70, 23, 36, 8 |
| (2) 14, 16 | (27) 15, 19, 60, 57 |
| (3) 17, 51 | (28) 14, 21, 84, 72 |
| (4) 56, 84 | (29) 3, 9, 6, 8, 14, 5 |
| (5) 4, 5, 6 | (30) 5, 9, 11, 7, 21, 3 |
| (6) 7, 14, 21 | (31) 8, 6, 15, 50 |
| (7) 3, 6, 15 | (32) 32, 3, 8, 6, 4 |
| (8) 4, 7, 8 | (33) 76, 25, 35, 70 |
| (9) 3, 5, 7 | (34) 13, 38, 39, 19 |
| (10) 7, 63, 9 | (35) 50, 40, 30, 12 |
| (11) 8, 16, 14 | (36) 62, 14, 31, 81 |
| (12) 16, 18, 32 | (37) 81, 5, 27, 25 |
| (13) 17, 51, 153 | (38) 32, 34, 36, 40, 42 |
| (14) 12, 15, 25 | (39) 12, 15, 18, 21 |
| (15) 16, 20, 24 | (40) 12, 10, 8, 80, 9 |
| (16) 11, 17, 34 | (41) 45, 6, 18, 90 |
| (17) 8, 12, 10, 6 | (42) 3, 6, 9, 12, 15 |
| (18) 113, 4, 452 | (43) 2, 4, 6, 8, 10, 12 |
| (19) 59, 9, 177 | (44) 14, 16, 18, 20, 22 |
| (20) 4, 6, 8, 10 | (45) 8, 16, 24, 15, 30 |
| (21) 7, 21, 63, 105 | (46) 99, 3, 11, 5, 33 |
| (22) 11, 8, 6, 19 | (47) 999, 27, 37 |
| (23) 5, 310, 62, 40 | (48) 15, 65, 75, 85 |
| (24) 17, 39, 52, 68 | (49) 49, 21, 5, 8, 6 |
| (25) 44, 121, 19, 76 | (50) 13, 17, 83, 51, 249 |

VULGAR FRACTIONS.

Ex. I.

(1)	Express	4	as a fraction with denominator	2
(2)	”	5	”	3
(3)	”	7	”	5
(4)	”	3	”	16
(5)	”	14	”	7
(6)	”	17	”	9
(7)	”	13	”	15
(8)	”	23	”	4
(9)	”	9	”	8
(10)	”	15	”	3
(11)	”	26	”	10
(12)	”	117	”	9
(13)	”	38	”	7
(14)	”	51	”	11
(15)	”	73	”	18
(16)	”	86	”	63
(17)	”	96	”	71
(18)	”	105	”	25
(19)	”	71	”	24
(20)	”	58	”	19

Ex. II.

Reduce to improper fractions :—

- | | | | |
|------|-------------------|------|-----------------------|
| (1) | $1\frac{1}{2}$ | (26) | $170\frac{4}{15}$ |
| (2) | $1\frac{3}{4}$ | (27) | $96\frac{11}{21}$ |
| (3) | $2\frac{1}{2}$ | (28) | $806\frac{806}{807}$ |
| (4) | $7\frac{1}{4}$ | (29) | $191\frac{1}{71}$ |
| (5) | $8\frac{3}{4}$ | (30) | $38\frac{30}{40}$ |
| (6) | $9\frac{1}{5}$ | (31) | $102\frac{101}{102}$ |
| (7) | $3\frac{3}{7}$ | (32) | $96\frac{37}{137}$ |
| (8) | $9\frac{4}{5}$ | (33) | $51\frac{17}{38}$ |
| (9) | $11\frac{2}{9}$ | (34) | $638\frac{2}{11}$ |
| (10) | $5\frac{3}{8}$ | (35) | $901\frac{57}{109}$ |
| (11) | $9\frac{2}{9}$ | (36) | $440\frac{373}{440}$ |
| (12) | $15\frac{1}{15}$ | (37) | $138\frac{10}{40}$ |
| (13) | $105\frac{7}{8}$ | (38) | $70\frac{2}{28}$ |
| (14) | $12\frac{11}{13}$ | (39) | $96\frac{15}{16}$ |
| (15) | $78\frac{5}{16}$ | (40) | $701\frac{301}{1076}$ |
| (16) | $901\frac{7}{13}$ | (41) | $137\frac{210}{212}$ |
| (17) | $112\frac{5}{6}$ | (42) | $699\frac{50}{60}$ |
| (18) | $90\frac{10}{13}$ | (43) | $13\frac{75}{125}$ |
| (19) | $68\frac{2}{17}$ | (44) | $116\frac{22}{133}$ |
| (20) | $5\frac{7}{3}$ | (45) | $79\frac{69}{182}$ |
| (21) | $73\frac{1}{6}$ | (46) | $435\frac{26}{117}$ |
| (22) | $92\frac{11}{23}$ | (47) | $9002\frac{44}{110}$ |
| (23) | $16\frac{1}{4}$ | (48) | $736\frac{88}{89}$ |
| (24) | $15\frac{0}{10}$ | (49) | $197\frac{2}{17}$ |
| (25) | $11\frac{11}{10}$ | (50) | $3016\frac{172}{112}$ |

Ex. III.

Reduce to whole or mixed numbers:—

- | | | | |
|------|-------------------------------------|------|---|
| (1) | $\frac{12}{3}, \frac{110}{11}$ | (26) | $\frac{441}{63}, \frac{713}{84}$ |
| (2) | $\frac{19}{3}, \frac{56}{9}$ | (27) | $\frac{901}{111}, \frac{926}{58}$ |
| (3) | $\frac{20}{7}, \frac{83}{5}$ | (28) | $\frac{999}{37}, \frac{302}{29}$ |
| (4) | $\frac{19}{6}, \frac{105}{7}$ | (29) | $\frac{6271}{31}, \frac{5131}{731}$ |
| (5) | $\frac{11}{2}, \frac{191}{17}$ | (30) | $\frac{4469}{78}, \frac{7120}{35}$ |
| (6) | $\frac{15}{7}, \frac{14}{3}$ | (31) | $\frac{3912}{112}, \frac{1111}{101}$ |
| (7) | $\frac{18}{5}, \frac{31}{7}$ | (32) | $\frac{87642}{993}, \frac{7319}{562}$ |
| (8) | $\frac{21}{7}, \frac{510}{17}$ | (33) | $\frac{1571}{731}, \frac{4603}{651}$ |
| (9) | $\frac{113}{9}, \frac{60}{7}$ | (34) | $\frac{6991}{101}, \frac{7203}{513}$ |
| (10) | $\frac{126}{8}, \frac{115}{19}$ | (35) | $\frac{5010}{25}, \frac{739}{125}$ |
| (11) | $\frac{145}{15}, \frac{361}{50}$ | (36) | $\frac{69213}{833}, \frac{7130}{283}$ |
| (12) | $\frac{710}{11}, \frac{173}{13}$ | (37) | $\frac{7615}{15}, \frac{17091}{37}$ |
| (13) | $\frac{99}{30}, \frac{88}{12}$ | (38) | $\frac{9603}{181}, \frac{14511}{299}$ |
| (14) | $\frac{720}{13}, \frac{901}{15}$ | (39) | $\frac{4741}{384}, \frac{10032}{713}$ |
| (15) | $\frac{75}{8}, \frac{2121}{7}$ | (40) | $\frac{5968}{219}, \frac{39021}{631}$ |
| (16) | $\frac{1196}{17}, \frac{1521}{25}$ | (41) | $\frac{7956}{73}, \frac{4021}{17}$ |
| (17) | $\frac{582}{39}, \frac{1103}{17}$ | (42) | $\frac{8484}{120}, \frac{59021}{736}$ |
| (18) | $\frac{51}{9}, \frac{281}{13}$ | (43) | $\frac{6021}{59}, \frac{27031}{119}$ |
| (19) | $\frac{283}{14}, \frac{520}{21}$ | (44) | $\frac{3716}{19}, \frac{27434}{111}$ |
| (20) | $\frac{1496}{217}, \frac{6031}{73}$ | (45) | $\frac{18647}{29}, \frac{40139}{171}$ |
| (21) | $\frac{3362}{63}, \frac{808}{102}$ | (46) | $\frac{73131}{38}, \frac{91931}{79}$ |
| (22) | $\frac{8261}{199}, \frac{731}{19}$ | (47) | $\frac{14613}{872}, \frac{31993}{1551}$ |
| (23) | $\frac{4775}{25}, \frac{1558}{93}$ | (48) | $\frac{9091}{301}, \frac{5171}{527}$ |
| (24) | $\frac{1112}{17}, \frac{501}{31}$ | (49) | $\frac{87643}{992}, \frac{8391}{736}$ |
| (25) | $\frac{602}{198}, \frac{7021}{91}$ | (50) | $\frac{52136}{4170}, \frac{170312}{1517}$ |

Ex. IV.

Reduce to their lowest terms:—

- | | |
|---|---|
| (1) $\frac{15}{35}, \frac{72}{96}$ | (26) $\frac{1395}{1488}, \frac{999}{1017}$ |
| (2) $\frac{18}{360}, \frac{125}{500}$ | (27) $\frac{7125}{17250}, \frac{8880}{14430}$ |
| (3) $\frac{12}{42}, \frac{13}{65}$ | (28) $\frac{5980}{16790}, \frac{791}{5670}$ |
| (4) $\frac{16}{90}, \frac{17}{153}$ | (29) $\frac{567}{1001}, \frac{1332}{1369}$ |
| (5) $\frac{36}{1080}, \frac{48}{1102}$ | (30) $\frac{153}{909}, \frac{9113}{9123}$ |
| (6) $\frac{37}{259}, \frac{18}{270}$ | (31) $\frac{378}{483}, \frac{3544}{3576}$ |
| (7) $\frac{14}{27}, \frac{53}{263}$ | (32) $\frac{2000}{4072}, \frac{4173}{12519}$ |
| (8) $\frac{78}{91}, \frac{84}{156}$ | (33) $\frac{9107}{11709}, \frac{103}{7519}$ |
| (9) $\frac{64}{512}, \frac{708}{1296}$ | (34) $\frac{1800}{1920}, \frac{2059}{21170}$ |
| (10) $\frac{51}{57}, \frac{111}{370}$ | (35) $\frac{1133}{1957}, \frac{2037}{2086}$ |
| (11) $\frac{77}{84}, \frac{32}{88}$ | (36) $\frac{2160}{2448}, \frac{361}{3800}$ |
| (12) $\frac{35}{56}, \frac{510}{1705}$ | (37) $\frac{591}{1576}, \frac{1775}{1925}$ |
| (13) $\frac{93}{155}, \frac{80}{95}$ | (38) $\frac{19968}{20480}, \frac{4210}{78805}$ |
| (14) $\frac{714}{918}, \frac{791}{1017}$ | (39) $\frac{803}{2310}, \frac{444}{1760}$ |
| (15) $\frac{90}{105}, \frac{7016}{15508}$ | (40) $\frac{660}{708}, \frac{924}{1008}$ |
| (16) $\frac{4484}{5605}, \frac{729}{810}$ | (41) $\frac{1452}{1848}, \frac{713}{9617}$ |
| (17) $\frac{104}{169}, \frac{763}{1414}$ | (42) $\frac{477}{756}, \frac{168}{512}$ |
| (18) $\frac{133}{181}, \frac{2021}{3035}$ | (43) $\frac{703}{4107}, \frac{4720}{9063}$ |
| (19) $\frac{99}{153}, \frac{39}{780}$ | (44) $\frac{999}{2835}, \frac{7070}{127360}$ |
| (20) $\frac{1008}{2520}, \frac{1210}{7785}$ | (45) $\frac{9664}{9696}, \frac{1026}{1071}$ |
| (21) $\frac{63}{117}, \frac{212}{265}$ | (46) $\frac{1197}{1477}, \frac{5802}{64056}$ |
| (22) $\frac{330}{570}, \frac{147}{2856}$ | (47) $\frac{140}{3948}, \frac{3322}{4200}$ |
| (23) $\frac{791}{798}, \frac{1590}{1850}$ | (48) $\frac{7171}{32118}, \frac{9477}{10559}$ |
| (24) $\frac{126}{441}, \frac{150}{225}$ | (49) $\frac{79}{4819}, \frac{8307}{72900}$ |
| (25) $\frac{1515}{1618}, \frac{3913}{7835}$ | (50) $\frac{12423}{13653}, \frac{13690}{99900}$ |

Ex. V.

Reduce to their least common denominator:—

- | | |
|---|--|
| (1) $\frac{1}{2}, \frac{1}{3}, \frac{1}{4}$ | (26) $\frac{4}{37}, \frac{15}{111}, \frac{1}{6}, \frac{221}{222}$ |
| (2) $\frac{1}{3}, \frac{1}{6}, \frac{1}{9}$ | (27) $\frac{3}{4}, \frac{7}{8}, \frac{125}{25}, \frac{11}{10}$ |
| (3) $\frac{2}{3}, \frac{3}{4}, \frac{5}{8}$ | (28) $\frac{15}{16}, \frac{17}{18}, \frac{13}{20}, \frac{11}{12}$ |
| (4) $\frac{1}{5}, \frac{3}{20}, \frac{4}{25}$ | (29) $\frac{1}{2}, \frac{7}{8}, \frac{5}{6}, \frac{7}{12}$ |
| (5) $\frac{3}{7}, \frac{3}{14}, \frac{3}{28}$ | (30) $\frac{9}{10}, \frac{11}{40}, \frac{13}{30}, \frac{61}{80}$ |
| (6) $\frac{1}{11}, \frac{2}{33}, \frac{4}{11}, \frac{7}{22}$ | (31) $\frac{17}{60}, \frac{13}{30}, \frac{3}{4}, \frac{13}{16}$ |
| (7) $\frac{1}{2}, \frac{2}{3}, \frac{3}{4}, \frac{5}{12}$ | (32) $\frac{5}{6}, \frac{7}{8}, \frac{31}{240}, \frac{69}{40}$ |
| (8) $\frac{5}{6}, \frac{4}{9}, \frac{7}{18}, \frac{11}{12}$ | (33) $\frac{3}{5}, \frac{11}{15}, \frac{21}{45}, \frac{34}{60}$ |
| (9) $\frac{2}{3}, \frac{3}{15}, \frac{9}{11}, \frac{2}{5}$ | (34) $\frac{7}{10}, \frac{11}{12}, \frac{13}{60}, \frac{5}{6}$ |
| (10) $\frac{1}{4}, \frac{3}{8}, \frac{5}{6}, \frac{7}{12}$ | (35) $\frac{1}{2}, \frac{2}{3}, \frac{3}{4}, \frac{4}{5}, \frac{5}{6}$ |
| (11) $\frac{2}{3}, \frac{4}{9}, \frac{5}{13}, \frac{61}{117}$ | (36) $\frac{19}{20}, \frac{7}{10}, \frac{131}{180}, \frac{7}{9}, \frac{1}{3}$ |
| (12) $\frac{4}{5}, \frac{5}{9}, \frac{7}{10}, \frac{7}{45}$ | (37) $\frac{16}{18}, \frac{9}{20}, \frac{9}{22}, \frac{11}{24}, \frac{10}{11}$ |
| (13) $\frac{3}{8}, \frac{11}{12}, \frac{14}{15}, \frac{17}{30}$ | (38) $\frac{15}{16}, \frac{17}{17}, \frac{17}{18}, \frac{19}{19}, \frac{19}{20}$ |
| (14) $\frac{9}{10}, \frac{11}{12}, \frac{5}{7}, \frac{5}{6}$ | (39) $\frac{2}{3}, \frac{7}{24}, \frac{9}{16}, \frac{5}{8}, \frac{39}{48}$ |
| (15) $\frac{4}{9}, \frac{7}{27}, \frac{3}{6}, \frac{8}{11}$ | (40) $\frac{13}{13}, \frac{31}{52}, \frac{3}{4}, \frac{3}{8}, \frac{59}{91}$ |
| (16) $\frac{11}{15}, \frac{5}{6}, \frac{2}{3}, \frac{9}{10}$ | (41) $\frac{12}{17}, \frac{5}{6}, \frac{31}{21}, \frac{8}{34}, \frac{3}{8}$ |
| (17) $\frac{112}{113}, \frac{2}{5}, \frac{19}{20}, \frac{3}{10}$ | (42) $\frac{4}{37}, \frac{5}{6}, \frac{13}{27}, \frac{70}{111}, \frac{886}{999}$ |
| (18) $\frac{6}{7}, \frac{7}{8}, \frac{5}{14}, \frac{11}{28}$ | (43) $\frac{11}{32}, \frac{34}{34}, \frac{11}{36}, \frac{11}{40}, \frac{11}{42}$ |
| (19) $\frac{4}{21}, \frac{5}{7}, \frac{4}{9}, \frac{1}{3}$ | (44) $\frac{4}{5}, \frac{69}{310}, \frac{11}{62}, \frac{29}{40}$ |
| (20) $\frac{3}{8}, \frac{9}{12}, \frac{9}{16}, \frac{5}{18}$ | (45) $\frac{9}{102}, \frac{6}{17}, \frac{31}{68}, \frac{29}{51}$ |
| (21) $\frac{13}{16}, \frac{13}{18}, \frac{13}{20}, \frac{13}{24}$ | (46) $\frac{41}{102}, \frac{11}{51}, \frac{16}{17}, \frac{13}{38}$ |
| (22) $\frac{5}{14}, \frac{5}{15}, \frac{5}{16}, \frac{5}{21}$ | (47) $\frac{5}{6}, \frac{7}{7}, \frac{7}{8}, \frac{9}{9}, \frac{9}{10}, \frac{11}{12}$ |
| (23) $\frac{4}{35}, \frac{5}{77}, \frac{11}{11}, \frac{2}{7}$ | (48) $\frac{9}{44}, \frac{10}{121}, \frac{132}{132}, \frac{29}{110}, \frac{68}{1100}$ |
| (24) $\frac{13}{18}, \frac{13}{20}, \frac{13}{32}, \frac{3}{8}$ | (49) $\frac{19}{32}, \frac{1}{3}, \frac{7}{8}, \frac{5}{6}, \frac{3}{4}$ |
| (25) $\frac{5}{24}, \frac{1}{18}, \frac{6}{7}, \frac{13}{14}$ | (50) $\frac{2}{5}, \frac{5}{6}, \frac{7}{11}, \frac{6}{7}, \frac{8}{21}, \frac{1}{3}$ |

Ex. VI.

Express as a simple fraction :—

- | | |
|--|--|
| (1) $\frac{1}{2}$ of $\frac{1}{4}$ | (26) $2\frac{1}{2}$ of $1\frac{1}{4}$ of $2\frac{1}{2}$ |
| (2) $\frac{1}{2}$ of $\frac{3}{4}$ | (27) $\frac{1}{2}$ of $\frac{1}{7}$ of $\frac{1}{3}$ of 1 |
| (3) $\frac{2}{3}$ of $\frac{6}{9}$ | (28) $\frac{1}{7}$ of $\frac{1}{9}$ of $\frac{1}{9}$ of 63 |
| (4) $1\frac{1}{2}$ of $\frac{3}{11}$ | (29) $6\frac{3}{4}$ of $\frac{8}{9}$ of $\frac{6}{7}$ of $\frac{5}{8}$ |
| (5) $\frac{1}{2}$ of $\frac{2}{3}$ of $\frac{1}{4}$ | (30) $1\frac{1}{2}$ of $\frac{5}{8}$ of $\frac{9}{10}$ of $3\frac{1}{2}$ |
| (6) $\frac{2}{5}$ of $\frac{3}{5}$ of $\frac{2}{5}$ | (31) $15\frac{1}{3}$ of $\frac{7}{23}$ of $\frac{5}{14}$ |
| (7) $\frac{9}{10}$ of $\frac{2}{5}$ of $\frac{6}{7}$ | (32) $1\frac{1}{4}$ of $\frac{8}{9}$ of $3\frac{1}{8}$ of $\frac{3}{8}$ |
| (8) $1\frac{1}{2}$ of $\frac{6}{7}$ of $\frac{5}{8}$ | (33) $11\frac{3}{4}$ of $2\frac{3}{4}$ of $5\frac{1}{2}$ of 7 |
| (9) $\frac{4}{7}$ of $\frac{3}{4}$ of $\frac{6}{21}$ | (34) $9\frac{1}{7}$ of $\frac{7}{32}$ of $\frac{6}{7}$ of 7 |
| (10) $\frac{6}{11}$ of $1\frac{10}{26}$ of $\frac{61}{110}$ | (35) $\frac{4}{5}$ of $\frac{3}{4}$ of $2\frac{1}{2}$ of $6\frac{1}{2}$ |
| (11) $\frac{2}{3}$ of $\frac{3}{4}$ of 4 | (36) $1\frac{3}{4}$ of $\frac{9}{10}$ of $16\frac{3}{4}$ of $\frac{1}{2}$ |
| (12) $\frac{8}{9}$ of $\frac{6}{7}$ of 5 | (37) $13\frac{1}{7}$ of $5\frac{3}{4}$ of $4\frac{1}{2}$ of $\frac{7}{29}$ |
| (13) $\frac{5}{8}$ of $\frac{3}{4}$ of $2\frac{1}{2}$ | (38) $1\frac{1}{10}$ of 11 of $\frac{5}{121}$ of 9 |
| (14) $1\frac{1}{2}$ of $4\frac{1}{2}$ | (39) $\frac{1}{7}$ of $\frac{1}{9}$ of $\frac{1}{11}$ of 63 |
| (15) $3\frac{3}{4}$ of $7\frac{1}{4}$ | (40) $4\frac{3}{5}$ of $\frac{8}{9}$ of $\frac{6}{7}$ of 4 |
| (16) $19\frac{1}{11}$ of $120\frac{1}{4}$ | (41) $1\frac{1}{3}$ of $1\frac{2}{3}$ of $\frac{6}{7}$ of $2\frac{1}{4}$ |
| (17) $2\frac{3}{4}$ of $1\frac{4}{5}$ of $\frac{7}{8}$ | (42) $25\frac{3}{4}$ of $17\frac{1}{2}$ of $\frac{2}{3}$ of $1\frac{1}{3}$ |
| (18) $\frac{1}{2}$ of $\frac{2}{3}$ of $\frac{3}{4}$ of $\frac{4}{5}$ of $\frac{5}{8}$ | (43) $15\frac{2}{11}$ of $2\frac{3}{7}$ of $\frac{1}{16}$ |
| (19) $1\frac{1}{2}$ of $1\frac{2}{3}$ of $\frac{7}{8}$ of $\frac{6}{7}$ | (44) $1\frac{1}{2}$ of $\frac{1}{2}$ of 2 of 3 |
| (20) $3\frac{3}{4}$ of $7\frac{2}{3}$ of $1\frac{1}{3}$ of $2\frac{1}{3}$ | (45) $5\frac{1}{4}$ of $1\frac{8}{9}$ of $1\frac{2}{3}$ of $\frac{1}{8}$ |
| (21) $11\frac{1}{2}$ of $5\frac{1}{4}$ of $5\frac{1}{4}$ | (46) $90\frac{1}{5}$ of $2\frac{1}{2}$ of $7\frac{1}{4}$ of $\frac{4}{5}$ |
| (22) $\frac{2}{3}$ of $\frac{2}{3}$ of $\frac{3}{4}$ of 6 | (47) $6\frac{2}{3}$ of $6\frac{1}{3}$ of $8\frac{1}{4}$ of 7 |
| (23) $1\frac{1}{3}$ of $\frac{8}{9}$ of 5 | (48) $\frac{5}{8}$ of $\frac{6}{7}$ of $3\frac{1}{2}$ of $11\frac{5}{8}$ |
| (24) $2\frac{2}{7}$ of $6\frac{1}{4}$ of $\frac{2}{3}$ of $1\frac{1}{2}$ | (49) $\frac{1}{3}$ of $\frac{1}{9}$ of $6\frac{1}{3}$ of $\frac{7}{13}$ of $30\frac{1}{3}$ |
| (25) $1\frac{1}{2}$ of $1\frac{2}{3}$ of $5\frac{1}{8}$ of $\frac{1}{3}$ | (50) $\frac{4}{7}$ of $\frac{1}{11}$ of $\frac{1}{3}$ of $\frac{1}{8}$ of 56 |

Ex. VII.

Find the value of :—

- | | |
|--|--|
| (1) $\frac{1}{2} + \frac{1}{4} + \frac{1}{6}$ | (26) $\frac{18}{15} + \frac{3}{35} + \frac{5}{75} + \frac{11}{15}$ |
| (2) $\frac{1}{3} + \frac{1}{5} + \frac{1}{9}$ | (27) $\frac{2}{3} + \frac{3}{4} + \frac{4}{5} + \frac{5}{8}$ |
| (3) $\frac{1}{7} + \frac{1}{8} + \frac{1}{21}$ | (28) $\frac{5}{8} + \frac{6}{7} + \frac{7}{5} + \frac{8}{9}$ |
| (4) $\frac{1}{4} + \frac{1}{8} + \frac{1}{16}$ | (29) $\frac{8}{9} + \frac{9}{10} + \frac{10}{11} + \frac{11}{12}$ |
| (5) $\frac{1}{3} + \frac{1}{5} + \frac{1}{15}$ | (30) $1\frac{2}{3} + 2\frac{3}{4} + 6\frac{4}{5} + 2\frac{5}{8}$ |
| (6) $\frac{1}{2} + \frac{2}{7} + \frac{3}{14}$ | (31) $1\frac{2}{7} + 3\frac{3}{4} + 2\frac{2}{3} + 1\frac{1}{4}$ |
| (7) $\frac{1}{2} + \frac{2}{3} + \frac{3}{4}$ | (32) $4\frac{3}{4} + 3\frac{3}{5} + 2\frac{2}{3} + 5\frac{1}{4}$ |
| (8) $\frac{2}{3} + \frac{7}{8} + \frac{8}{9}$ | (33) $8\frac{2}{5} + 6\frac{6}{7} + 3\frac{3}{14} + 1\frac{3}{70}$ |
| (9) $\frac{5}{8} + \frac{6}{7} + \frac{7}{12}$ | (34) $5\frac{9}{10} + 2\frac{4}{7} + 1\frac{1}{10} + \frac{11}{15}$ |
| (10) $\frac{2}{5} + \frac{4}{5} + \frac{6}{15}$ | (35) $6\frac{3}{4} + 3\frac{3}{8} + 3\frac{2}{3} + 6\frac{7}{8}$ |
| (11) $\frac{7}{10} + \frac{5}{20} + \frac{4}{5}$ | (36) $11\frac{2}{9} + 15\frac{8}{11} + 6\frac{3}{3} + 5\frac{2}{3}$ |
| (12) $\frac{3}{17} + \frac{2}{51} + \frac{9}{65}$ | (37) $17\frac{2}{17} + 6\frac{3}{11} + 18\frac{19}{55} + 11\frac{1}{7}$ |
| (13) $\frac{3}{4} + \frac{5}{12} + \frac{5}{6}$ | (38) $10\frac{3}{13} + 1\frac{9}{39} + 6\frac{2}{13} + 5\frac{5}{13}$ |
| (14) $\frac{4}{7} + \frac{7}{8} + \frac{8}{9}$ | (39) $7\frac{10}{19} + 1\frac{19}{57} + 4\frac{3}{5} + 18\frac{11}{19}$ |
| (15) $\frac{4}{7} + \frac{9}{10} + 1\frac{1}{7}$ | (40) $5\frac{1}{8} + 6\frac{1}{7} + 7\frac{3}{8} + 9\frac{11}{12}$ |
| (16) $\frac{6}{9} + \frac{7}{11} + \frac{3}{9}$ | (41) $1\frac{2}{3} + 7\frac{1}{3} + 8\frac{4}{5} + 3\frac{7}{10}$ |
| (17) $\frac{8}{11} + \frac{7}{11} + \frac{10}{11}$ | (42) $6\frac{2}{7} + 1\frac{8}{7} + \frac{11}{12}$ of $1\frac{1}{11}$ |
| (18) $1\frac{3}{4} + \frac{6}{70} + 1\frac{9}{11}$ | (43) $\frac{2}{3}$ of $\frac{3}{4} + \frac{5}{6}$ of $\frac{7}{8}$ |
| (19) $1\frac{1}{12} + \frac{5}{7} + 1\frac{9}{10}$ | (44) $2\frac{2}{3}$ of $\frac{9}{16}$ of $\frac{2}{7}$ of $\frac{1}{5} + 6\frac{2}{3}$ |
| (20) $\frac{7}{10} + \frac{1}{25} + \frac{9}{20}$ | (45) $1\frac{1}{2}$ of $5\frac{1}{3} + \frac{9}{10}$ of $1\frac{1}{3} + 5\frac{1}{4}$ |
| (21) $1\frac{1}{11} + 1\frac{5}{17} + \frac{8}{34} + \frac{9}{22}$ | (46) $6\frac{3}{4}$ of $\frac{4}{5}$ of $5 + \frac{2}{3}$ of 18 |
| (22) $1\frac{9}{20} + 1\frac{3}{16} + 1\frac{7}{51} + \frac{2}{3}$ | (47) $\frac{7}{8}$ of $5\frac{2}{3}$ of $7 + 1\frac{2}{3}$ of $\frac{9}{10}$ |
| (23) $\frac{2}{3} + \frac{2}{7} + \frac{3}{11} + 1\frac{3}{4}$ | (48) $\frac{1}{2}$ of $7 + \frac{3}{4}$ of $\frac{5}{8} + 9\frac{1}{2}$ |
| (24) $\frac{4}{5} + \frac{6}{7} + 1\frac{11}{15} + \frac{8}{9}$ | (49) $20\frac{1}{3} + 9\frac{1}{3}$ of $\frac{3}{14} + 7\frac{1}{2}$ |
| (25) $\frac{6}{7} + \frac{2}{21} + \frac{5}{7} + \frac{2}{3}$ | (50) $6\frac{2}{3}$ of $\frac{2}{3}$ of $7 + 3\frac{1}{2}$ of $\frac{4}{7}$ |

Ex. VIII.

- (1) $\frac{1}{2} - \frac{1}{3}$
 (2) $\frac{6}{7} - \frac{4}{5}$
 (3) $1\frac{2}{3} - \frac{3}{4}$
 (4) $\frac{5}{8} - \frac{5}{14}$
 (5) $\frac{7}{8} - \frac{2}{7}$
 (6) $\frac{9}{10} - \frac{4}{11}$
 (7) $\frac{7}{32} - \frac{3}{16}$
 (8) $1\frac{7}{8} - 1\frac{1}{7}$
 (9) $\frac{2}{3} - \frac{5}{103}$
 (10) $\frac{4}{5} - \frac{1}{15}$
 (11) $2\frac{1}{11} - 1\frac{1}{2}$
 (12) $8\frac{2}{3} - 1\frac{1}{18}$
 (13) $5\frac{2}{7} - 3\frac{8}{9}$
 (14) $1\frac{7}{21} - \frac{4}{7}$
 (15) $3\frac{5}{8} - 2\frac{3}{4}$
 (16) $14\frac{1}{5} - 2\frac{1}{7}$
 (17) $11\frac{3}{8} - 5\frac{1}{2}$
 (18) $6\frac{2}{5} - 5\frac{1}{18}$
 (19) $1\frac{5}{8} - \frac{1}{2}$
 (20) $12\frac{11}{19} - 10\frac{4}{57}$
 (21) $116\frac{2}{3} - 15\frac{11}{30}$
 (22) $7\frac{9}{10} - 2\frac{2}{3}$
 (23) $6\frac{3}{4} - 4\frac{1}{5}1\frac{1}{2}$
 (24) $8 - 6\frac{4}{17}$
 (25) $5\frac{3}{31} - 4\frac{11}{124}$
 (26) $\frac{1}{2} + \frac{2}{3} - \frac{2}{5}$
 (27) $\frac{2}{5} + \frac{7}{8} - \frac{6}{7}$
 (28) $1\frac{2}{11} + 3\frac{1}{11} - 4\frac{1}{20}$
 (29) $\frac{1}{2} + \frac{2}{3} + \frac{3}{4} - \frac{5}{6}$
 (30) $7\frac{1}{2} + \frac{2}{3} - 5\frac{4}{5}$
 (31) $6\frac{3}{4} + \frac{7}{8} - 5\frac{1}{17}$
 (32) $1\frac{1}{2} - \frac{5}{9}$ of $\frac{1}{2}$
 (33) $\frac{2}{7}$ of $\frac{3}{14} - \frac{3}{19}$
 (34) $\frac{4}{5}$ of $\frac{5}{9} - \frac{11}{38}$
 (35) $3\frac{2}{3}$ of $1\frac{1}{11} - 3\frac{1}{4}$
 (36) $8\frac{1}{9}$ of $2\frac{1}{2} - 4\frac{1}{3}$ of $1\frac{1}{4}$
 (37) $\frac{1}{7}$ of $1\frac{4}{5} - \frac{1}{3}$ of $\frac{1}{4}$
 (38) $2\frac{2}{9}$ of $\frac{7}{10} - \frac{5}{6}$ of $\frac{3}{20}$
 (39) $\frac{1}{2} + \frac{1}{3}$ of $\frac{1}{4} - \frac{1}{10}$
 (40) $2\frac{1}{2} - 1\frac{3}{4}$ of $1\frac{1}{2}$
 (41) $1\frac{1}{4}$ of $\frac{7}{10}$ of $\frac{2}{3} - \frac{1}{2}$ of $\frac{1}{3}$
 (42) $5\frac{1}{4} + 2\frac{1}{8} - 9\frac{1}{3}$ of $1\frac{3}{4}$
 (43) $6\frac{2}{7}$ of $\frac{5}{11} - 1\frac{5}{8}$ of $\frac{2}{10}$
 (44) $\frac{2}{5}$ of $\frac{1}{7} + \frac{1}{2} - \frac{3}{7}$
 (45) $1\frac{2}{3}$ of $1\frac{1}{2}$ of $\frac{7}{8} - \frac{2}{5}$ of $\frac{1}{9}$
 (46) $7\frac{1}{8}$ of $\frac{1}{9} - \frac{6}{7}$ of $2\frac{1}{2}$
 (47) $9\frac{1}{10}$ of $\frac{1}{13} - \frac{1}{4}$ of $\frac{4}{5}$ of 6
 (48) $3\frac{3}{4} + 1\frac{2}{7} + \frac{6}{7}$ of $2\frac{1}{3} - 5$
 (49) $1 - \frac{1}{2}$ of $\frac{3}{4}$ of $\frac{5}{8}$ of $\frac{7}{8}$
 (50) $1\frac{3}{4} + \frac{7}{8}$ of $\frac{5}{21} - \frac{6}{7}$ of $\frac{3}{11}$

Ex. IX.

- (1) $\frac{4}{5} \times \frac{5}{8}$
 (2) $\frac{3}{4} \times \frac{7}{8}$
 (3) $\frac{9}{11} \times \frac{13}{25}$
 (4) $\frac{1}{2} \times \frac{2}{3} \times \frac{3}{4}$
 (5) $\frac{7}{8} \times \frac{8}{9} \times \frac{9}{10}$
 (6) $\frac{5}{6} \times \frac{11}{2} \times \frac{17}{2}$
 (7) $\frac{7}{9} \times \frac{8}{15} \times \frac{10}{45}$
 (8) $\frac{11}{2} \times \frac{9}{10} \times \frac{1}{5}$
 (9) $1\frac{1}{2} \times \frac{2}{3} \times \frac{6}{7}$
 (10) $1\frac{5}{6} \times 2\frac{7}{8} \times 3\frac{3}{4}$
 (11) $2\frac{3}{4} \times 5\frac{1}{4} \times 3\frac{2}{3} \times \frac{1}{2}$
 (12) $6\frac{4}{5} \times \frac{20}{170} \times \frac{15}{11} \times 7\frac{2}{3}$
 (13) $\frac{1}{3} \times \frac{2}{5} \times \frac{5}{7} \times \frac{8}{9} \times 7$
 (14) $1\frac{1}{2} \times 1\frac{1}{2} \times 1\frac{1}{4} \times 1$
 (15) $3 \times 3\frac{1}{4} \times 3\frac{1}{2} \times \frac{8}{13}$
 (16) $\frac{1}{4} \times \frac{1}{5} \times \frac{6}{7} \times \frac{9}{10}$
 (17) $\frac{11}{2} \times \frac{5}{8} \times \frac{6}{11} \times \frac{4}{7}$
 (18) $9\frac{1}{2} \times 1\frac{1}{4} \times \frac{1}{5}$
 (19) $2\frac{1}{2} \times 3\frac{1}{4} \times 6\frac{7}{8} \times \frac{4}{5}$
 (20) $15\frac{1}{3} \times \frac{17}{18} \times \frac{9}{23} \times \frac{5}{34}$
 (21) $1\frac{2}{3} \times \frac{10}{20} \times \frac{1}{7} \times \frac{17}{19}$
 (22) $\frac{1}{2} \times \frac{3}{4} \times \frac{5}{6} \times \frac{8}{9} \times \frac{11}{2}$
 (23) $6\frac{2}{3} \times 73\frac{1}{3} \times \frac{20}{1} \times 5$
 (24) $11\frac{2}{3} \times \frac{1}{7} \times 9\frac{1}{10} \times \frac{1}{2}$
 (25) $5\frac{1}{7} \times 1\frac{8}{9} \times \frac{1}{7} \times \frac{5}{7}$
 (26) $1\frac{2}{3}$ of $\frac{7}{8}$ of $\frac{1}{5} \times 6\frac{1}{2} \times \frac{8}{9}$
 (27) $1\frac{1}{4}$ of $1\frac{1}{2} \times \frac{2}{3}$ of 2
 (28) $\frac{1}{2}$ of $\frac{3}{4} \times \frac{6}{7}$ of $\frac{4}{5}$
 (29) $10 \times \frac{9}{10} \times \frac{5}{9}$ of 8
 (30) $31\frac{1}{2}$ of $\frac{5}{8} \times 51 \times \frac{1}{9}$
 (31) $\frac{7}{8} + (\frac{2}{3}$ of $\frac{3}{4} \times \frac{6}{7}$)
 (32) $(1\frac{1}{2} \times \frac{2}{3}) + (\frac{5}{8}$ of $\frac{6}{7}$)
 (33) $\frac{1}{2}$ of 7 + $(3\frac{1}{5} \times \frac{7}{8})$
 (34) $(4\frac{3}{4} + \frac{1}{2}$ of $4\frac{3}{4}$ of $\frac{8}{19}) \times 6$
 (35) $2\frac{1}{3}$ of $\frac{6}{7} - 1\frac{1}{2}$ of $1\frac{1}{4}$
 (36) $(5\frac{1}{6} \times \frac{9}{11}) + \frac{1}{2}$ of 2
 (37) $11\frac{8}{9} \times \frac{10}{20} \times \frac{7}{4}$
 (38) $(1\frac{2}{3} \times \frac{1}{7}$ of $\frac{1}{2}) - \frac{4}{5}$
 (39) $19\frac{1}{4}$ of $\frac{8}{11}$ of 3 - $15\frac{3}{4}$
 (40) $1 \times \frac{1}{2} \times \frac{1}{7} \times \frac{1}{8} \times 2$
 (41) $1\frac{9}{10} \times 7\frac{1}{2} \times \frac{13}{5} \times 4$
 (42) $\frac{1}{2}$ of $\frac{2}{3} + \frac{3}{4}$ of $1\frac{1}{6}$
 (43) $2\frac{2}{3} \times 5\frac{1}{6} \times 8\frac{3}{4} \times \frac{5}{30}$
 (44) $1\frac{4}{9} \times \frac{9}{10} \times \frac{1}{3} \times 4$
 (45) $5\frac{2}{3}$ of $\frac{1}{7} + \frac{8}{11}$ of $\frac{5}{8}$
 (46) $1\frac{1}{2} \times 2\frac{2}{3} \times 3\frac{3}{4} \times 4\frac{4}{5}$
 (47) $\frac{1}{7} \times \frac{1}{7}$ of $\frac{3}{4}$ of $\frac{5}{8}$ of 7
 (48) $21\frac{1}{2}$ of $\frac{5}{7}$ of $\frac{7}{9}$ of 3 - $\frac{7}{8}$
 (49) $(1\frac{1}{3} \times \frac{9}{10}$ of 7) - $\frac{3}{5}$ of $5\frac{1}{2}$
 (50) $(17\frac{2}{10} \times 9\frac{1}{8}) - (8\frac{3}{4} \times 7\frac{2}{3})$

Ex. X.

- | | |
|---|---|
| (1) $1\frac{1}{2} \div \frac{2}{3}$ | (26) $12\frac{1}{7} \div (19\frac{1}{8} + 7)$ |
| (2) $3\frac{3}{4} \times \frac{1}{2} \div \frac{7}{8}$ | (27) $(3\frac{1}{8} + 1\frac{5}{8}) \div (3\frac{1}{3} + 2\frac{1}{4})$ |
| (3) $\frac{1}{2} \times \frac{5}{7} \div 4$ | (28) $(4\frac{1}{2} - 2\frac{1}{3}) \div (1\frac{1}{4} - \frac{2}{3})$ |
| (4) $\frac{2}{7} \times \frac{3}{4} \div 7$ | (29) $(20\frac{1}{2} \text{ of } \frac{41}{2}) \div (\frac{1}{40} \text{ of } \frac{11}{4})$ |
| (5) $\frac{1}{9} \text{ of } \frac{1}{2} \div 6\frac{1}{3}$ | (30) $(2\frac{1}{7} \div 3\frac{1}{8}) + \frac{1}{9} + \frac{7}{8}$ |
| (6) $11\frac{1}{9} \div 11\frac{1}{10}$ | (31) $5\frac{2}{9} \div (\frac{2}{3} + \frac{1}{4} - \frac{1}{6})$ |
| (7) $6\frac{1}{4} \times \frac{11}{2} \div 275$ | (32) $(6 - \frac{1}{10}) \div \frac{4}{7} \text{ of } 3$ |
| (8) $1\frac{2}{3} \text{ of } \frac{3}{4} \div \frac{7}{9}$ | (33) $1\frac{1}{2} \text{ of } 3\frac{1}{7} \div (\frac{4}{5} + \frac{3}{2})$ |
| (9) $1\frac{1}{2} \text{ of } \frac{5}{6} \text{ of } \frac{7}{11} \div 3\frac{2}{3}$ | (34) $(11\frac{1}{2} - 2\frac{1}{3}) \div (7\frac{1}{8} + 1\frac{1}{4})$ |
| (10) $\frac{6}{7} \text{ of } \frac{2}{3} \div \frac{8}{9} \text{ of } \frac{9}{10}$ | (35) $(18\frac{2}{3} + 5\frac{1}{2}) \div \frac{7}{8} \text{ of } \frac{5}{6}$ |
| (11) $1\frac{2}{7} \text{ of } \frac{7}{18} \div \frac{5}{6} \text{ of } \frac{7}{8}$ | (36) $(19\frac{1}{10} + 3\frac{4}{5} - 1\frac{1}{4}) \div \frac{7}{10}$ |
| (12) $1\frac{9}{11} \text{ of } \frac{2}{3} \div \frac{7}{11} \text{ of } 14$ | (37) $15\frac{7}{12} \div \frac{1}{2} \text{ of } \frac{1}{8}$ |
| (13) $19\frac{1}{3} \div \frac{1}{2} \text{ of } \frac{1}{3}$ | (38) $\frac{2}{3} \text{ of } \frac{3}{4} \text{ of } \frac{4}{5} \div 1\frac{1}{7} \text{ of } \frac{7}{16}$ |
| (14) $11\frac{2}{9} \div \frac{2}{3} \text{ of } \frac{5}{6}$ | (39) $11\frac{1}{3} \text{ of } \frac{9}{10} \div \frac{1}{8} \times \frac{4}{5}$ |
| (15) $1\frac{9}{10} \times \frac{7}{8} \text{ of } \frac{2}{21} \div \frac{6}{7}$ | (40) $1 \div \frac{7}{8} \text{ of } \frac{2}{3}$ |
| (16) $5\frac{1}{6} \text{ of } \frac{1}{9} \div \frac{5}{6}$ | (41) $1\frac{1}{5} \div (9\frac{1}{10} + \frac{3}{5})$ |
| (17) $8\frac{1}{3} \div \frac{5}{6} \text{ of } \frac{7}{8}$ | (42) $(2\frac{3}{4} + \frac{6}{7} + \frac{2}{3}) \div (1\frac{1}{2} + \frac{2}{3})$ |
| (18) $6\frac{7}{8} \text{ of } \frac{9}{10} \div \frac{1}{5}$ | (43) $7\frac{1}{3} \text{ of } 5\frac{2}{7} \div \frac{2}{4}$ |
| (19) $(\frac{1}{2} + \frac{2}{3}) \div 7$ | (44) $1\frac{7}{8} \div (1\frac{3}{4} \div \frac{1}{2})$ |
| (20) $(\frac{13}{10} - \frac{11}{8}) \div 6$ | (45) $(9\frac{1}{3} \text{ of } \frac{7}{11} \text{ of } \frac{3}{14}) \div (\frac{2}{7} \text{ of } 1\frac{5}{8})$ |
| (21) $(\frac{5}{7} - \frac{1}{3}) \div \frac{4}{7}$ | (46) $(7\frac{1}{8} + 2\frac{2}{3}) \div (\frac{6}{7} \times \frac{5}{6})$ |
| (22) $(1\frac{1}{8} + 2\frac{1}{12}) \div \frac{6}{7} \text{ of } \frac{7}{8}$ | (47) $(1 \div \frac{2}{3}) \div (1\frac{1}{7} \text{ of } 6)$ |
| (23) $5\frac{1}{7} \text{ of } \frac{2}{3} \div (\frac{1}{2} + \frac{2}{3})$ | (48) $(8\frac{1}{2} \div \frac{3}{4}) \div 2\frac{1}{8} \text{ of } 1\frac{2}{3}$ |
| (24) $(\frac{1}{4} + \frac{1}{5} + \frac{1}{12}) \div \frac{7}{8}$ | (49) $(5\frac{1}{6} \div \frac{2}{3}) \text{ of } \frac{7}{8} \text{ of } 3$ |
| (25) $(1\frac{1}{2} + \frac{1}{9}) \div \frac{7}{8} \text{ of } 24$ | (50) $2\frac{1}{2} \div (1\frac{1}{4} \div 1\frac{7}{8} + 3\frac{3}{4})$ |

Ex. XI.

Simplify the following :

- (1) $4 - \frac{\frac{1}{2} + \frac{1}{4}}{\frac{3}{4} - \frac{6}{17}}$
- (2) $\frac{7}{12}$ of $\frac{3\frac{1}{4}}{11\frac{1}{2} - 2\frac{1}{3}}$
- (3) $5\frac{1}{2} - \frac{3 + 1\frac{1}{4}}{6\frac{1}{2} \times \frac{8}{9}}$
- (4) $6 + \frac{1\frac{1}{11} - 1\frac{3}{4}}{5\frac{1}{4} + 1\frac{3}{4}}$
- (5) $\frac{14\frac{1}{3}}{7\frac{1}{8}} - \frac{1\frac{1}{4} - \frac{2}{3}}{4\frac{1}{4}}$
- (6) $\frac{9\frac{1}{2}}{11\frac{1}{2}}$ of $\frac{1}{5\frac{3}{4}$ of $7\frac{1}{2}}$
- (7) $\frac{2\frac{3}{4}}{5\frac{1}{2}}$ of $7\frac{1}{2}$ of $\frac{9\frac{1}{10}}{6\frac{1}{2}}$ of $5\frac{1}{4}$ of 49
- (8) $1\frac{3}{4} + 1\frac{7}{8}$ of $\frac{5\frac{1}{2}}{3\frac{2}{3}}$ of $\frac{1}{2}$
- (9) $\frac{1}{1 - \frac{2}{3}}$ of $\frac{1}{1 + \frac{2}{3}}$
- (10) $7 + \frac{5 - \frac{2}{3}}{\frac{6\frac{2}{3}}{\frac{4}{7}}}$ of $\frac{4}{7}$
- (11) $\frac{5\frac{1}{4}}{4\frac{1}{3}}$ of $\frac{7\frac{1}{9}}{\frac{1}{3\frac{2}{3}}}$ of $\frac{7}{13}$
- (12) $4\frac{2}{3}$ of $\frac{\frac{3}{5}}{14 \times 27}$
- (13) $\frac{6\frac{1}{4}}{1\frac{3}{4} - \frac{7}{9}} - \frac{15\frac{1}{8} - 9\frac{1}{10}}{3\frac{2}{3}$ of $11\frac{1}{3}$
- (14) $1 - \left(\frac{\frac{1}{2} + \frac{1}{3}}{1 + \frac{1}{4}} \right)$ of $1\frac{1}{2}$
- (15) $\frac{3\frac{6}{7}}$ of $9\frac{1}{3} + 1\frac{1}{2}$ of $7\frac{1}{4} - \frac{1}{3}$ of 9
- (16) $\frac{17 - 3\frac{1}{4} + 7\frac{1}{3}}{8\frac{1}{2}}$ of $1\frac{1}{9}$ of $\frac{5}{8}$ of $\frac{7}{24}$
- (17) $1 - \frac{1 - \frac{1}{2}}{1 + \frac{1}{2}}$
- (18) $5 - \frac{\frac{1}{2}}$ of $\frac{2}{3}$ of $\frac{5\frac{1}{4}}$ of $\frac{1}{1\frac{1}{2}}$
- (19) $\frac{7}{4} - \left(\frac{\frac{3}{5}}$ of 6 of $\frac{1}{1 - \frac{1}{3}} \right)$
- (20) $\frac{19\frac{1}{4}}$ of $3\frac{1}{5}$ of $\frac{9\frac{3}{10}}$ of $5\frac{1}{2}$ of $\frac{11 \times 6\frac{1}{5}}{13\frac{2}{3}}$
- (21) $\frac{8\frac{2}{3} - (6\frac{7}{8}$ of $\frac{8}{11})}{4\frac{2}{9} - \frac{5}{9}} - \frac{10\frac{2}{11}}{13\frac{2}{3} \times 6}$
- (22) $\frac{1}{2 \times \frac{3}{7}} + \left(\frac{3 \times \frac{4}{7}}{5} \div \frac{1}{7\frac{1}{3} \times 1\frac{1}{2}} \right)$
- (23) $3\frac{3}{4} + \frac{1 - \frac{1}{9}}{7\frac{1}{5} \times \frac{4}{63}} - 1\frac{5}{8}$
- (24) $(6\frac{1}{7} \div 3\frac{1}{5}) \times \frac{5}{2\frac{1}{3}}$ of $13\frac{7}{9}$

Ex. XII.

- (1) Add £3. 1. $6\frac{1}{2}$, £9. 2. $11\frac{7}{8}$, £2. 19. $5\frac{5}{8}$, £7. 13. $9\frac{1}{8}$
 (2) „ £4. 7. $9\frac{1}{4}$, £1. 1. $9\frac{3}{4}$, £6. 1. $7\frac{1}{11}$, £5. 0. $9\frac{3}{4}$
 (3) „ £8. 2. $6\frac{3}{4}$, £6. 19. $6\frac{7}{8}$, £1. 15. $6\frac{9}{7}$, £3. 2. $11\frac{5}{14}$
 (4) „ £3. 19. $7\frac{7}{8}$, £5. 4. $2\frac{3}{4}$, £9. 0. $7\frac{3}{16}$, £10. 10. $10\frac{3}{8}$
 (5) „ £8. 14. $7\frac{1}{8}$, £9. 13. $8\frac{9}{7}$, £5. 0. $6\frac{1}{14}$, £9. 2. $6\frac{3}{14}$
 (6) „ £4. 4. $9\frac{9}{7}$, £3. 16. $2\frac{5}{21}$, £8. 0. $1\frac{1}{4}$, £9. 6. $7\frac{1}{4}$
 (7) „ £6. 1. $3\frac{1}{3}$, £2. 4. $2\frac{1}{4}$, £9. 2. $6\frac{5}{8}$, £7. 12. $11\frac{5}{12}$
 (8) „ £3. 1. $5\frac{1}{2}$, £4. 6. $2\frac{3}{8}$, £6. 1. $3\frac{3}{8}$, £9. 7. $6\frac{9}{8}$
 (9) „ £5. 5. $5\frac{2}{5}$, £4. 2. $6\frac{3}{10}$, £11. 0. $11\frac{7}{15}$, £8. 2. $11\frac{9}{20}$
 (10) „ £4. 6. $8\frac{3}{4}$, £1. 5. $4\frac{7}{9}$, £8. 1. $6\frac{1}{21}$, £2. 1. $9\frac{7}{7}$
 (11) From £6. 13. $7\frac{1}{4}$ take £5. 19. $4\frac{7}{8}$
 (12) „ £3. 1. $6\frac{1}{2}$ take £2. 11. $10\frac{6}{17}$
 (13) „ £4. 19. 1 take £4. 17. $5\frac{3}{7}$
 (14) „ £8. 0. $6\frac{9}{7}$ take £1. 11. $10\frac{7}{9}$
 (15) „ £9. 5. $8\frac{1}{4}$ take £5. 15. $9\frac{5}{9}$
 (16) „ £9. 16. $8\frac{3}{4}$ take £6. 15. $11\frac{3}{8}$
 (17) „ £101. 13. $2\frac{3}{4}$ take £29. 16. $8\frac{3}{8}$
 (18) „ £117. 5. 0 take £61. 3. $8\frac{1}{9}$
 (19) „ £58. 2. $0\frac{1}{2}$ take £57. 1. $2\frac{2}{48}$
 (20) „ £70. 5. $7\frac{1}{141}$ take £36. 8. $9\frac{5}{113}$
 (21) Multiply £3. 1. $6\frac{7}{9}$ by 18
 (22) „ £1. 17. $7\frac{2}{7}$ by 63
 (23) „ £3. 1. $6\frac{1}{8}$ by 36
 (24) „ £2. 1. 4 by $\frac{7}{8}$
 (25) „ £9. 16. 3 by $1\frac{1}{3}$
 (26) „ £3. 17. 6 by $2\frac{5}{7}$
 (27) „ £5. 19. $9\frac{1}{2}$ by $8\frac{9}{7}$
 (28) „ £7. 8. $8\frac{3}{4}$ by $5\frac{3}{8}$
 (29) „ £8. 1. $5\frac{9}{7}$ by $7\frac{1}{12}$
 (30) „ £9. 3. $10\frac{5}{8}$ by $8\frac{1}{11}$
 (31) „ 5 cwt. 3 qrs. 14 lbs. by $3\frac{2}{7}$
 (32) „ 6 tons 11 cwt. 3 qrs. 5 lbs. by $6\frac{1}{2}$

- (33) Multiply 5 ac. 3 r. $3\frac{3}{4}$ po. by $11\frac{1}{7}$
- (34) " 11 lbs. 8 oz. 5 dwts. 6 grs. by $7\frac{9}{10}$
- (35) " 13 qrs. 5 bus. 2 pks. by $6\frac{8}{15}$
- (36) " 11 dys. 5 hrs. $13\frac{3}{4}$ min. by $9\frac{1}{11}$
- (37) " 1 m. 1 fur. $58\frac{3}{4}$ yds. by $8\frac{7}{8}$
- (38) " 15 yds. 2 ft. 9 in. by $6\frac{3}{4}$
- (39) " 86 yds. 2 qrs. 2 nls. 1 in. by $11\frac{1}{3}$
- (40) " 5 cub. yds. 1 ft. 110 in. by $8\frac{1}{3}\frac{2}{3}$
- (41) Divide £3. 1. 9 by $\frac{2}{3}$
- (42) " £1. 11. 4 by $1\frac{4}{5}$
- (43) " £3. 6. 8 by $\frac{4}{7}$
- (44) " £10. 11. $1\frac{1}{2}$ by $\frac{5}{8}$
- (45) " £55. 4. 7 by $6\frac{1}{9}$
- (46) " £3. 9. $6\frac{3}{4}$ by $1\frac{1}{11}$
- (47) " £8. 11. $11\frac{1}{2}$ by $5\frac{4}{7}$
- (48) " £1002. 16. 1 by $3\frac{2}{3}$
- (49) " £501. 19. $10\frac{1}{4}$ by $1\frac{1}{2}$ of $\frac{2}{3}$
- (50) " £73. 8. $2\frac{1}{2}$ by $\frac{5}{8}$ of $4\frac{1}{5}$
- (51) " 11 ac. 2 r. 12 po. by $3\frac{1}{8}$
- (52) " 9 lbs. 5 oz. 8 drs. by $6\frac{1}{4}$
- (53) " 3 qrs. 3 bus. 1 pk. by $\frac{7}{8}$
- (54) " 100 yrs. 31 days 20 hrs. by $8\frac{4}{5}$
- (55) " 33 m. 5 fur. 28 po. 4 yds. by $2\frac{1}{7}$
- (56) " 5 sq. yds. 8 ft. 110 in. by $7\frac{2}{9}$
- (57) " 1021 yds. 1 ft. $11\frac{1}{2}$ in. by $2\frac{3}{4}$
- (58) " 36 tons 11 cwt. 15 lbs. by $90\frac{1}{3}$
- (59) " 1 cwt. 1 qr. 12 lbs. by $\frac{1}{3}\frac{2}{8}$
- (60) " 105 lbs. 5 oz. 2 drs. 2 sc. 10 grs. by $\frac{3}{4}$
- (61) Find the value of $\frac{3}{8}$ of £1 + £10. 1. $6\frac{1}{2} \times \frac{1}{7}$
- (62) " $\frac{1}{4}$ of £1 + $\frac{1}{5}$ of 2s. 6d. + $\frac{3}{8}$ of 6s. 8d. + $\frac{2}{9}$ of 6s.
- (63) " $\frac{3}{8}$ of 2s. 6d. + $\frac{4}{5}$ of £2 - $\frac{4}{7}$ of $2\frac{1}{2}$ guineas
- (64) " $\frac{1}{3}$ of $\frac{3}{4}$ of 5s. - $\frac{1}{2}$ of $\frac{3}{4}$ of 1s.
- (65) " $\frac{1}{2}$ ($\frac{7}{9} - \frac{5}{12}$) of 6s. + $\frac{2}{3}$ of $\frac{5}{8}$ of $6\frac{3}{4}$ d.
- (66) " $\frac{1}{3}$ of $\frac{1}{4}$ of $2\frac{1}{2}$ guineas + $\frac{2}{3}$ of £7 + $1\frac{1}{2}$ of 6s. 8d.
- (67) " $\frac{1}{9}$ of $\frac{1}{7}$ of 3 guineas + $\frac{1}{11}$ of $\frac{1}{4}$ of 5s. 6d.
- (68) " $2\frac{2}{3}$ of £2 + $3\frac{1}{8}$ of $1\frac{3}{5}$ of 10s.
- (69) " $3\frac{1}{8}$ of £1 + $1\frac{1}{8}$ of 1s. + $1\frac{5}{8}$ of £2 - $\frac{3}{8}$ of 2 guineas
- (70) " $1\frac{3}{4}$ of a crown + $\frac{5}{6}$ of 3d. - $\frac{7}{8}$ of 6s.

- (71) Find the value of $\frac{1}{3}\text{£} + \frac{1}{3}\text{s.} + \frac{1}{3}\text{d.}$
- (72) " $\frac{2}{7}\text{£} + \frac{1}{7}\text{s.} - \frac{5}{7}$ of 2s.
- (73) " $6\frac{1}{4}$ of $2\frac{1}{3}$ of a guinea $- 6\frac{1}{4}$ of $2\frac{1}{3}$ of £1
- (74) " $\frac{1}{7}$ of a guinea $+ \frac{1}{7}$ of £1 $+ \frac{1}{7}$ of half-a-crown
 $+ \frac{1}{7}$ of 1s.
- (75) " $\frac{6}{7}$ of $\frac{7}{8}$ of 2s. 6d. $+ \frac{1}{9}$ of $1\frac{1}{4}$ of 5s. 4d. $- \frac{2}{30}$ of
 7s. 6d.
- (76) " $\frac{1}{7}$ of 1 ton 3 cwt.
- (77) " $\frac{6}{11}$ of 1 cwt. 3 qrs. 12 lbs.
- (78) " $\frac{2}{5}$ of 3 lbs. 5 oz. 4 drs.
- (79) " $\frac{1}{3}$ of $\frac{1}{4}$ of 2 qrs. $+ \frac{1}{5}$ of 2 tons 1 cwt.
- (80) " $\frac{1}{4}$ of $\frac{1}{5}$ of 3 lbs. 4 oz. Troy $+ 3\frac{3}{4}$ of 3 lbs. 6 oz.
 Troy
- (81) " $2\frac{1}{3} \times 5760$ grains $+ 1\frac{3}{4}$ of $1\frac{1}{4}$ of $2\frac{1}{2}$ lbs. Troy
- (82) " $2\frac{1}{11}$ of 1 qr. 5 lbs. $+ \frac{5}{8}$ of 2 tons 10 cwt.
- (83) " $\frac{3}{4}$ of a ton $+ \frac{2}{3}$ of a cwt. $+ \frac{1}{7}$ of 2 qrs.
- (84) " $1\frac{1}{2}$ of $\frac{2}{3}$ of 5 cwt. 7 lbs. $+ \frac{1}{3}$ of 2 tons 5 cwt.
 $+ \frac{1}{9}$ of 3 tons 3 cwt.
- (85) " $\frac{1}{2}$ of $\frac{2}{3}$ of $\frac{7}{9}$ of 1 cub. yard $+ \frac{2}{3}$ of 1 cub. ft.
- (86) " $(11 \text{ cwt.} \div \frac{2}{3}) + (5 \text{ lbs. } 7 \text{ oz.} \div \frac{3}{4}) - 2 \text{ qrs. } 4 \text{ lbs.}$
- (87) " $(1 \text{ m.} \div \frac{2}{3}) - (2 \text{ fur. } 18 \text{ yds.} \times \frac{3}{7}) + (\frac{1}{2} \text{ mile} \div \frac{2}{3})$
- (88) " $\frac{2}{3}$ of $\frac{3}{14}$ of $5\frac{1}{4}$ miles $+ \frac{2}{7}$ of 3 po. $+ \frac{1}{12}$ of 1 fur.
- (89) " $\frac{1}{16}$ of 1 hr. $+ 1\frac{1}{3}$ of $\frac{2}{3}$ of 2 h. 30 m. $+ (1\frac{1}{4} \text{ h.} \div \frac{2}{3})$
- (90) " $\frac{1}{10}$ of 2 dys. $+ \frac{3}{16}$ of 5 hrs. $- \frac{1}{12}$ of 7 hrs. 30 min.
- (91) " $\frac{2}{5}$ of $3\frac{1}{2}$ ac. $+ \frac{2}{5}$ of 7 po. $+ (5 \text{ sq. yds. } 7 \text{ ft.} \times \frac{2}{3})$
- (92) " $\frac{1}{3}$ of $\frac{1}{5}$ of $2\frac{1}{2}$ ft. $+ \frac{2}{7}$ of 2 ft. 9 in. $- \frac{1}{2}$ of $5\frac{1}{4}$ in.
- (93) " $\frac{2}{3}$ bus. $+ \frac{2}{3}$ pks. $+ \frac{2}{3}$ gals. $+ \frac{2}{3}$ pints
- (94) " $\frac{1}{4}$ of $\frac{3}{7}$ of 9 qrs. 6 bus. $+ \frac{1}{3}$ of 5 bus. 2 pks.
- (95) " $\frac{1}{5}$ mile $+ \frac{2}{3}$ fur. $+ \frac{2}{3}$ pole $+ \frac{1}{4}$ yard
- (96) " $\frac{1}{2}$ ($\frac{2}{3}$ of $\frac{3}{4}$ of 5 hrs.) $+ \frac{3}{5}$ ($\frac{1}{12}$ of $\frac{4}{5}$ of 15 minutes)
- (97) " $\{4\frac{1}{2} (\frac{1}{2} \text{ of } \frac{4}{7}) - 3\frac{1}{4} (\frac{2}{5} \text{ of } \frac{4}{7})\}$ of 5 tons
- (98) " $1\frac{1}{4}$ tons $- \frac{2}{3}$ of 17 cwt. 3 qrs.
- (99) " $3\frac{2}{3}$ of 7 m. 5 fur. $- 1\frac{3}{4}$ of 10 m. 6 fur.
- (100) " $\frac{1}{13}$ of 1 ton $+ \frac{1}{13}$ of 1 cwt. $+ \frac{1}{13}$ of 1 qr. $+ \frac{1}{13}$
 of 1 lb.

Ex. XIII.

(1)	Reduce	2s. 6d.	to the fraction of	£1
(2)	"	5s. 4d.	" "	£1
(3)	"	13s. 4d.	" "	£1
(4)	"	3s. 8d.	" "	10s.
(5)	"	9s. 10d.	" "	£2. 10. 0
(6)	"	5s. 6½d.	" "	£1. 0. 5
(7)	"	3s. 2¼d.	" "	£7
(8)	"	8½d.	" "	4s. 6d.
(9)	"	11¼d.	" "	6d.
(10)	"	2¾d.	" "	1s.
(11)	"	1s. 9d.	" "	5s.
(12)	"	11s. 8¼d.	" "	3s. 9d.
(13)	"	7s. 2½d.	" "	15s.
(14)	"	1s. 11¾d.	" "	29s.
(15)	"	23s. 4d.	" "	£1. 5. 0
(16)	"	19s. 3d.	" "	£1. 15. 7
(17)	"	3s. 9d.	" "	12s. 6d.
(18)	"	6s. 8d.	" "	1½ guineas
(19)	"	1s. 3¾d.	" "	11s. 9d.
(20)	"	8s. 7d.	" "	5s.
(21)	"	£1. 2. 9	" "	£2
(22)	"	£7. 3. 6	" "	£10. 10. 0
(23)	"	£1. 5. 7½	" "	£20. 10. 0
(24)	"	£6. 3. 4½	" "	£10. 10. 0
(25)	"	£1. 9. 0¼	" "	£4. 7. 6¼
(26)	"	£5. 9. 9	" "	£5. 0. 0
(27)	"	£4. 17. 2½	" "	£1. 0. 0
(28)	"	£3. 10. 10	" "	£18. 18. 0
(29)	"	£1. 3. 8½	" "	£1. 7. 0
(30)	"	£2. 1. 6¼	" "	£1. 13. 4
(31)	"	£10. 3. 6¼	" "	£11. 11. 6
(32)	"	5 half-crowns	" "	7¼ florins

(33)	Reduce 103 threepences to the fraction of 71 fourpences		
(34)	69 sixpences	58	half-crowns
(35)	£73. 12. 9	£100	
(36)	£3. 1. 2½	£12. 16. 0	
(37)	37 half-crowns	119	sixpences
(38)	23 shillings	£15. 10. 9	
(39)	175 crowns	£9. 3. 4	
(40)	38 farthings	2s. 6d.	
(41)	113 half-pence	10s.	
(42)	5 cwts.	2 tons 10 cwt.	
(43)	13 lbs.	1 qr. 11 lbs.	
(44)	3 cwts. 1 qr.	5 cwt. 3 qrs.	
(45)	1 cwt. 1 qr. 7 lbs.	1 cwt.	
(46)	5 lbs. 13 oz.	1 qr. 1 lb. 1 oz.	
(47)	3 lbs. 3½ oz.	2 qrs. 5 lbs.	
(48)	2 ft. 6 in.	1 yard	
(49)	3 ft. 7½ in.	2 yds. 1 ft.	
(50)	5 bus. 2 pks.	2 qrs. 3 bus.	
(51)	1 gal. 3 qts.	70 pints	
(52)	5 ft. 10 in.	4 yards	
(53)	3 yds. 2 ft.	1 mile	
(54)	6 m. 5 fur.	10 miles	
(55)	3 r. 15 po.	1 acre	
(56)	2 ac. 3 r. 12 po.	5 acres	
(57)	1 lb. 2 oz. 5 dwts.	3 lb. 10 oz.	
(58)	2½ gals.	1 firkin	
(59)	13 gals. 2 qts.	1 hhd.	
(60)	5 sq. ft.	7 sq. yds. 1 ft.	
(61)	18 ac. 3 r. 12 po.	100 ac.	
(62)	5½ hours	1 week	
(63)	35½ hours	1 day	
(64)	5 h. 37½ m.	6 h. 20 m.	
(65)	88 dys.	52 wks.	
(66)	1 c. ft. 117 in.	2 c. yds.	
(67)	38 lbs. 2 oz.	1 cwt. 1 qr.	
(68)	5 dys. 13 h. 12 m.	14½ days	
(69)	11 hrs. 19 m.	3¼ hours	
(70)	1 lb. 5 oz. 10 dwt.	6 lb. 3 oz.	
(71)	150 grs.	1 lb. Troy	

(72)	Reduce	161 lbs. Troy	to the fraction of 1 cwt.
(73)	"	5 bus. 3 pks.	" " 1 qr. 3 pks.
(74)	"	3 bus. 2 pks.	" " 2 qrs. 1 bus. 2 pks.
(75)	"	$12\frac{1}{2}$ acres	" " 10 sq. miles
(76)	"	5 c. yds. 10 ft. 16 in.	" " 11 cub. yds.
(77)	"	5 fur. 30 yds.	" " 1 mile
(78)	"	110 sq. poles	" " 2 ac. 3 r.
(79)	"	1 yd. 1 qr. 2 n. $0\frac{1}{2}$ in.	" " 3 yds. 1 ft.
(80)	"	5 yds. 3 qrs. 1 n. $0\frac{3}{4}$ in.	" " 11 Eng. ells

Ex. XIV.

(1)	Reduce	$1\frac{1}{2}$ s.	to the fraction of 10s.
(2)	"	£ $2\frac{2}{3}$	" " £3.
(3)	"	3s. $8\frac{1}{2}$ d.	" " 5s.
(4)	"	6s. $9\frac{1}{10}$ d.	" " 6s. $1\frac{3}{4}$ d.
(5)	"	8s. $9\frac{3}{8}$ d.	" " 11s. 6d.
(6)	"	1s. $2\frac{1}{2}$ d.	" " 2s. $10\frac{1}{3}$ d.
(7)	"	$5\frac{7}{8}$ d.	" " 1s.
(8)	"	£ $1\frac{5}{8}$	" " a guinea
(9)	"	£ $1\frac{3}{8}$	" " $2\frac{1}{2}$ guineas
(10)	"	$11\frac{1}{12}$ d.	" " half-a-crown
(11)	"	$\frac{1}{7}$ of £2. 10	" " £5
(12)	"	$\frac{5}{8}$ of £11. 6	" " £11
(13)	"	$\frac{1}{20}$ of £1. 1	" " £1
(14)	"	$\frac{1}{7}$ of 13s. 4d.	" " £2
(15)	"	$\frac{1}{8}$ of £5	" " £5. 17. 6
(16)	"	$\frac{1}{11}$ of £7. 10	" " £1. 2. 6
(17)	"	$\frac{5}{7}$ of £6. 13. 6	" " £9
(18)	"	$2\frac{3}{8}$ of £1. 7. 6	" " £4. 4. 6
(19)	"	$1\frac{7}{8}$ of £4. 18	" " 7 guineas
(20)	"	$7\frac{3}{8}$ of £7. 0. 6	" " £10. 9. 0
(21)	"	$1\frac{3}{14}$ of £2. 2. 9	" " £3
(22)	"	$1\frac{1}{4}$ ac.	" " 17 poles
(23)	"	$11\frac{3}{4}$ sq. yds.	" " 1 sq. pole
(24)	"	15 grains	" " 1 lb. Troy

(25)	Reduce	$1\frac{1}{4}$ lb. Troy	to the fraction of 1 lb. Avoir.
(26)	"	$3\frac{1}{4}$ sq. yds.	" " a sq. pole
(27)	"	$8\frac{3}{4}$ dwts.	" " $1\frac{2}{3}$ lbs. Avoir.
(28)	"	$\frac{5}{9}$ of 3 tons	" " 17 cwt.
(29)	"	$\frac{7}{11}$ of 1 ton 5 cwt.	" " $1\frac{1}{2}$ tons
(30)	"	$3\frac{3}{11}$ of 3 qrs. 5 lbs.	" " 2 tons 11 cwt.
(31)	"	$5\frac{2}{3}$ of 11 lbs. 8 oz.	" " 1 qr.
(32)	"	$9\frac{1}{10}$ of 5 tons 3 qrs.	" " 13 tons 10 cwt.
(33)	"	$2\frac{1}{5}$ of 3 ft. 8 in.	" " 1 yard
(34)	"	$9\frac{1}{8}$ of 7 ft. 9 in.	" " 4 ft. 7 in.
(35)	"	$3\frac{2}{3}$ of 11 yds. 2 ft.	" " 1 pole
(36)	"	$1\frac{3}{4}$ of 2 gals.	" " 36 gals.
(37)	"	$9\frac{2}{5}$ of 1 cub. yd.	" " $5\frac{1}{2}$ cub. yds.
(38)	"	$11\frac{1}{10}$ of 3 yds. 3 qrs. 1 n.	" " 12 yards
(39)	"	$9\frac{2}{3}$ of 11 h. 30 m.	" " a day
(40)	"	$\frac{17}{18}$ of $2\frac{1}{2}$ days	" " 35 h. 45 m.
(41)	"	$\frac{13}{14}$ of $1\frac{3}{4}$ miles	" " 10 miles
(42)	"	$\frac{2}{3}$ of $\frac{3}{4}$ of 1 m. 5 fur.	" " a mile
(43)	"	$\frac{7}{9}$ of 3 ac. 3 r.	" " 20 acres
(44)	"	$1\frac{6}{7}$ of 9 ac. 1 r. 20 p.	" " $3\frac{1}{2}$ acres
(45)	"	$6\frac{1}{5}$ of 3 lbs. 8 dwts.	" " 34 lbs. Troy
(46)	"	$3\frac{1}{8}$ of 5 lbs. 10 oz. Troy	" " 38 lbs. Avoir.
(47)	"	$1\frac{2}{9}$ of 17 tons 1 cwt.	" " 30 tons
(48)	"	$7\frac{1}{9}$ of 31 dys. 12 hrs.	" " $365\frac{1}{4}$ days
(49)	"	$11\frac{1}{2}$ of £2. 12. 6	" " £5
(50)	"	$5\frac{5}{8}$ of $3\frac{1}{4}$ guineas	" " 112 half-crowns

Ex. XV.

- (1) Find the sum of $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, $\frac{1}{5}$ and $\frac{1}{6}$.
- (2) From $\frac{1}{2}$ of $\frac{2}{3}$ of $\frac{3}{4}$ take $\frac{1}{5}$ of $\frac{5}{6}$.
- (3) Multiply the sum of $\frac{1}{3}$ and $\frac{1}{5}$ by their difference.
- (4) By how much is $1\frac{2}{3}$ of 15 greater than $14\frac{1}{2} \times 1\frac{1}{2}$.
- (5) Divide £9. 12. 6 by $3\frac{2}{3}$.
- (6) Find the sum of $\frac{1}{2}$ guineas + $\frac{1}{4}$ £ + $\frac{1}{4}$ shilling.

- (7) Reduce £14 $\frac{39}{100}$ to account money.
- (8) Divide the sum of $1\frac{2}{3}$ and $\frac{5}{8}$ by the product of their sum and difference.
- (9) What number multiplied by $\frac{3}{8}$ of $11\frac{1}{3}$ will give 20?
- (10) Find the value of $\frac{7}{8}$ yard + $\frac{5}{8}$ foot + $1\frac{5}{8}$ in.
- (11) A clock gains $1\frac{1}{5}$ of $3\frac{1}{2}$ minutes in 2 hours 30 min., what will it gain in 8 days 8 hours?
- (12) A field of 100 acres is divided into three equal parts, what is the exact area of each?
- (13) The shares of a company rise £ $\frac{5}{16}$, what is the increase in the value of 109 shares?
- (14) Reduce $\frac{1}{4}$ of 3 guineas to the fr. of £10.
- (15) If a person pays $\frac{1}{4}$ of his income for rent and $\frac{2}{9}$ for rates and taxes and these two sums amount to £17, what is his income?
- (16) A plot of ground measuring 3 ac. 0 r. 24 p. was sold for building purposes in the following lots, viz. $\frac{2}{9}$ of the whole at $3\frac{1}{2}d.$ per sq. yard, $\frac{3}{8}$ at $9d.$, $\frac{2}{9}$ at $1s. 0\frac{1}{2}d.$ and the remainder at $1s. 2d.$ What was the total amount realised?
- (17) From £20. 0. $2\frac{1}{4}$ take £11. 0. $6\frac{3}{8}$.
- (18) From $\frac{3}{8}$ of two guineas take $\frac{5}{8}$ of $13s. 4d.$
- (19) What is the value of $\frac{2}{3}$ of $\frac{3}{4}$ of £7. 10. 0?
- (20) What number added to the sum of $\frac{2}{3}$, $\frac{1}{9}$, $\frac{5}{8}$ and $1\frac{1}{2}$ will make 5?
- (21) From a plank measuring 19 ft. 6 in. there is cut away $2\frac{1}{3}$ of $\frac{3}{9}$ of the whole. What length remains?
- (22) Express $\frac{2}{3}$ of £1. 5. 0 as a fr. of £9. 6. 8.
- (23) Reduce $\frac{1}{3}\frac{5}{8}\frac{2}{19}$ to its lowest terms.
- (24) Divide 1 by $\frac{4}{9}$ of $1\frac{3}{4}$.
- (25) From £2. 0. $6\frac{1}{4}$ take £1. 11. $10\frac{1}{8}$.
- (26) Divide the product of $\frac{3}{4}$ and $\frac{3}{10}$ by half the sum of $1\frac{1}{4}$ and $\frac{2}{3}$.
- (27) How many times is $\frac{2}{3}$ of 30 poles contained in $\frac{5}{8}$ of $11\frac{1}{4}$ acres?
- (28) If $\frac{2}{4}$ of $\frac{5}{8}$ of a yard cost $3\frac{3}{8}s.$, what is that for 10 yards?

(29) Out of a total force of 48000 troops $\frac{1}{4}$ of the number were on the sick list and $\frac{2}{3}$ of the remainder were non-effective. How many combatants could be mustered?

(30) If $\frac{1}{4}$ lb. butter cost $3\frac{1}{3}$ d., what is the cost of 11 cwt. 3 qrs.?

(31) Express 1 cwt. 2 qrs. as the fraction of 1 ton 19 cwt.

(32) A hhd. of ale cost £4. 1. 0; what is the price of the sixth part of three-fourths of a gallon?

(33) Divide $\frac{4}{11}$ of $\frac{5}{9}$ of 13 by the sum of $\frac{1}{2}$, $\frac{1}{3}$ and $\frac{1}{4}$.

(34) A merchant sold $\frac{1}{2}$ his stock for $\frac{3}{4}$ of the entire cost price, $\frac{1}{2}$ the remainder at a gain of £40, $\frac{1}{4}$ of what still remained for its cost price £75, and the rest at a reduction of $\frac{2}{3}$ on the cost price. What was his total gain or loss?

(35) What amount would a rate $1\frac{5}{8}$ d. in the £ produce on an assessment of £560016?

(36) Reduce to its simplest form

$$\left(\frac{1\frac{1}{2}}{2} - \frac{1\frac{1}{2}}{3}\right) - \left(\frac{1\frac{1}{2}}{4} - \frac{1\frac{1}{2}}{5}\right).$$

(37) Reduce £2. 11. 10 to the fr. of 15 half-crowns.

(38) Find the value of $\frac{1}{2}$ of $\frac{5}{8}$ of a shilling + $\frac{2}{3}$ of $\frac{3}{4}$ of £ $\frac{5}{8}$ - $\frac{1}{7}$ of 5 half-guineas.

(39) What will $\frac{1}{4}$ of a dozen + $\frac{1}{2}$ of 3 score cost at £1. 8. 0 each?

(40) Divide a guinea between A and B, giving the former 1s. more than $\frac{1}{2}$ as much again as the latter.

(41) Divide $3\frac{1}{2} \times 11\frac{1}{3} \times \frac{5}{8}$ by $9\frac{1}{4} \times \frac{3}{7}$.

(42) Reduce $\frac{1}{5} \frac{7}{8} \frac{1}{7}$ to its lowest terms.

(43) Reduce $2\frac{2}{3}$ of $\frac{5}{8}$ of a lb. Troy to the fraction of 1 lb. Avoirdupois.

(44) Simplify

$$\frac{\frac{1}{2} + \frac{1}{3} + \frac{1}{4}}{13 - \left(\frac{1}{2} + \frac{1}{3}\right)} + \frac{11\frac{1}{3}}{4 - \frac{1}{4}} \text{ of } \frac{9\frac{1}{2}}{3\frac{1}{8}} \text{ of } \frac{10}{119}.$$

(45) Express 4 m. 2 fur. 15 p. 3 yards as a fr. of $1\frac{3}{8}$ miles.

(46) If $\frac{1}{12}$ share in a company cost £19. 10. 6, what shares will £293. 12. 0 buy?

(47) A booking clerk receives altogether £19. 8. 8 $\frac{1}{2}$ as third class fare from Darlington to London. How many full fares does this represent if he receives £3. 11. 7 $\frac{1}{4}$ for two whole and three half tickets?

(48) Three persons received respectively the fifth, sixth, and eighth parts of the fourth of £25. What sum remained of the £25?

(49) Add together $\frac{1}{8}$ of a bushel, $\frac{3}{4}$ of a peck, $\frac{1}{4}$ of 3 quarters, and $\frac{1}{7}$ of 7 bus. 3 pks. 1 gal.

(50) Three towns *A*, *B* and *C* are situated in a straight line. The distance from *A* to *C* is 9 $\frac{1}{2}$ miles, and *B* is $\frac{1}{19}$ of this distance nearer *A* than to *C*. What is the distance from *B* to *C*?

(51) An exposed sheet of water loses $\frac{1}{10}$ of its volume by evaporation daily. If it contains 190,000 gallons, how much would be lost in five days?

(52) From 3 tons 10 cwt. 1 qr. take 1 ton 11 cwt. 5 lbs., and reduce the remainder to the fraction of a ton.

(53) If a man earns $\frac{1}{4}$ as much as 7 women, and a boy $\frac{1}{2}$ of $\frac{3}{8}$ of the wages of 2 women, what part of a man's wages does a boy earn?

(54) Reduce $\frac{1}{10}$ of 9 $\frac{3}{4}$ acres to the fr. of 1 ac. 13 p.

(55) Add together $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{5}$, $\frac{1}{7}$, $\frac{1}{11}$, and divide the result by $\frac{4}{385}$.

(56) By selling an article at £1. 8. 0 I gain on 100 the cost price of a dozen. What was the cost price of $\frac{5}{8}$ of 3 $\frac{1}{2}$ of a dozen?

(57) Which is the greater, and by how much, $\frac{11\frac{3}{4}}{11\frac{3}{4}}$, or $5 \times \frac{1}{3}$ of $\frac{7\frac{1}{3}}{7\frac{1}{3}}$?

(58) Reduce to its simplest form

$$\frac{1\frac{1}{2} + \frac{3}{7} \text{ of } \frac{5}{8}}{9\frac{1}{4} \text{ of } \frac{2}{3}} \text{ of } \frac{11\frac{1}{4} \text{ of } \frac{1}{2} \text{ of } \frac{1}{2\frac{1}{4}}}{14\frac{3}{7} \text{ of } 3\frac{1}{2} + \frac{1}{2\frac{1}{2}}} \text{ of } \frac{11 - \frac{3}{7\frac{1}{4}}}{5\frac{1}{6} \text{ of } \frac{1}{3\frac{1}{2}}}$$

(59) Reduce the sum of a guinea, a half-guinea, a crown, a half-crown, and sevenpence to the fr. of 3 $\frac{1}{2}$ guineas.

(60) Multiply £2. 0. 11 by 13 $\frac{1}{2}$.

(61) What fraction divided by 9 $\frac{1}{4}$ will give 41 $\frac{1}{2}$?

(62) Divide the sum of the sum, difference, and product of 9 and $\frac{9}{10}$ by the quotient obtained on dividing the former by the latter.

(63) If a rise of $\frac{1}{3}d.$ per lb. in the price of cotton caused an increase of £100 in the receipts, how many bales each 640 lbs. were sold?

(64) If $\frac{2}{7}$ of $\frac{2}{9}$ of a meadow measures 3 ac. 0 r. $11\frac{1}{2}$ p., what will $\frac{1}{10}$ of the remainder measure?

(65) If $\frac{1}{7}$ of 10000 bricks are required for a piece of work, $\frac{1}{3}$ of the same number for another, $\frac{2}{11}$ for another, and $\frac{7}{231}$ for another, how many are required altogether?

(66) If $\frac{1}{9}$ of 1 lb. sugar cost as much as $\frac{1}{4}$ lb. rice and $2\frac{1}{2}$ lb. rice cost 5*d.*, what is the price of sugar per lb.?

(67) A wheel makes 72 revolutions a minute; if its speed were increased $\frac{1}{15}$ how many revolutions would it make in 6 working days of 10 hrs. each?

(68) Express 2 nls. $1\frac{1}{4}$ in. as the fr. of a yard.

(69) The inner circle formed by the felloes of a cart wheel is 13 ft. 6 in. round; at what distance apart should the marks for the centre of each of the ten spokes be placed?

(70) A cubic foot of water weighs $62\frac{1}{2}$ lbs.; what weight of water is contained in an oblong bath 36 ft. long $12\frac{1}{4}$ ft. broad and 5 ft. $4\frac{1}{2}$ inches deep?

(71) At an election the successful candidate polled $\frac{1}{3}$ more votes than the other. The number of voters was 11543. How many votes had each candidate?

(72) If the number of persons in receipt of relief in London was 76860 in the year 1877, and had decreased $\frac{1}{10}$ from the year 1876, which in its turn had shewn a decrease of $\frac{1}{5}$ on 1875, what was the average number for the three years?

(73) A person going on a journey travels $\frac{1}{7}$ the distance on the first day, $\frac{2}{13}$ of the remainder on the second, $\frac{3}{11}$ of what still remains on the third, and the remaining 48 miles on the fourth day. How many miles did he travel?

(74) How many lbs. Troy are contained in 2 tons $11\frac{3}{4}$ cwt.?

(75) Multiply 3 ac. 2 r. $11\frac{1}{4}$ p. by $26\frac{3}{4}$.

(76) Express 19 gallons $3\frac{1}{2}$ pints as a fr. of $11\frac{1}{4}$ barrels, each 36 gallons.

(77) How many sixteenths of an inch are there in $1\frac{1}{4}$ yards?

(78) A barrel of petroleum containing 60 gallons loses $\frac{1}{11}$ of its contents by evaporation, $\frac{9}{10}$ of the remainder is sold at 4*d.* per quart, i. e. $\frac{8}{5}$ of its cost price per quart. The remainder is sold at 2*d.* per quart. What was the entire gain?

(79) Simplify

$$\frac{1}{\frac{1}{2} \text{ of } 2\frac{1}{4} - \frac{1}{3}} \text{ of } \frac{2}{1 + \frac{1}{2} + \frac{1}{3} + \frac{1}{4}}$$

(80) Express $\frac{1}{2}$, $\frac{1}{3}$, $\frac{4}{7}$, $\frac{2}{9}$, $\frac{5}{11}$ as fractions with the same denominator.

(81) How many times is $\frac{1}{3}$ of an inch contained in $\frac{4}{11}$ of a quarter of a mile?

(82) Reduce $1\frac{3}{8}$ of $\frac{9}{22}$ of 3*s.* to the fr. of £1. 7. 0.

(83) From £1. 9. $10\frac{1}{2}$ take 13*s.* $6\frac{3}{4}$ *d.* and divide the remainder by $3\frac{1}{2}$.

(84) On four successive days the barometer stood at $29\frac{1}{10}$, on the next day at $30\frac{3}{100}$, the following day at $30\frac{17}{100}$, and on the next at 31 inches. What was the weekly average?

(85) How many strips of paper $20\frac{1}{2}$ inches wide will be required in papering the walls of a room 15 ft. $4\frac{1}{2}$ in. long and 10 ft. 3 in. broad?

(86) Add together £2. 1. $9\frac{3}{8}$, £4. 11. $0\frac{3}{10}$, £3. 16. $2\frac{7}{8}$, £1. 7. $6\frac{3}{8}$, £11. 16. $3\frac{3}{4}$, £1. 8. $0\frac{1}{2}$.

(87) Divide the third part of £2. 12. 6 by $\frac{1}{2}$ of $\frac{6}{7}$ of 5.

(88) What is the value of $11\frac{1}{8}$ yards of flannel at $2\frac{1}{2}$ *s.* per yard?

(89) Reduce to its simplest form

$$\left(\frac{2\frac{1}{8} \text{ of } \frac{4}{33} \text{ of } 14\frac{1}{7}}{\frac{5}{23} \times 7\frac{2}{7} \text{ of } 1\frac{8}{15}} \text{ of } \frac{1\frac{1}{4}}{7} \right) \div \frac{7\frac{2}{14}}{1 - \frac{2}{3} \text{ of } \frac{1}{2}}$$

(90) From 3 times $\frac{1}{11}$ of £11 $\frac{1}{10}$ take £2. 15. $4\frac{1}{2}$.

(91) If mercury be $13\frac{598}{1000}$ times as heavy as water, and a cubic foot of water weighs 1000 oz. Avoirdupois, what will be the weight of a cubic yard of mercury?

(92) How many rafters $2\frac{1}{2}$ in. by $3\frac{1}{2}$ in. and 18 ft. long could be cut from a block of wood 12 yards long, 3 ft. $2\frac{1}{2}$ in. broad and 1 ft. $5\frac{1}{2}$ in. thick?

(93) From $\frac{2}{3}$ of $\frac{7}{8}$ of 4 take $\frac{1}{5}$ of $\frac{6}{11}$ of 5.

(94) What sum of money is that if after the $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{14}$ and $\frac{1}{15}$ parts are given away there remains 15s.?

(95) A certain number divided by $2\frac{3}{4}$ gives $\frac{6}{11}$ as quotient; what would have been the product had it been multiplied by $2\frac{3}{4}$?

(96) Find the cost of $103\frac{1}{4}$ cwt. of sugar at 3s. $9\frac{1}{2}$ d. per stone.

(97) *A* has $\pounds 10\frac{1}{8}$ and *B* $\pounds 7\frac{1}{4}$. *A* pays to *B* $\frac{2}{7}$ of $5\frac{1}{2}$ of $\pounds 10$. 0 and *B* pays to *A* $\frac{3}{11}$ of $\frac{5}{8}$ of $\pounds 10$. How much has *A* now more than *B*?

(98) Find the solid content of a block of stone 25 in. long by $19\frac{3}{4}$ in. broad and $3\frac{5}{8}$ in. thick.

(99) Find the cost of $11\frac{1}{2}$ pieces of ribbon each $19\frac{5}{8}$ yards long at $11\frac{3}{4}$ d. per yard.

(100) Reduce $4^{\circ} 33' 45''$ to the fraction of 73° .

DECIMAL FRACTIONS.

Ex. I.

Express as Decimals :—

- (1) $\frac{3}{10}, \frac{3}{100}, \frac{3}{1000}$
- (2) $\frac{7}{100}, \frac{7}{10000}, \frac{70}{10000}$
- (3) $\frac{19}{10}, \frac{176}{100}, \frac{1}{1000}$
- (4) $\frac{111}{10}, \frac{109}{100}, \frac{1071}{10000}$
- (5) $\frac{107}{10000}, \frac{9}{10}, \frac{11}{100}, \frac{1599}{100000}$
- (6) $\frac{71}{10000}, \frac{81496}{1000000}, \frac{31}{1000000}$
- (7) $\frac{11}{10} + \frac{5}{10} + \frac{7}{10}$
- (8) $\frac{9}{10} + \frac{99}{100} + \frac{87}{10000}$
- (9) $\frac{103}{1000} + \frac{51}{100} + \frac{19}{100000} + \frac{17}{10000}$
- (10) 3 tenths + 7 millionths + 51 thousandths
- (11) 61 tenths + 15 hundredths + 13 ten-thousandths
- (12) 7 hundredths + 11 millionths + 113 hundred-thousandths
- (13) 51 millionths + 51 hundredths + 51 tenths
- (14) 1001 thousandths + 101 hundredths + 11 tenths
- (15) 516 hundredths + 19 millionths + 5 thousandths
- (16) 33 millionths + 33 thousandths + 33 ten-thousandths
- (17) 301 hundred-thousandths + 31 tenths + 3 ten-thousandths
- (18) 562 millionths + 726 tenths + 7296 thousandths
- (19) 15 hundredths + 12 hundred thousandths + 19 millionths
- (20) 92 tenths + 37 millionths + 87 thousandths
- (21) 111 tenths - 111 thousandths
- (22) 37 thousandths - 37 millionths
- (23) 5 hundred-thousandths - 18 millionths
- (24) 311 thousands + 151 tenths - 967 hundredths

- (25) 60 tenths + 11 ten-thousandths - 819 millionths
 (26) 476 millionths - 476 ten-millionths
 (27) 13 hundredths + 5 tenths - 71 ten-thousandths
 (28) 86 thousandths + 86 ten-millionths - 171 ten-thousandths
 (29) 11 tenths + 11 thousandths + 11 millionths - 11 hundredths
 (30) 37 ten-thousandths + 37 hundred-thousandths - 37 millionths

Ex. II.

Express as Vulgar Fractions :—

- (1) $\cdot 5, \cdot 05, \cdot 0005$
 (2) $\cdot 8, \cdot 81, \cdot 0081$
 (3) $\cdot 3, \cdot 003, \cdot 00003$
 (4) $\cdot 315, \cdot 5170, \cdot 86$
 (5) $\cdot 095, \cdot 0715, \cdot 02134$
 (6) $\cdot 514, \cdot 8136, \cdot 446$
 (7) $\cdot 00758, \cdot 02131, \cdot 061376$
 (8) $\cdot 221958, \cdot 6903, \cdot 08157$
 (9) $3\cdot 303, 33\cdot 03, \cdot 3303$
 (10) $\cdot 03031, 71\cdot 061, \cdot 00015$
 (11) $3\cdot 14, 8\cdot 219, 5\cdot 101$
 (12) $7\cdot 003, \cdot 07003, 70\cdot 03$
 (13) $5\cdot 1832, \cdot 2015, \cdot 000175$
 (14) $4\cdot 3103, 431\cdot 03, \cdot 043103$
 (15) $82\cdot 7, 590\cdot 006, 5\cdot 90006$
 (16) $36\cdot 07, 750\cdot 13, 8\cdot 0075$
 (17) $\cdot 021, 1\cdot 02, \cdot 00025$
 (18) $\cdot 713, 5\cdot 1903, 21\cdot 007$
 (19) $4\cdot 4041, 440\cdot 41, \cdot 0041$
 (20) $3\cdot 287516, \cdot 503, \cdot 030071$

Ex. III.

Find the value of:—

- (1) $2\cdot 4 + 3\cdot 14 + 3\cdot 6 + 9\cdot 12 + 8\cdot 04$
 (2) $\cdot 123 + \cdot 247 + \cdot 316 + \cdot 92 + \cdot 58$
 (3) $\cdot 7163 + \cdot 951 + \cdot 216 + \cdot 035 + \cdot 6923$
 (4) $51\cdot 7 + 7\cdot 8 + 5\cdot 936 + 72\cdot 31 + 61\cdot 3$

- (5) $92\cdot18 + 76\cdot95 + 576\cdot03 + 596\cdot37 + \cdot031$
- (6) $1\cdot03 + 5\cdot007 + \cdot051 + \cdot0175 + \cdot256$
- (7) $5\cdot071 + 371\cdot51 + \cdot0013 + \cdot015 + 2\cdot0158$
- (8) $7\cdot0021 + 15\cdot376 + \cdot00195 + 7\cdot308 + 3\cdot1032$
- (9) $\cdot0313 + 32\cdot156 + \cdot0212 + 7\cdot308 + 7\cdot39 + 73\cdot9$
- (10) $58\cdot205 + \cdot00157 + 20\cdot031 + 7\cdot595 + \cdot03176$
- (11) $73\cdot295 + \cdot3103 + 1\cdot0021 + 5\cdot906 + \cdot0713$
- (12) $8\cdot21 + 38\cdot017 + \cdot2906 + 1\cdot509 + 11\cdot81$
- (13) $5\cdot01736 + 9\cdot6 + 1\cdot9682 + \cdot0007 + 3\cdot3$
- (14) $99\cdot517 + 38\cdot6984 + 119\cdot5 + 38 + \cdot0117$
- (15) $1\cdot101 + 11\cdot01 + \cdot1101 + \cdot07876 + \cdot995$
- (16) $3\cdot704 + 9981\cdot17 + 92\cdot367 + \cdot01599 + \cdot04$
- (17) $156\cdot9 + 96\cdot51 + 78\cdot901 + 13\cdot22 + 17\cdot584$
- (18) $97\cdot316 + 1597\cdot308 + 316\cdot2917 + \cdot03 + 159\cdot1$
- (19) $76\cdot038 + 11\cdot215 + 68\cdot207 + 56 + 37\cdot013 + 96\cdot12$
- (20) $107\cdot0131 + 96\cdot317 + \cdot017 + 776\cdot9 + 15\cdot61$
- (21) $1596\cdot131 + 702\cdot021 + \cdot170038 + 319\cdot7 + 5\cdot93$
- (22) $3814\cdot04 + 243\cdot123 + \cdot013 + 66\cdot665 + 31\cdot581$
- (23) $58\cdot234 + 69\cdot3157 + \cdot071007 + 59\cdot1361 + 21\cdot5$
- (24) $49\cdot016 + \cdot0213 + 31\cdot21 + 44\cdot5609 + 38\cdot45 + 60\cdot12$
- (25) $30\cdot017 + 2916\cdot01 + 73\cdot037 + 381\cdot69 + \cdot017$
- (26) $11\cdot176 + 9\cdot609 + 38\cdot71 + 59\cdot687 + 1\cdot031 + \cdot19$
- (27) $573\cdot162 + 83\cdot017 + 92\cdot159 + 30\cdot031 + 99\cdot999$
- (28) $55\cdot7 + 31\cdot69 + 83\cdot15 + 95\cdot142 + 316\cdot208$
- (29) $29\cdot5 + 83\cdot79 + \cdot0915 + 7\cdot7161 + 51\cdot906$
- (30) $11\cdot154 + 32\cdot323 + 45\cdot44 + 36\cdot91 + 576\cdot28$
- (31) $705\cdot75 + 31\cdot021 + 69\cdot02 + 76\cdot3 + \cdot028$
- (32) $17\cdot177 + 426 + 37\cdot81 + \cdot219 + \cdot03101$
- (33) $8321\cdot9 + 537\cdot08 + 68\cdot005 + 13\cdot716 + 92\cdot37$
- (34) $188\cdot219 + 514\cdot0312 + 3\cdot806 + 299\cdot04$
- (35) $57\cdot063 + 219\cdot6093 + 5\cdot961 + 3\cdot215 + 8\cdot64$
- (36) $\cdot013 + \cdot179 + \cdot96703 + \cdot5967 + \cdot7968 + \cdot38$
- (37) $\cdot2915 + \cdot6813 + 6\cdot354 + \cdot0026 + \cdot79381$
- (38) $1159\cdot217 + 387\cdot61 + 71\cdot316 + 91\cdot204 + 74\cdot031$
- (39) $8613\cdot96 + 69\cdot6 + 71\cdot58 + \cdot021 + 73\cdot0074$
- (40) $440\cdot46 + 96\cdot87 + 596\cdot38 + 71\cdot96 + 69\cdot1$

Ex. IV.

(1)	$\cdot 356 - \cdot 298$	(26)	$\cdot 03107 - \cdot 00071961$
(2)	$\cdot 57031 - \cdot 3806$	(27)	$5\cdot 71021 - 2\cdot 369684$
(3)	$19\cdot 210 - 7\cdot 998$	(28)	$1\cdot 29613 - \cdot 672163$
(4)	$56\cdot 036 - 3\cdot 4796$	(29)	$\cdot 71031 - \cdot 314696$
(5)	$83\cdot 5102 - 27\cdot 847$	(30)	$1\cdot 11315 - \cdot 5968$
(6)	$5\cdot 7031 - 3\cdot 29164$	(31)	$10 - 8\cdot 20571$
(7)	$80\cdot 2150 - \cdot 37815$	(32)	$36\cdot 36 - 32\cdot 3156$
(8)	$21\cdot 012 - 7\cdot 31569$	(33)	$19\cdot 271 - 5\cdot 96913$
(9)	$17\cdot 369 - 5\cdot 446$	(34)	$8\cdot 264 - 6\cdot 03176$
(10)	$1\cdot 026103 - \cdot 21968$	(35)	$15\cdot 903 - 4\cdot 696843$
(11)	$51\cdot 0316 - 32\cdot 7147$	(36)	$1003\cdot 713 - 513\cdot 71314$
(12)	$23 - 19\cdot 6976$	(37)	$\cdot 30216 - \cdot 296167$
(13)	$70\cdot 151 - 15\cdot 8261$	(38)	$5\cdot 9013 - \cdot 696837$
(14)	$32\cdot 961 - 30\cdot 2169$	(39)	$\cdot 6931 - \cdot 021396$
(15)	$\cdot 13096 - \cdot 013096$	(40)	$7\cdot 2183 - 5\cdot 4145$
(16)	$736 - 57\cdot 829$	(41)	$1 - \cdot 007136$
(17)	$83\cdot 6 - 83\cdot 47916$	(42)	$12 - \cdot 517$
(18)	$5\cdot 89 - \cdot 02976$	(43)	$1500\cdot 5 - 714\cdot 286$
(19)	$1 - \cdot 00313$	(44)	$7 - 6\cdot 90086$
(20)	$\cdot 73 - \cdot 510317$	(45)	$70\cdot 107 - 69\cdot 89706$
(21)	$105 - 96\cdot 335$	(46)	$3001 - 597\cdot 31$
(22)	$63 - 15\cdot 0191$	(47)	$15 - 6\cdot 8461$
(23)	$20\cdot 1 - 20\cdot 00317$	(48)	$70\cdot 201 - 38\cdot 57$
(24)	$276 - 3\cdot 7173$	(49)	$136\cdot 159 - 136\cdot 0159$
(25)	$13 - 5\cdot 90516$	(50)	$1 - \cdot 996079$

Ex. V.

- | | | | |
|------|------------------------|------|---|
| (1) | 5.5×3.2 | (26) | $.2 \times 3.4 \times .5$ |
| (2) | 7.91×8.6 | (27) | $3.8 \times .07 \times .02$ |
| (3) | 3.25×4.5 | (28) | $11.01 \times 110 \times .1102$ |
| (4) | 2.25×1.16 | (29) | $.3 \times .033 \times 33.5$ |
| (5) | $9.07 \times .38$ | (30) | $29.58 \times 7.3 \times .072$ |
| (6) | $.05 \times .05$ | (31) | $11.56 \times .021 \times .386$ |
| (7) | $.26 \times .26$ | (32) | $276.5 \times .35 \times .08$ |
| (8) | $.3025 \times .5$ | (33) | $517 \times 517 \times .000517$ |
| (9) | 8.21×10 | (34) | $28.91 \times .2891 \times 2.891$ |
| (10) | 5.319×1.01 | (35) | $.03 \times .07 \times 7.007$ |
| (11) | 336.8×7.25 | (36) | $.71 \times 31.5 \times .0024$ |
| (12) | $.0441 \times .04$ | (37) | $4.44 \times .044 \times 54.4$ |
| (13) | 56.802×1.09 | (38) | $312.21 \times 11.63 \times .071$ |
| (14) | 19.21×3.65 | (39) | $119.5 \times .036 \times 1.21$ |
| (15) | $.0587 \times 2.11$ | (40) | $.47 \times .47 \times 47.$ |
| (16) | 3.102×31.02 | (41) | $200 \times 3.41 \times .023$ |
| (17) | $.56801 \times 3000$ | (42) | $3.05 \times 29.5 \times .00048$ |
| (18) | 190.901×1.9 | (43) | $2 \times .22 \times 1.3085$ |
| (19) | $.0021 \times .07$ | (44) | $.5 \times .08 \times .931 \times .095$ |
| (20) | $36.2185 \times .229$ | (45) | $1.02 \times 102 \times 10.2 \times .102$ |
| (21) | $.115 \times .7269$ | (46) | $3600 \times .36 \times 3.6 \times .03$ |
| (22) | $3.5804 \times .0358$ | (47) | $.006 \times .55 \times 25 \times .83$ |
| (23) | $.0631 \times .00028$ | (48) | $.002 \times .071 \times .00038$ |
| (24) | 90.157×9015 | (49) | $5.107 \times .05107 \times .05 \times 700$ |
| (25) | $338.022 \times .0076$ | (50) | $3.8 \times 38000 \times .0025$ |

Ex. VI.

(1)	$\cdot 36288 \div 2$	(26)	$5 \div \cdot 5$
(2)	„ $\div 3$	(27)	$1\cdot 7 \div \cdot 5$
(3)	„ $\div 4$	(28)	$38\cdot 67 \div 10$
(4)	„ $\div 5$	(29)	$11\cdot 564 \div 1000$
(5)	„ $\div 6$	(30)	$2\cdot 25 \div 100$
(6)	„ $\div 7$	(31)	$\cdot 276 \div 10000$
(7)	„ $\div 8$	(32)	$11\cdot 564 \div \cdot 38$
(8)	„ $\div 9$	(33)	$2\cdot 25 \div \cdot 015$
(9)	$36\cdot 288 \div \cdot 2$	(34)	$3\cdot 62 \div 8$
(10)	„ $\div \cdot 3$	(35)	$92\cdot 007 \div \cdot 09$
(11)	„ $\div \cdot 4$	(36)	$5\cdot 635 \div \cdot 63$
(12)	„ $\div \cdot 5$	(37)	$8 \div \cdot 0064$
(13)	„ $\div \cdot 6$	(38)	$7\cdot 15 \div 31\cdot 55$
(14)	„ $\div \cdot 7$	(39)	$\cdot 06286 \div 73\cdot 9$
(15)	„ $\div \cdot 8$	(40)	$11\cdot 002 \div \cdot 0032$
(16)	„ $\div \cdot 9$	(41)	$5960\cdot 31 \div \cdot 2864$
(17)	$3\cdot 6288 \div \cdot 02$	(42)	$1 \div \cdot 0075$
(18)	„ $\div \cdot 03$	(43)	$31\cdot 05 \div \cdot 314$
(19)	„ $\div \cdot 04$	(44)	$\cdot 002715 \div 655$
(20)	„ $\div \cdot 05$	(45)	$8\cdot 001837 \div 900$
(21)	„ $\div \cdot 006$	(46)	$302 \div 14\cdot 215$
(22)	„ $\div \cdot 007$	(47)	$6 \div \cdot 000715$
(23)	„ $\div \cdot 08$	(48)	$130\cdot 2 \div 2\cdot 5$
(24)	„ $\div \cdot 9$	(49)	$81\cdot 61 \div 7\cdot 96$
(25)	„ $\div \cdot 009$	(50)	$100\cdot 13 \div 4\cdot 75$

Ex. VII.

Reduce to Decimals :—

- | | |
|---|---|
| (1) $\frac{8}{15}, \frac{9}{12}$ | (23) $\frac{11}{12}$ of $\frac{3}{4}$ of $1\frac{1}{2}$ |
| (2) $\frac{5}{18}, \frac{11}{440}$ | (24) $1\frac{9}{10}$ of $\frac{5}{8}$ of 4 |
| (3) $\frac{3}{4}, \frac{19}{8}$ | (25) $\frac{7}{11}$ of $\frac{33}{4}$ of $\frac{17}{16}$ |
| (4) $\frac{7}{25}, \frac{111}{50}$ | (26) $\frac{5}{14}$ of $\frac{77}{80}$ of 6 |
| (5) $\frac{2}{5}, \frac{18}{45}$ | (27) $13\frac{1}{2}$ of $\frac{7}{8}$ of $\frac{11}{40}$ |
| (6) $\frac{104}{40}, \frac{31}{64}$ | (28) $\frac{77}{88}$ of 90 |
| (7) $\frac{42}{125}, \frac{791}{625}$ | (29) $1\frac{2}{3}$ of $\frac{6}{7}$ of $1\frac{1}{5}$ of 3 |
| (8) $\frac{80}{250}, \frac{1031}{750}$ | (30) $\frac{11}{102}$ of $\frac{17}{4}$ of 18 |
| (9) $\frac{59}{64}, \frac{912}{400}$ | (31) $1\frac{1}{2}$ of $2\frac{1}{2}$ of $3\frac{1}{4}$ |
| (10) $\frac{7}{32}, \frac{181}{1250}$ | (32) $11\frac{6}{7}$ of $\frac{70}{81}$ of 243 |
| (11) $3\frac{1}{4}, 5\frac{1}{2}$ | (33) $\frac{1}{25}$ of $\frac{5}{6}$ of $\frac{6}{7}$ of 42 |
| (12) $1\frac{1}{8}, 3\frac{7}{8}$ | (34) $\frac{1}{9}$ of $\frac{1}{10}$ of $\frac{3}{4}$ of $\frac{2}{5}$ |
| (13) $4\frac{1}{2}, 1\frac{3}{5}$ | (35) $\frac{19}{20}$ of $\frac{5}{8}$ of $\frac{1}{4}$ |
| (14) $1\frac{1}{2}$ of $2\frac{1}{4}$ | (36) $\frac{11\frac{1}{2}}{7}$ of $2\frac{1}{4}$ |
| (15) $\frac{3}{4}$ of $\frac{4}{5}$ of 7 | (37) $9\frac{1}{2}$ of $\frac{37}{8}$ of $2\frac{3}{4}$ |
| (16) $\frac{1}{2}$ of $\frac{2}{13}$ of $3\frac{1}{4}$ | (38) $7\frac{1}{4}$ of $\frac{5}{6}$ of $1\frac{18}{5}$ |
| (17) $\frac{71}{512}$ of $2\frac{1}{4}$ | (39) $1\frac{2}{15}$ of $3\frac{1}{25}$ of $\frac{1}{14}$ |
| (18) $\frac{91}{180}$ of $4\frac{7}{8}$ | (40) $1\frac{3}{17}$ of $8\frac{5}{8}$ of $\frac{3\frac{3}{16}}{11\frac{1}{2}}$ |
| (19) $6\frac{3}{4}$ of $\frac{11}{2500}$ of 9 | |
| (20) $\frac{187}{51200}$ of $\frac{6400}{5120}$ of $\frac{16}{374}$ | |
| (21) $1\frac{1}{25}$ of $\frac{5}{8}$ | |
| (22) $\frac{2}{5}$ of $\frac{1}{24}$ of 50 | |

RECURRING DECIMALS.

Ex. VIII.

Reduce to Decimals :—

- | | |
|---|---|
| (1) $\frac{1}{3}, \frac{1}{6}, \frac{1}{7}$ | (16) $\frac{31}{9}, \frac{16}{15}$ |
| (2) $\frac{2}{9}, \frac{5}{7}, \frac{2}{3}$ | (17) $\frac{1}{13}, \frac{1}{17}$ |
| (3) $\frac{1}{15}, \frac{109}{180}, \frac{11}{105}$ | (18) $\frac{1}{23}, \frac{1}{27}$ |
| (4) $\frac{7}{11}, \frac{5}{14}, \frac{2}{11}$ | (19) $\frac{4}{31}, 1\frac{2}{27}$ |
| (5) $\frac{13}{18}, \frac{5}{13}, \frac{6}{7}$ | (20) $\frac{9}{111}, 1\frac{3}{13}$ |
| (6) $\frac{4}{3}, \frac{5}{6}, \frac{3}{14}$ | (21) $\frac{102}{101}, \frac{53}{163}$ |
| (7) $\frac{108}{14}, \frac{901}{330}$ | (22) $\frac{11}{28}, \frac{62}{81}$ |
| (8) $\frac{17}{18}, \frac{9}{42}, \frac{8}{12}$ | (23) $\frac{316}{144}, \frac{113}{339}$ |
| (9) $\frac{40}{370}, \frac{512}{117}$ | (24) $\frac{25}{58}, \frac{37}{55}$ |
| (10) $\frac{56}{49}, \frac{18}{9}$ | (25) $\frac{13}{42}, \frac{180}{234}$ |
| (11) $4\frac{1}{30}, 11\frac{5}{140}$ | (26) $\frac{71}{7}, \frac{60}{63}$ |
| (12) $6\frac{4}{70}, 3\frac{17}{21}$ | (27) $\frac{117}{91}, \frac{85}{283}$ |
| (13) $\frac{48}{13}, \frac{6}{11}$ | (28) $\frac{92}{89}, \frac{95}{57}$ |
| (14) $\frac{80}{6}, \frac{111}{220}$ | (29) $\frac{704}{27}, \frac{821}{99}$ |
| (15) $\frac{36}{37}, \frac{10}{21}$ | (30) $\frac{512}{700}, \frac{1}{31}$ |

Ex. IX.

Reduce to Vulgar Fractions :—

- | | |
|----------------------------|------------------------------|
| (1) $\cdot 3, \cdot 015$ | (6) $\cdot 24, \cdot 18$ |
| (2) $\cdot 21, \cdot 17$ | (7) $\cdot 0037, \cdot 063$ |
| (3) $\cdot 54, \cdot 16$ | (8) $\cdot 0304, \cdot 051$ |
| (4) $\cdot 081, 819$ | (9) $\cdot 0036, \cdot 0036$ |
| (5) $\cdot 45, \cdot 0036$ | (10) $\cdot 812, 4\cdot 71$ |

- | | |
|--|-------------------------------------|
| (11) $\cdot 42857\bar{1}$, $\cdot 031\bar{7}$ | (36) $\cdot 51438\bar{2}$ |
| (12) $\cdot 036\bar{1}$, $21\cdot 00\bar{3}$ | (37) $\cdot 5430\bar{8}$ |
| (13) $5\cdot 41\bar{6}$, $17\cdot 06\bar{9}$ | (38) $\cdot 10\bar{8}$ |
| (14) $6\cdot 3\bar{8}\bar{2}$, $8\cdot 04\bar{3}$ | (39) $\cdot 340\bar{9}$ |
| (15) $17\cdot 31\bar{6}$, $2\cdot 00\bar{5}$ | (40) $\cdot 76\bar{2}195\bar{1}$ |
| (16) $11\cdot 61\bar{9}$, $11\cdot 61\bar{9}$ | (41) $3\cdot 031\bar{7}$ |
| (17) $31\cdot 931\bar{8}$, $5\cdot 07\bar{6}$ | (42) $5\cdot 0031\bar{8}$ |
| (18) $12\cdot 603\bar{1}$, $4\cdot 076\bar{4}$ | (43) $1\cdot 0001\bar{7}$ |
| (19) $\cdot 0031\bar{5}$, $\cdot 0031\bar{5}$ | (44) $11\cdot 2021\bar{3}$ |
| (20) $\cdot 0100\bar{1}$, $\cdot 0100\bar{1}$ | (45) $5\cdot 76093\bar{1}$ |
| (21) $3\cdot 261\bar{4}$, $7\cdot 081\bar{3}$ | (46) $\cdot 003158\bar{6}$ |
| (22) $13\cdot 600\bar{4}$, $9\cdot 20\bar{9}$ | (47) $\cdot 071428\bar{5}$ |
| (23) $6\cdot 71\bar{4}$, $5\cdot 91\bar{6}$ | (48) $\cdot 06318\bar{2}$ |
| (24) $5\cdot 63\bar{8}$, $6\cdot 940\bar{3}$ | (49) $4\cdot 0061\bar{3}$ |
| (25) $3\cdot 303\bar{3}$, $3\cdot 303\bar{3}$ | (50) $\cdot 56927\bar{4}$ |
| (26) $15\cdot 043\bar{2}$, $51\cdot 9$ | (51) $\cdot 30310\bar{3}$ |
| (27) $16\cdot 031\bar{4}$, $8\cdot 277\bar{6}$ | (52) $\cdot 0010\bar{7}$ |
| (28) $1\cdot 83\bar{1}$, $\cdot 0031\bar{4}$ | (53) $\cdot 001010\bar{1}$ |
| (29) $\cdot 021\bar{6}$, $\cdot 021\bar{6}$ | (54) $\cdot 001010\bar{1}$ |
| (30) $5\cdot 1\bar{9}$, $3\cdot 10\bar{8}$ | (55) $\cdot 44642857\bar{1}$ |
| (31) $7\cdot 3\bar{1}$, $6\cdot 2\bar{4}$ | (56) $\cdot 4735162\bar{9}$ |
| (32) $\cdot 07\bar{6}$, $6\cdot 9\bar{2}$ | (57) $\cdot 03225806451612\bar{9}$ |
| (33) $\cdot 0042857\bar{1}$ | (58) $\cdot 000213\bar{6}$ |
| (34) $\cdot 3175\bar{4}$ | (59) $3\cdot 0071428\bar{5}$ |
| (35) $\cdot 07692\bar{3}$ | (60) $\cdot 058823529411764\bar{7}$ |

Ex. X.

Find the value correct to 5 places of decimals of:—

- (1) $\cdot 036 + 11\cdot 058 + 9\cdot 071 + \cdot 71428\bar{5}$
- (2) $\cdot 0037\bar{5} + \cdot 010\bar{6} + \cdot 3214\bar{7} + \cdot 062\bar{5}$
- (3) $\cdot 31\bar{3} + 9\cdot 0\bar{6} + 7\cdot 031 + \cdot 0071\bar{4}$
- (4) $\cdot 82960\bar{3} + \cdot 563\bar{2} + 59\cdot 03\bar{7} + \cdot 069\bar{2}$

- (5) $88\cdot063 + 461\cdot034 + \cdot91 + \cdot074$
 (6) $16\cdot0381 + \cdot02165 + 13 + 5\cdot09613$
 (7) $3\cdot02 + 5\cdot19 + \cdot00217 + \cdot30216$
 (8) $7\cdot0428 + 3\cdot69 + 57\cdot031 + 9\cdot0064$
 (9) $3\cdot0216 + \cdot00621 + 2\cdot814 + 5\cdot9162$
 (10) $\cdot0313 + \cdot000314 + 5\cdot96 + 8\cdot1254$
 (11) $\cdot0625 - \cdot0037$
 (12) $\cdot5167 - 2\cdot8634$
 (13) $\cdot4721 - \cdot09989$
 (14) $1\cdot5623 - \cdot07156$
 (15) $3\cdot0021 - \cdot1037$
 (16) $\cdot6032 - \cdot0785196$
 (17) $1\cdot00316 - \cdot828569$
 (18) $3\cdot02105 - \cdot072163$
 (19) $1\cdot2 - 1\cdot1769$
 (20) $1\cdot13 - \cdot587463$
 (21) $\cdot1 - \cdot09$
 (22) $1\cdot00107 - \cdot08372$
 (23) $1\cdot7 + \cdot037 + 1\cdot92 - 2\cdot0058$
 (24) $3\cdot031 + \cdot0721 - 2\cdot1396$
 (25) $4\cdot0026 + 3\cdot157 - \cdot00796$
 (26) $1\cdot00716 - \cdot00716$
 (27) $3\cdot284 + \cdot0721 + \cdot036 - \cdot158$
 (28) $1\cdot0314 + \cdot382 - 1\cdot27603$
 (29) $\cdot04 - \cdot007132$
 (30) $\cdot373 + \cdot03 + 51\cdot82 - 16\cdot307$
 (31) $\cdot03 \times \cdot58$
 (32) $\cdot0091 \times \cdot7163$
 (33) $\cdot5906 \times \cdot07$
 (34) $1\cdot284 \times \cdot0307$
 (35) $\cdot714285 \times \cdot361$
 (36) $11\cdot072 \times 5\cdot086$
 (37) $\cdot11216 \times \cdot0037$
 (38) $2\cdot8421 \times \cdot0185$
 (39) $\cdot0041 \times \cdot725$
 (40) $\cdot00113 \times 4\cdot071$
 (41) $3\cdot03 \div \cdot58$
 (42) $1\cdot27 \div \cdot037$
 (43) $\cdot03142 \div \cdot067$

- (44) $2.12\dot{4} \div .30\dot{2}$
 (45) $.026 \div .789\dot{5}$
 (46) $\dot{3} \div .115\dot{6}$
 (47) $.20\dot{7} \div 5.29\dot{4}$
 (48) $11.06\dot{3} \div 3.2\dot{1}$
 (49) $.072\dot{6} \div 4.64\dot{7}$
 (50) $.00316\dot{2} \div 3.15\dot{3}$

Ex. XI.

Find the value of:—

- (1) 1.5 of 1s.; and 2.25 of £1
 (2) 3.75 of 1*d.*; and 6.625 of £1
 (3) .1706 of £1; and 3.824 of £5
 (4) .096 of 10s.; and 20.175 of 2s. 6*d.*
 (5) 1.028 of £2. 10; and .03175 of £1. 10. 0
 (6) .071695 of £20; and 2.476 of £45
 (7) 3.6825 of £11. 10. 0; and 5.75 of 4 guineas
 (8) 1.026 of 5 half-guineas; and 1.0675 of 13s. 4*d.*
 (9) .7158 of £17. 10. 0; and 11.025 of 5s.
 (10) .625 of £3. 2. 6; and .0258 of £5. 10. 0
 (11) .3865 of a ton
 (12) .96 of 2 tons 10 cwt.
 (13) 5.0375 of a mile
 (14) 1.28625 of 1 lb. Troy
 (15) .031675 of an acre
 (16) .8325 of $2\frac{1}{2}$ acres
 (17) 11.275075 of a year
 (18) 5.19 of a cubic yard
 (19) 3.10025 of 5 ac. 3 roods
 (20) 2.17 of 2 lb. 14 oz.
 (21) .02755 of 5 days
 (22) .3125 of a bushel
 (23) 6.325 of 6 cwt. 3 qrs.
 (24) .706 of 5 tons 11 cwt.
 (25) 3.804 of 8 cwt. 3 qrs. 5 lbs.
 (26) .625 of 3 yds. 2 ft. 6 in.

- (27) 3.75 of 1 fur. 25 p.
 (28) .0025 of 2 ac. 3 r. 12 p.
 (29) 61.0765 of a square mile
 (30) .03136 of 10 tons
 (31) 3.998 of 1 yd. 1 ft. 6 in.
 (32) .3865 of $7\frac{1}{2}$ sq. yards
 (33) .0764 of $9\frac{3}{4}$ days
 (34) 6.82315 of $3\frac{1}{2}$ lbs. Troy
 (35) 15.7196 of $3\frac{3}{4}$ miles
 (36) 3.71625 of 3 hhds.
 (37) 15.007 of 15 leagues
 (38) 1.085 of a barrel (36 gallons)
 (39) .7162 of a degree (69.1 miles)
 (40) 4.045 of 1 cwt. 2 qrs. 14 lbs.
 (41) 2.15 of £1 + .0375 of 10 guineas + .0625 of £10
 (42) .076 of £5 + .025 of 5s. + .02775 of 10s.
 (43) 3.168 of 15s. + .915 of 6s. 8d. + .185 of a crown
 (44) 7.013 of £2. 10. 0 + .15 of £3. 2. 6 + .04 of 25s.
 (45) .3 of 3s. 4d. + .021 of £50 + .25 of 11s. 6d.
 (46) .94 of £5 + .94 of £3 + 1.325 of 2s. 6d.
 (47) 1.8 of £1. 2. 6 + .046 of $11\frac{1}{2}$ d. - 1.25 of 15s.
 (48) 3.175 of £100 + 1.225 of 100 guineas - 70.75 of £1
 (49) .0261 of £5. 8. 4 + 11.5 of 9s. + .3 of 2s. 6d.
 (50) .017 of 16s. 8d. + .142857 of a guinea
 (51) .09 of 22s. + .075 of £40 - .875 of 2s.
 (52) 3.35 of 5 tons + .103 of 49 tons 10 cwt.
 (53) .0716 of 495 tons + .428571 of 2 qrs.
 (54) .3 of a yard + .3 of a ft. + .125 of 1 ft. 4 in.
 (55) .09 of a furlong + .01136 of a mile
 (56) .06 of an hour + .03 of 1 min. 6 sec.
 (57) .714285 of a week - .6 of an hour
 (58) .076923 of 1 qr. 11 lbs. + .0714285 of 2 qrs.
 (59) 3.145 of £3. 15. 0 - .857142 of £2. 16. 0
 (60) .03 of 1 lb. Troy + .416 of 1 oz. Troy

Ex. XII.

Reduce:—

- | | | | |
|------|--------------------|-----------------------------|----------------|
| (1) | 2s. 6d. | to the decimal of £1 | |
| (2) | 7s. 6d. | ” | £1. 5. 0 |
| (3) | 16s. 8d. | ” | £5 |
| (4) | 3s. 4d. | ” | £1. 6. 8 |
| (5) | 5s. 6d. | ” | £2 |
| (6) | £1. 10. 6 | to the decimal of £9. 10. 0 | |
| (7) | £10. 10. 0 | ” | £1. 4. 0 |
| (8) | £1. 4. 0 | ” | 10 guineas |
| (9) | 2s. 7½d. | ” | 4s. 2d. |
| (10) | 11s. 6¼d. | ” | 5s. 4d. |
| (11) | £2. 1. 8 | ” | 1s. 8d. |
| (12) | 1s. 8d. | ” | £2. 1. 8 |
| (13) | 3s. | ” | a guinea |
| (14) | 11s. 10d. | ” | 40s. |
| (15) | £1. 9. 0½ | ” | £10 |
| (16) | 6s. 8d. | ” | £13. 6. 8 |
| (17) | 15s. | ” | a guinea |
| (18) | 2¾d. | ” | £1. 2. 6 |
| (19) | 4s. 6½d. | ” | 5s. 10d. |
| (20) | 3s. 4¼d. | ” | 19s. 6d. |
| (21) | 2 tons 3 cwt. | to the decimal of 10 tons | |
| (22) | 1 cwt. 3 qrs. | ” | half a ton |
| (23) | 3 oz. 2 dwts. Troy | ” | 1 lb. Troy |
| (24) | 3 yds. 1 ft. | ” | 1 furlong |
| (25) | 2 ft. 6 in. | ” | a yard |
| (26) | 5 fur. 13 p. | ” | a mile |
| (27) | 7 fur. 10 p. | ” | 3 m. 1 fur. |
| (28) | 12 cwt. 2 qrs. | ” | 4 cwt. 2 qrs. |
| (29) | 4 cwt. 2 qrs. | ” | 12 cwt. 2 qrs. |
| (30) | 5 lbs. 8 oz. | ” | 1 cwt. 8 lbs. |
| (31) | 40 sq. yds. | ” | an acre |
| (32) | 3 ac. 2 r. | ” | 28 acres |
| (33) | 1½ sec. | ” | a minute |
| (34) | 6° 31' | ” | 5° 20' |
| (35) | 30' 25" | ” | 2° 30' |

(36)	1 cubic foot to the decimal of a cubic yard	
(37)	3 nails	2 yards
(38)	1 yd. 3 qrs. 3 n.	$1\frac{1}{2}$ yards
(39)	3 bus. 2 pecks	1 qr. 5 bus.
(40)	$2\frac{3}{4}$ pecks	3 bush.
(41)	29 ac. 3 r.	a square mile
(42)	13 ac. 2 r. 20 p.	a square mile
(43)	5 lbs. 4 oz.	8 oz. 8 drams.
(44)	2 scr. 15 grs.	1 lb. Apoth.
(45)	1 lb. Troy	1 lb. Avoir.
(46)	1 lb. Avoir.	1 lb. Troy
(47)	$2\frac{3}{4}$ shillings	a guinea
(48)	5 half-crowns	3 half-guineas
(49)	$13\frac{3}{4}$ florins	£3
(50)	$7\frac{1}{2}$ gallons	18 gallons
(51)	10 cwt. 3 qrs.	2 tons 11 cwt.
(52)	$5^0 13' 40''$	$12^0 30'$
(53)	$11\frac{3}{4}$ sq. ft.	4 sq. yards
(54)	$9\frac{1}{2}$ guineas	12s. 6d.
(55)	$2^0 12' 30''$	360^0
(56)	£1. 7. 9	£2. 1. 8
(57)	$12\frac{3}{4}$ ac.	3 r. 1 p.
(58)	$3\frac{1}{2}$ lbs.	2 stones
(59)	£6. 6. 0	£80
(60)	1 ton 11 cwt. 3 qrs. to the decimal of 5 tons 10 cwts.	

Ex. XIII.

- (1) What is meant by the term "decimal fraction"?
- (2) Express in words $\cdot 5132$.
- (3) What is the effect of multiplying any decimal fraction by 10, 100 or 1000?
- (4) Divide $\cdot 031$ by 10 and $1\cdot 037$ by 1000.
- (5) Express as vulgar fractions
 $\cdot 031$, $\cdot 0079$, $\cdot 001$ and $7\cdot 103$.
- (6) Express as decimal fractions: three-tenths, nine thousandths, seven hundred and five ten-thousandths, four hundredths, and six tenths.

(7) Find the sum of seventy-nine tenths, five thousandths, eighty-nine ten thousandths, five hundred and four thousandths, and nine tenths.

(8) From $\cdot 1$ take $\cdot 0031$ and multiply the remainder by $\cdot 07$.

(9) From thrice $4\cdot 017$ take twice $\cdot 90516$.

(10) Find the sum of

$$3\cdot 102 + \cdot 00071 + 5\cdot 876 + 1\cdot 2 + \cdot 31907 + \cdot 027 + 310\cdot 68 + \cdot 0000743 \\ + 38\cdot 691 + \cdot 1041457.$$

(11) Find the sum of $\cdot 06 + \cdot 031 + \cdot 0028$ + four times $\cdot 22655$.

(12) Divide the sum of $8\cdot 25$ and $4\cdot 125$ by their difference.

(13) Divide the sum of $7\cdot 12306$ and $1\cdot 01758$ by their difference.

(14) Multiply $\cdot 00315$ by $\cdot 0713$.

(15) Express $\cdot 02695$ as a vulgar fraction.

(16) What is the value of $\cdot 025$ of £2. 12. 6?

(17) Find the value of £ $\cdot 125 + \cdot 125$ of a guinea + $\cdot 125$ of a shilling.

(18) How many times may $\cdot 125$ be taken from 10?

(19) Reduce $\frac{3}{31}$ to a decimal.

(20) What decimal represents the difference between $\frac{1}{3}$ and $\frac{4}{21}$?

(21) Express in account money the sum of

$$£\cdot 375 + £\cdot 9604 + £5\cdot 906 + £30\cdot 125.$$

(22) Multiply £10 by $5\cdot 136$.

(23) Find the value of $\cdot 0625$ of 1 ton 10 cwt.

(24) The side of a square field measures $3769\cdot 05$ yards; what is its area?

(25) A train travels $7\cdot 306$ furlongs per minute; how many miles does it travel in an hour?

(26) The price of bread is $1\cdot 25d.$ for $\cdot 75$ lbs.; what is that per stone?

(27) One hundred and eight steps each $\cdot 583$ ft. high lead to the summit of a tower; what is its height?

(28) Divide $1\cdot 2$ by $\cdot 00012$.

(29) Find the value of $\cdot 03156$ of £11. 12. 9.

(30) Multiply $\cdot 0313\bar{2}$ by $7\cdot 09\bar{5}$ correct to seven places of decimals.

(31) Reduce $\frac{11\bar{3}}{44}$ to a decimal.

(32) Find the value of $11\frac{5}{\bar{3}}$ of £47. 5. $4\frac{3}{4}$, and express the result as a decimal of £100.

(33) Find the sum of $\cdot 27$ cwt. + $\cdot 385$ tons + $\cdot 071428\bar{5}$ of 3 qrs. + $\cdot 625$ of 3 qrs. 6 lbs.

(34) What would be the cost of $13\cdot 07625$ tons of soda at $\cdot 09d.$ per lb.?

(35) Reduce $\frac{4}{\bar{2}\bar{3}}$ to a decimal.

(36) A stone is $3\cdot 87$ ft. long, $2\cdot 465$ ft. broad, and 1 ft. 6 in. thick; what is its solidity?

(37) The specific gravity of dry oak is to water as $\cdot 6777$ is to 1. Express this as a vulgar fraction.

(38) Wheat contains in every 100 parts, water 14, flesh-forming substances $14\cdot 6$, heat-givers $66\cdot 4$, accessories $3\cdot 4$, and mineral matters 1·6 parts by weight. What weight of each is there in a bushel of wheat weighing 60 lbs.?

(39) Reduce

$$\frac{1\cdot 5 + 2\cdot 96}{4\cdot 46} + \frac{2\cdot 75 \text{ of } 1\cdot 0\bar{9}}{\cdot 025 \times \cdot 12} + \frac{3\cdot 5\bar{9} \text{ of } \cdot 025}{\cdot 09}$$

to its simplest form.

(40) On the equator the length of a pendulum beating seconds is $39\cdot 0168$ inches and at the poles $39\cdot 217$ inches. Express the difference as the decimal of a yard.

(41) Multiply £3. 12. 6 by $\cdot 0756$.

(42) Divide $\cdot 001$ by $7\cdot 568$.

(43) Reduce £3. 1. $7\frac{1}{2}$ to the decimal of £8.

(44) Express $\frac{17}{11\bar{9}}$ as a decimal.

(45) Reduce $\cdot 42857\bar{1}$ to a vulgar fraction.

(46) How many cubic feet of water are contained in a tank $30\cdot 125$ ft. long, $11\cdot 08$ yds. wide, and 6 ft. deep?

- (47) Reduce 13'6s. to the decimal of £1. 10. 11½.
- (48) Find the cost of 114'3165 tons of cast-iron at £5. 10. 0 per ton.
- (49) Find the weight of 373'025 ft. of girder iron at 23'076 lbs. per yard.
- (50) Divide the difference between 3'1047 and '0731 by the sum of 1'27 and 11'384.
- (51) Find the value correct to seven places of decimals of

$$62\cdot0073 \div \cdot558065\bar{7}.$$
- (52) Reduce '012345679 to a vulgar fraction.
- (53) Add together £10'158 + £11'068⅔ + £'069.
- (54) The $\frac{1}{100}$ part of an inch of gold thread contains $\frac{1}{7200000}$ of a grain of that metal. Express this as a decimal of 1 lb. Troy.
- (55) The mean temperature for June was 70'1906 degrees, for July 68'53, and for August 76'007; what was the mean for the three months?
- (56) Give the corresponding decimals to £⅛, ⅓s., ⅕d.
- (57) Divide £40. 5. 0 by 8'05, and reduce the quotient to the decimal of £20.
- (58) The annual death-rate in a town containing 80,000 inhabitants is 29'075 per thousand. How many persons died in a quarter of a century?
- (59) Divide 10⅓ by '012345679.
- (60) If wheat is sold at 1'875s. per peck, what is the price per quarter?
- (61) If the cost of making and distributing penny postage stamps averages '0125d. each, what is the gain on the sale of 12 millions of stamps?
- (62) What is the cost of 13½ gross of flower-pots at 5'037d. per dozen?
- (63) A person gains '05s. in the £ by the sale of £360 worth of goods. What is his entire gain?
- (64) The price of land is 3'175d. per sq. yard; what is that per acre?

- (65) Multiply 1 cwt. 2 qrs. 14 lbs. by $\cdot 428571$.
- (66) The Mint price of gold is £3·89375 per ounce; what is the value of 138 lbs. 10 oz.?
- (67) Find the value of 9·8 guineas + $\cdot 625$ of a shilling + $\cdot 00375$ of £40.
- (68) Express 9 cwt. 3 qrs. 12 lbs. 8 oz. as the dec. of 2 tons 10 cwt.
- (69) From £9·6 take $5\cdot 037$ of a guinea.
- (70) How many times is $9\cdot 037$ poles contained in 244 acres?
- (71) A merchant buys 376 cwt. 3 qrs. 12 lbs. of sugar at $3\cdot 3d.$ per lb. and sells it at the rate of £1. 15. 0 per cwt. What does he gain?
- (72) Reduce 5 oz. 15 dwts. 12 grs. to the decimal of a lb. Troy.
- (73) What is the rent of a farm of 520·876 acres at £2·964 per acre?
- (74) A piece of gold weighing a lb. was made into 50 rings: what was the weight of each, allowing $\cdot 943$ oz. waste in manufacturing?
- (75) Find the continued product of 1·3, 1·03, $\cdot 013$, and 100·0013.
- (76) Reduce $\frac{13}{14}$, $\frac{14}{15}$ and $\frac{15}{16}$ to decimals, and find the decimal corresponding to the quotient obtained by dividing the greatest by the least.
- (77) Find the difference between $\cdot 714285$ of 3 half-guineas and 6·9845 of 5 half-crowns.
- (78) Multiply $\cdot 03104$ by $\cdot 02173$.
- (79) Find the value of $\cdot 07385$ of an acre.
- (80) Reduce $\cdot 079165$ to a vulgar fraction.
- (81) What is the weight of 11 trucks of coal, each weighing 9 tons 13·58 cwts.?
- (82) Find the value of £7·148 + 6·314s. + 10·25d.
- (83) Reduce a mile to the decimal of a knot (2000 yds.).
- (84) In every 100 parts by weight turnips contain 90·5 parts water: what weight of water is there in a ton of turnips?
- (85) Reduce $6^{\circ} 13' 22''$ to the decimal of a quadrant (90°).

(86) How many times will a wheel 10·175 ft. round revolve in going a distance of 5 miles ?

(87) The circumference of a circle is 3·1416 times the diameter; what is the diameter of a circle whose circumference is 219·912 ft. ?

(88) Rice contains 74·1 per cent. of starch, potatoes 15·5 per cent.; how much starch would be contained in a cwt. of each ?

(89) Find the value of ·795 cwt. + ·968 qr. + ·915 lb. - ·03 of a ton.

(90) Reduce $\frac{15\cdot7 - 14\cdot037}{\cdot025} + \frac{5\cdot027}{\cdot972} - \frac{3\cdot25 \text{ of } 4}{4\cdot3 \times \cdot230769}$

to its simplest form.

(91) Divide the sum of 13·3 and 1·33 by their difference.

(92) What decimal multiplied by 62·5 will give 1 ?

(93) A canal is 17 miles long, with an average width of 30 ft. and depth of 5·09 ft. How many cubic feet of water does it contain ?

(94) Multiply £10. 12. 1 by 3·675.

(95) Find the value of ·0968 of a year.

(96) Divide 3·0072 by $\frac{5}{8}$ of 4·561.

(97) Reduce £2. 1. 9½ to the decimal of £4. 10. 0.

(98) Reduce the difference between 3½ guineas and £3·207 to the decimal of £1.

(99) What is the cost of 529615 c. feet of gas at £·225 per thousand feet ?

(100) If a lb. of tea cost 1·2916s., what would ·642857i of a cwt. cost ?

SIMPLE PRACTICE.

Find by Practice the value of

(1) 120 at 1s. 6 <i>d.</i>	(29) 440 at £1. 3. 4
(2) 134 „ 6 <i>d.</i>	(30) 159 „ £1. 12. 6
(3) 284 „ 4 <i>d.</i>	(31) 316 „ £1. 17. 6
(4) 130 „ 4½ <i>d.</i>	(32) 7210 „ £1. 16. 8
(5) 99 „ 5 <i>d.</i>	(33) 86 „ £1. 13. 4
(6) 111 „ 5½ <i>d.</i>	(34) 9905 „ £2. 1. 8
(7) 73 „ 8 <i>d.</i>	(35) 723 „ £2. 15. 0
(8) 75 „ 9½ <i>d.</i>	(36) 896 „ £3. 17. 0
(9) 179 „ 10¾ <i>d.</i>	(37) 3117 „ £2. 19. 0
(10) 58 „ 11¼ <i>d.</i>	(38) 538 „ £2. 16. 8
(11) 29 „ 2s. 6 <i>d.</i>	(39) 1147 „ £1. 10. 10
(12) 38 „ 5s. 0 <i>d.</i>	(40) 599 „ £3. 18. 4
(13) 57 „ 13s. 4 <i>d.</i>	(41) 647 „ £7. 15. 6
(14) 138 „ 15s. 0 <i>d.</i>	(42) 8396 „ £11. 10. 8
(15) 73 „ 17s. 6 <i>d.</i>	(43) 729 „ £5. 16. 9
(16) 119 „ 16s. 8 <i>d.</i>	(44) 106 „ £3. 19. 9
(17) 204 „ 18s. 0 <i>d.</i>	(45) 1137 „ £2. 11. 5
(18) 193 „ 19s. 6 <i>d.</i>	(46) 1216 „ £8. 14. 2
(19) 726 „ 14s. 7 <i>d.</i>	(47) 1100 „ £2. 12. 11
(20) 302 „ 13s. 11 <i>d.</i>	(48) 1135 „ £4. 9. 10
(21) 98 „ 16s. 5 <i>d.</i>	(49) 1604 „ £5. 0. 10
(22) 147 „ 11s. 10 <i>d.</i>	(50) 1998 „ £2. 0. 9
(23) 562 „ 19s. 9 <i>d.</i>	(51) 738 „ £13. 7. 9½
(24) 835 „ 7s. 7½ <i>d.</i>	(52) 1551 „ £8. 6. 7½
(25) 916 „ 3s. 6 <i>d.</i>	(53) 527 „ £2. 2. 2½
(26) 527 „ 18s. 4½ <i>d.</i>	(54) 1663 „ £7. 13. 1½
(27) 608 „ 11s. 9½ <i>d.</i>	(55) 1876 „ £6. 14. 9¼
(28) 1309 „ 12s. 10½ <i>d.</i>	(56) 998 „ £9. 5. 8¾

(57)	711 at	£3. 11. 10	(79)	400 at	£13. 13. 0½
(58)	804 „	£50. 15. 5½	(80)	576 „	£23. 17. 6
(59)	1016 „	£11. 12. 9¼	(81)	740 „	£3. 11. 5¼
(60)	119 „	£1. 0. 11½	(82)	908 „	£7. 17. 0¾
(61)	35 „	£2. 9. 8¼	(83)	444 „	£6. 19. 11¾
(62)	113 „	£1. 19. 11¾	(84)	816 „	£12. 12. 6
(63)	720 „	£3. 14. 10¾	(85)	1039 „	£1. 19. 4¾
(64)	999 „	£6. 11. 7½	(86)	960 „	£1. 19. 11¾
(65)	960 „	£1. 0. 0¾	(87)	1475 „	£123. 6. 8½
(66)	1025 „	£15. 13. 9¼	(88)	405 „	£73. 2. 9¼
(67)	374 „	£9. 11. 0¾	(89)	8½ „	£1. 12. 2
(68)	501 „	£2. 18. 4½	(90)	19½ „	£7. 11. 5
(69)	143 „	£3. 6. 5	(91)	102¼ „	£4. 17. 6
(70)	236 „	£3. 14. 11¼	(92)	36¾ „	£3. 10. 7
(71)	109 „	£1. 16. 7½	(93)	199½ „	£1. 14. 10
(72)	149 „	£3. 19. 8½	(94)	56¾ „	£2. 2. 8
(73)	702 „	£2. 0. 5¼	(95)	80¾ „	£7. 12. 8
(74)	864 „	£6. 13. 9	(96)	179½ „	£1. 6. 9¼
(75)	132 „	£4. 5. 8¼	(97)	38¼ „	£14. 19. 6
(76)	203 „	£7. 12. 11	(98)	601⅒ „	£20. 5. 8
(77)	446 „	£9. 11. 10	(99)	73⅒ „	£2. 9. 9½
(78)	399 „	£7. 11. 11¾	(100)	62⅓ „	£5. 14. 7

(101) Find the cost of 112 bushels of barley at 6s. 2½d. per bushel.

(102) What is the cost of 372 bags of linseed at £1. 11. 10½ per bag?

(103) A person owes £2100, and pays 3s. 9d. in the £; what is the amount of his assets?

(104) What is the cost of laying 318 miles of railway at £2916. 13. 8 per mile?

(105) Find the value of 4 pieces of gold, each 13¼ ounces, at the rate of £3. 17. 10½ per oz.

(106) Find the value of 1309 roubles at 2s. 5¼d. each.

(107) What is the salary for a year (365 days) at £1. 1. 11¼ per day?

(108) Find the interest on a sum of money for 111 days at the rate of 11s. 7¼d. per day.

(109) What is the rent of 29 houses at £13. 14. 2 each per year?

(110) What will a rate of 1s. $3\frac{1}{2}d.$ in the £ produce on a rateable value of £9091?

(111) If the annual cost per head for the maintenance of troops be £44. 9. 8, what would be the cost of maintaining 25000 men?

(112) What is the cost of 1396 bushels of apples at $10\frac{3}{4}d.$ a peck?

(113) What is the cost of driving 158 $\frac{1}{2}$ yards of piles at an average cost of £2. 11. $10\frac{1}{2}$ per yard?

(114) What is the amount of a bankrupt's assets who fails for £21009 and pays 11s. $10\frac{3}{4}d.$ in the £?

(115) What is the cost of an article of silver plate weighing 93 $\frac{1}{2}$ ounces if the silver cost 5s. $8d.$ per oz. and workmanship 2s. $9d.$ per oz.?

(116) What is the total loss in 6 years' wear of iron rails, if in that period a railway company buys 3726 tons of new rails at £11. 16. 0 per ton, and sells annually 479 tons of old ones at £8. 9. 7 per ton?

(117) What is the value of 329 bales of cotton at £11. 13. $9\frac{1}{2}$ per bale?

(118) What is the cost of 11 logs of mahogany, each 104 cub. ft., at £2. 9. 10 per cub. ft.?

(119) Express in account money the value of 1131 merks, each 13s. $4d.$

(120) Find the value of a rick of hay containing $11\frac{3}{4}$ tons at four guineas per ton.

(121) What sum would be paid by 19 travellers, taking return tickets, Birmingham to Paris, at £3. 16. $9\frac{3}{4}$ each?

(122) Find the value of 118 $\frac{1}{2}$ tons of scrap iron at £4. 11. $9\frac{1}{2}$ per ton.

(123) What is the cost of 706500 fire-bricks at three guineas and a half per thousand?

(124) Find the rent of 1103 $\frac{1}{4}$ acres of land at £4. 17. $8\frac{1}{2}$ per acre.

(125) What is the cost of paving 208 sq. poles of roadway at 11s. $7\frac{1}{2}d.$ per sq. yd.?

(126) A nobleman with a rent roll of £24000 a year pays a land tax of $7d.$ in the £ upon it, and an income tax of $4d.$ in the £ on his net rental. What amount does he receive?

(127) Find the cost of 17 pieces of cloth, each 91 yards, at 14s. 6d. per yard.

(128) By how much does the cost of $11\frac{1}{4}$ yds. of carpet at 3s. 6d. exceed the cost of $13\frac{1}{2}$ yds. at half a crown per yard?

(129) Find the cost of 103 yds. of linen at 2s. $10\frac{1}{2}$ d. per yard.

(130) What is the cost of 609 lineal feet of floorcloth at 13s. $8\frac{1}{2}$ d. per yard?

(131) What is the cost of 140 dozen of table-knives, half at 9s. 8d. per dozen and the rest at 10s. 2d. per dozen?

(132) What is the cost of $90\frac{1}{2}$ dozen pairs of boots at 12s. 9d. per pair?

(133) Find the whole cost of $11\frac{1}{2}$ yds. of calico at 7d., $9\frac{1}{2}$ yds. at $8\frac{1}{2}$ d., and 103 yards at $5\frac{1}{2}$ d.

(134) What is the value of 10 qrs. 3 bus. of wheat at 6s. $10\frac{1}{2}$ d. per bus.?

(135) What would be the cost of sinking a shaft 3 yards square by 69 feet deep at a cost of £1. 11. $10\frac{3}{4}$ per solid yard?

(136) What would be the value of the butter produced by 1470 cows in a year if each produced $5\frac{1}{4}$ lbs. weekly, the selling price being 18s. per stone?

(137) What is the cost of carriage for $30\frac{1}{2}$ miles at $9\frac{1}{2}$ d. per mile?

(138) What is the cost of 107 shares at £93. 15. 8 each?

(139) A gold miner pays £1. 10. 0 per month for license to dig. During 11 months he finds seven nuggets, each $5\frac{1}{2}$ oz. on the average, and $316\frac{1}{2}$ ounces of gold dust. What is his net gain if he sells the gold dust at £3. 4. 6 and the nuggets at £3. 14. 11 per oz.?

(140) If 319 doz. Reading Books at 18s. per doz., 193 doz. at 16s. 6d., and 111 doz. at 11s. 3d. be sold in the course of a year, what money should be received for them if 2d. in every shilling be allowed purchasers as discount?

(141) Find the cost of $12\frac{1}{4}$ tons of guano at 9s. $7\frac{1}{2}$ d. per cwt.

(142) What is the cost of $111\frac{1}{2}$ bus. of grass seeds at 31s. 9d. per bus.?

(143) Find the whole cost of $32\frac{1}{2}$ tons of Swede turnips at £4. 6. 3 per ton, and $5\frac{1}{4}$ tons of Mangold at £4. 7. 8.

(144) What amount of money will pay the wages of 320 men for a week if each earns £1. 11. $10\frac{1}{2}$?

(145) What would be the entire cost of 8 vans of salt, each 5 tons 15 cwt., at £2. 18. 10 per ton, the cost of carriage being 5s. $3\frac{1}{2}d.$ per ton?

(146) *A* works 37 weeks, receiving $3\frac{3}{4}$ guineas per week, *B* works 43 weeks 3 days, at 7s. 9d. per day, and *C* works 36 weeks 3 days (9 hrs. daily), and is paid $9\frac{1}{2}d.$ per hour. How much do they earn altogether?

(147) Find the value of 3061 sacks of flour at £2. 7. $3\frac{1}{2}$ per sack.

(148) What is the total cost of 31 lbs. cheese at $9\frac{1}{2}d.$, 43 lbs. bacon at $8\frac{1}{4}d.$, and 3 hams, each $15\frac{1}{4}$ lbs., at 1s. per lb.?

(149) What will a rate of $11\frac{1}{2}d.$ in the £ produce on an assessment of £447. 10. 0?

(150) What is the cost of $16\frac{2}{3}$ cwt. of sugar at the rate of three half-crowns per qr.?

COMPOUND PRACTICE.

- (1) 2 tons 10 cwt. at 13s. per ton.
- (2) 3 cwt. 2 qrs. 14 lbs. at £2. 1. 4 per cwt.
- (3) 33 lbs. 11 oz. at 6s. 8d. per lb.
- (4) 5 lbs. 14 oz. 8 drs. at 16s. per lb.
- (5) 110 cwt. 3 qrs. 21 lbs. at £2 per cwt.
- (6) 3 cwt. 3 qrs. 21 lbs. at £1. 10. 0 per cwt.
- (7) 11 tons 17 cwt. 3 qrs. 14 lbs. at £4. 10. 0 per ton.
- (8) 110 tons 11 cwt. 3 qrs. 14 lbs. at £9 per ton.
- (9) 36 cwt. 3 qrs. 19 lbs. at £1. 14. 0 per cwt.
- (10) 11 cwt. 3 qrs. 12 lbs. 8 oz. at £14 per ton.
- (11) 58 ac. 3 r. 25 p. at £320 per acre.
- (12) 7 ac. 2 r. 11 p. at £125 per acre.
- (13) 11 lbs. 8 oz. 15 dwts. 12 grs. at £2. 2. 0 per lb.
- (14) 5 yds. 1 ft. 9 in. at 13s. 6d. per yard.
- (15) 11 yds. 2 ft. 11 in. at 14s. per yard.
- (16) 15 cub. yds. 9 ft. 576 in. at £12 per yd.
- (17) 8 sq. yds. 5 ft. 112 in. at £7. 7. 0 per sq. yd.
- (18) 103 qrs. 7 bus. 3 pks. 1 gal. at £4. 5. 0 per qr.
- (19) 73 lds. 3 qrs. 5 bus. 3 pks. at £4. 4. 0 per qr.
- (20) 131 yrs. 39 wks. at £52. 10. 0 per year.
- (21) 38 qrs. 18 lbs. 9 oz. at £1. 8. 0 per qr.
- (22) 123 yds. 3 qrs. 3 nls. at 11s. 6d. per yard.
- (23) 404 lbs. 5 oz. 6 drs. 2 scr. at £5. 10. 0 per lb.
- (24) 119 tons 7 cwt. 13 lbs. at £2. 10. 0 per ton.

- (25) 73 oz. 5 dr. 1 sc. 15 grs. at £6. 0. 0 per lb.
- (26) 16 ac. 1 r. 12 p. at £17. 17. 0 per acre.
- (27) 119 yds. 2 ft. 11 in. at £1. 3. 7 per yd.
- (28) 15 tons 13 cwt. 3 qrs. 9 lbs. at £3. 0. 0 per cwt.
- (29) 5 qrs. 27 lbs. 3 oz. 8 drs. at £1. 1. 8 per lb.
- (30) 13 yds. 3 qrs. 3 n. 1 in. at £1. 19. 6 per yd.
- (31) 303 sq. yds. 5 ft. 104 in. at £7. 1. 6 per sq. yd.
- (32) 16 tons 13 cwt. 3 qrs. 14 lbs. at £2. 9. 0 per ton.
- (33) 7 tons 5 cwt. 1 qr. 19 lbs. at £5. 12. 0 per cwt.
- (34) 13 yds. 2 ft. 6 in. at £1. 11. 6 per yd.
- (35) 8 yds. 1 ft. 9 in. at 6s. 9d. per yd.
- (36) 73 qrs. 5 bus. 3 pks. at 73s. per qr.
- (37) 19 qrs. 4 bus. 3 pks. at 58s. 6d. per qr.
- (38) 11 lbs. 5 oz. 10 dwts. at £3. 16. 0 per lb.
- (39) 18 yrs. 5 mths. 1 wk. at £50 per year.
- (40) 11 yds. 1 ft. 6 in. at £1. 9. 4 per yd.
- (41) 20 lbs. Avoir. 10 oz. 8 drs. at £1. 5. 0 per lb.
- (42) 114 lbs. Avoir. 8 oz. at £1. 8. 0 per cwt.
- (43) 90 ac. 3 r. 20 p. at £5. 0. 0 per acre.
- (44) 17 ac. 1 r. 28 p. at £7. 16. 0 per acre.
- (45) 7 tons 3 cwt. 2 qrs. 21 lbs. at £2. 0. 0 per ton.
- (46) 15 cwt. 3 qrs. 24 lbs. at £7 per ton.
- (47) 15 qrs. 6 bus. 3 pks. at £4 per qr.
- (48) 3 qrs. 5 bus. 2 pks. at £3. 9. 0 per qr.
- (49) 19 sq. yds. 5 ft. 110 in. at £17. 0. 0 per sq. yd.
- (50) 51 ac. 3 r. 11 p. at £6. 10. 0 per acre.
- (51) 115 cub. yds. 9 ft. 864 in. at £3 per c. yd.
- (52) 71 lbs. 11 oz. 5 dwts. at £1. 3. 6 per lb.
- (53) 13 qrs. 22 lbs. 12 oz. at £10 per qr.
- (54) 105 yrs. 73 days at £50. 10. 0 per yr.
- (55) 36 wks. 3 dys. 12 hrs. at £2. 2. 0 per week.
- (56) 1215 yds. 3 qrs. 3 nls. at 3s. 6d. per yard.

- (57) 11 yds. 1 qr. 3 nls. at 5s. 8*d.* per yard.
- (58) 135 yds. 2 ft. 9 in. at 11*d.* per yard.
- (59) 42 yds. 1 ft. 8 in. at 1s. 8*d.* per yard.
- (60) 1900 ac. 3 r. 14 p. at £13. 10. 0 per acre.
- (61) 173 lbs. 8 oz. 9 dwts. 18 grs. at £3. 17. 10½ per oz.
- (62) 21 ac. 3 r. 25 p. at £8 per acre.
- (63) 17 yds. 1 ft. 3 in. at 4s. 8*d.* per yard.
- (64) 111 sq. yds. 8 ft. 56 in. at 3s. per sq. yd.
- (65) 58 qrs. 6 bus. 2 pks. at £3. 1. 0 per qr.
- (66) 110 days 15 hrs. 30 min. at 11s. 8*d.* per day.
- (67) 105 cub. yds. 9 ft. 1000 in. at £70 per cub. yd.
- (68) 11 tons 13 cwt. 3 qrs. at 16s. 8*d.* per ton.
- (69) 51 cwt. 2 qrs. 11 lbs. at 16s. 8*d.* per ton.
- (70) 19 lbs. 11 oz. 13 drs. at 5s. per lb.
- (71) 113 cwt. 1 qr. 15 lbs. at 8s. 6*d.* per ton.
- (72) 58 yds. 1 ft. 5½ in. at 2s. 6*d.* per yard.
- (73) 17 yds. 2 ft. 11¼ in. at 6s. per yard.
- (74) 101 yds. 3 qrs. 2 n. 2 in. at 11s. per yard.
- (75) 133 sq. yds. 5 ft. 72 in. at 3½*d.* per sq. yard.
- (76) 15 ac. 3 r. 12¾ p. at £105 per acre.
- (77) 203 m. 5 f. 19 p. at £6. 15. 0 per mile.
- (78) 17 lbs. 5 oz. 4 dwts. 20 grs. at £1. 10. 6 per oz.
- (79) 5 tons 13 cwt. 13 lbs. at £1. 1. 0 per ton.
- (80) 7 qrs. 5 bus. 1 pk. at £3. 5. 0 per qr.
- (81) 3 tons 11¼ lbs. at £2. 10. 0 per cwt.
- (82) 705 cub. yds. 19½ c. ft. at £7. 16. 0 per cub. yd.
- (83) 115 ac. 38 poles at £5. 5. 0 per acre.
- (84) 36¾ lbs. Troy at 6s. per ounce.
- (85) 19½ lbs. Avoir. at £2. 2. 0 per cwt.
- (86) 32131 qrs. 5 bus. at £15. 10. 0 per load.
- (87) 2 lbs. 5 oz. 5 dwts. at 19s. 6*d.* per lb.
- (88) 1101 ft. 11 in. at 3s. 6*d.* per yard.

- (89) 156 yds. 2 ft. $4\frac{1}{2}$ in. at 8s. per yard.
- (90) 21 years 315 days at £90. 12. 0 per year.
- (91) 5 mo. 3 wks. 5 days at £3. 10. 0 per month.
- (92) 316 days 5 hours 36 min. at £3 per day.
- (93) 16 tons 11 cwt. $19\frac{1}{2}$ lbs. at £4 per cwt.
- (94) 3 qrs. 15 lbs. 12 oz. at 6s. per lb.
- (95) 54 tons 9 cwt. 3 qrs. 11 lbs. at £6. 8. 0 per cwt.
- (96) 109 ac. 3 r. 19 p. at £7. 16. 0 per acre.
- (97) 39 hhds. 15 gals. 3 qts. at 18s. per hhd.
- (98) 1091 gals. 3 qts. 1 pt. at 3s. per gallon.
- (99) 715 sq. yds. 7 ft. 110 in. at £1. 6. 0 per sq. yd.
- (100) 21 ac. 3 r. $11\frac{1}{4}$ p. at $3\frac{1}{4}d.$ per sq. yd.
- (101) 83 lbs. 9 oz. 11 drs. at 5s. per lb.
- (102) 50 packets, each 3 lbs. $5\frac{1}{2}$ oz., at 3s. $4d.$ per lb.
- (103) 111 packages, each 17 cwt. 1 qr. 10 lbs., at £1. 1. 0 per ton.
- (104) 38 parcels, each 83 yds. 1 qr. 2 nls., at 7s. $6d.$ per yd.
- (105) 15 parcels, each 104 yds. 3 qrs. 3 nls., at 2s. $6d.$ per yd.
- (106) 7 plots, each 38 ac. 3 r. $29\frac{1}{2}$ p., at £5. 10. 0 per ac.
- (107) 13 plots, each 91 ac. 1 r. $10\frac{1}{4}$ p., at £4. 4. 0 per ac.
- (108) 17 loads, each 1 ton 3 cwt. 1 qr. 5 lbs., at £1 per ton.
- (109) 6 loads, each 14 cwt. 21 lbs., at 15s. $8d.$ per ton.
- (110) 111 ac. 3 r. $19\frac{1}{2}$ poles at £2 per acre.
- (111) 73 casks, each 36 gals. 1 qt. 1 pt., at 10s. per gal.
- (112) 15 casks, each weighing 5 qrs. 11 lbs. 8 oz., at 25s. per cwt.
- (113) 300 loads, each 1 ton 2 cwt. 2 qrs., at 11s. $6d.$ per cwt.
- (114) 51 hhds., each 1 cwt. 3 qrs. 17 lbs., at 8s. $6d.$ per ton.
- (115) 11 pieces, each 105 yds. 3 qrs. 3 n., at 2s. per yd.
- (116) 721 pieces, each 9 yds. 0 ft. $5\frac{1}{2}$ in., at 6s. per yard.
- (117) 13 packets, each 2 lbs. 5 oz. 5 dwts. Troy, at £3. 16. 0 per oz.
- (118) 121 packets, each 3 lbs. 2 oz. 7 dwts. Troy, at 5s. $10d.$ per oz.
- (119) 17 tons 11 cwt. 3 qrs. 15 lbs. 8 oz. at £2. 16. 0 per ton.
- (120) 15 ac. 3 r. 17 poles 20 yds. at £16 per acre.

- (121) Find the cost of 11 cwt. 3 qrs. of coal at 15s. 6*d.* per ton.
- (122) What is the weight of 60 packages, each 5 cwt. 1 qr. 7 lbs.?
- (123) Find the value of 11 lbs. 5 oz. 13 dwts. at £4 per oz.
- (124) What is the charge for carrying 11 tons 5 cwt. 3 qrs. 14 lbs. of goods at the rate of 13s. 4*d.* per ton?
- (125) What weight of coals is burnt in 85 days if 3 cwt. 3 qrs. 21 lbs. be consumed per day?
- (126) How many cubic yards may be excavated in 120 days at the rate of 5 cub. yards 9 ft. 864 in. per day?
- (127) Find the cost of 11 yds. 3 qrs. 3 n. at 11s. 6*d.* per yard.
- (128) What is the value of 93 qrs. 5 bus. 3 pks. at 51s. 6*d.* per qr.?
- (129) Find the rent of 504 ac. 3 r. 13 p. at £4 per acre.
- (130) If in estimating the rateable value of an estate one-sixth part is allowed off the Gross Rental, what is the rateable value of 3102 ac. 3 r. of land, the rent of which is £6. 15. 0 per acre?
- (131) Find the rent of a farm of 375 acres, of which 198 acres 1 r. 20 p. is grass land at £7. 10. 6 per acre and the rest arable at £4. 19. 0 per acre.
- (132) How many miles &c. are there in 35° 30' 20" longitude on a parallel of latitude on which 1° measures 62 miles?
- (133) From 1 cwt. 1 qr. 1 lb. take 2 qrs. 11 lbs., and find the value of the remainder at 30s. per cwt.
- (134) Find the cost of 11½ stones of bran at 11½*d.* per stone.
- (135) What is the cost of 7 blocks of stone, each 11 cwt. 1 qr. 14 lbs., at £2. 1. 0 per cwt.?
- (136) A ton of straw cost £4. 10. 0: what is that for 1 ton 11 cwt. 2 qrs. 14 lbs.?
- (137) Find the cost of cutting a new road 7 m. 5 fur. 154 yds. long at £450 per mile.
- (138) What is the cost of 13 tons 3 qrs. 21 lbs. of salt at 8s. per cwt.?
- (139) Find the value of 11 yds. 1 qr. 1 n. of cloth at 9s. 10*d.* per yard.

(140) What is the rent of a house for 5 years 73 days at £12. 10 per annum?

(141) What sum will be required to pay for 131 bus. 3 pks. 1 gallon of seed potatoes at 2s. 6d. per bushel?

(142) Find the cost of 11 ac. 3 r. 31 p. of land at £170. 16. 0 per acre.

(143) What is the cost of paving a court-yard 103 ft. 6 in. by 15 yds. 2 ft. 6 in. at 3s. 6d. per square yard?

(144) Find the cost of 160 cwt. 3 qrs. 11 lbs. of sugar at 28s. per cwt. if 1s. in the £ be deducted for cash.

(145) Find the value of 6 bales of silk, each 36 yds. 11 inches, at 14s. 9d. per yard.

(146) Find the entire cost of 11 cwt. 1 qr. of tobacco at £20. 10. 0 per cwt. and 5 cwt. 3 qrs. 11 lbs. at 20 guineas per cwt.

(147) What is the cost of 29 firkins of butter, each 1 cwt. 1 qr. 14 lbs., at £6. 10. 0 per cwt.?

(148) Find the cost of 11 lbs. 8 oz. 6 dr. of nutmegs at 1s. per lb. Avoirdupois.

(149) Find the weight of 116 packages, each 11 cwt. 3 qrs. 15½ lbs.

(150) Find the area of 726 plots of land, each 1 ac. 3 r. 12 p. 20 yds.

(151) What is the rent of 1 ac. 3 r. 12 p. 10 yds. at £24. 4. 0 per acre?

(152) What is the cost of 23 sacks of potatoes, each 15½ stones, at £7 per ton?

(153) A farmer sows 13 ac. 3 r. 30 p. of peas and 42 ac. 2 r. of beans. On the former he realises £12. 10. 0 per acre and on the latter £10. 10. 0; what is his profit after paying £4. 15. 0 per acre rent?

(154) Find the cost of 127 tons 13 cwt. 3 qrs. 14 lbs. of steel rails at £13. 10 per ton.

(155) What is the cost of 37 oz. 13 dwt. of silver at 8s. per oz.?

(156) Find the value of 16 packs of cloth, each 39 yds. 3 qrs. 3 nls., at the rate of 11s. 9d. per yard.

(157) What is the cost of the leaden lining of a cistern 11 yards long, 12½ ft. broad, and 4 ft. deep, the lead weighing 16 lbs. per square foot, and costing £2. 3. 9 per cwt.?

(158) What is the cost of a block of marble weighing 11 tons 13 cwt. 13 lbs. at £9. 6. 8 per ton?

(159) Find the whole cost of

5 cwt. 3 qrs. 11 lbs. cheese at £2. 5. 0 per cwt.

11 cwt. 3 qrs. 17 lbs. do. at £3. 0. 0 per cwt.

2 cwt. 1 qr. 19 lbs. do. at £3. 10. 0 per cwt.

(160) Find the cost of 1314 bars of soap, each 3 lbs., at £2. 6. 6 per cwt.

(161) A ton of goods cost for conveyance 11s. 6d.: what would be the cost of 8 packages, each weighing 4 cwt. 1 qr. 14 lbs.?

(162) Bought 50 barrels of pearl ashes, each 3 qrs. 19 lbs., at £5 per cwt.: what did I pay for them?

(163) Find the cost of 1 ton 3 cwt. 1 qr. 11 lbs. of copperas at 5s. 6d. per cwt.

(164) What is the cost of 5 puncheons of whiskey, each 165 gallons, at 15s. 8d. per gallon, if a shilling in the £. be allowed for prompt payment?

(165) Find the cost of 11 cases of gunpowder, each containing 93 lbs., at £7. 10. 0 per cwt.

(166) What is the value of 18 casks of brandy, each 53 gallons 3 qts. 1 pt., at 27s. per gallon?

(167) If I bought at Canton 93 chests of tea, each 96 lbs., what did they cost me when delivered in London if I paid £8 per cwt. for the tea, £1. 10. 0 per cwt. carriage, and 6d. per lb. duty?

(168) Find the value of 13 tons 11 cwt. 14 lbs. of salt at £4 per ton.

(169) What was the cost of 27 armour-plates, each weighing 13 tons 14 cwt. 3 qrs., at £13 per ton?

(170) Find the weight of 1376 barrels of herrings, each 3 cwt. 1 qr. 26 lbs.

(171) What is the duty on 111 gallons 3 qts. 1½ pints of brandy at 10s. 8d. per gallon?

(172) Find the cost of 30 lbs. 11 oz. 8 drs. of opium at 18s. 6d. per lb.

(173) Find the whole cost of

11 tons 5 cwt. 1 qr. salt at £5 per ton.

5 tons 12 cwt. 3 qrs. do. at £4. 10. 0 per ton.

9 tons 13 cwt. 1 qr. do. at £4. 16. 0 per ton.

(174) What is the cost of $3\frac{1}{2}$ tons of madder at £3. 6. 0 per cwt.?

(175) Received payment for 11 cwt. 3 qrs. 24 lbs. of goods at the rate of £2. 16. 0 per cwt. less a commission of 2s. 6d. in the £. What sum did I receive?

(176) What weight of hay should I get from 37 ac. 3 r. 20 poles at 2 tons 10 cwt. per acre?

(177) What is the cost of 313 cub. yards 19 ft. 144 in. of pitch pine at 13s. 6d. per cubic yard?

(178) Find the cost of 103 gallons 1 qt. 1 pint of rum at £1. 4. 6 per gallon.

(179) What is the value of 14 cwt. 3 qrs. 9 lbs. of sugar at £9 per ton?

(180) Find the cost of 103 cwt. 3 qrs. 21 lbs. of fish at 4s. 8d. per cwt.

(181) By selling goods at a certain price I lose 9s. 4d. per cwt.; what did I lose on 8 tons 15 cwt. 27 lbs.?

(182) What is the cost of 1136 yds. 2 ft. 9 in. at 2s. 6d. per yd.?

(183) Find the cost of 31 cwt. 3 qrs. 19 lbs. 8 oz. at £14 per ton.

(184) What is the cost of 14 pieces of sheeting each 11 yds. 1 qr. 1 n. at 3s. 8d. per yard?

(185) Find the cost of 11 gallons 3 qts. 1 pint of oil at 22s. 6d. per 9 gallon cask.

(186) What is the cost of 119 tons 14 cwt. of potatoes at £82 per 10 tons?

(187) Find the value of an estate as follows:

474 ac. 3 r. 20 p. grass land at £76 per acre,

119 ac. 1 r. 12 p. tillage at £50 per acre,

and 103 ac. 14 p. woodland at £40 per acre.

(188) Find the worth of 13 cwt. 13 lbs. of tobacco at 5 guineas per quarter.

(189) What is the cost of laying 1 m. 3 fur. 27 poles of drain-pipes at the rate of £96. 10. 0 per mile?

(190) Find the worth of 1194 cub. ft. 192 cub. in. of timber at £20 per cub. yard.

(191) What is the cost of 34 cwt. 2 qrs. 16 lbs. of soap at 18s. per cwt.?

(192) What dividend should be paid on £504. 17. 6 at the rate of 12s. 8d. in the £?

(193) Find the cost of erecting 5 fur. 13 p. 3 yds. of wire fencing at £1. 4. 6 per pole.

(194) Find the cost of glazing ten shop windows with plate glass, each window containing 3 panes 6 ft. 8 in. by 5 ft. 6 in. at 19s. 6d. per sq. foot.

(195) Find the dividend payable on £1105. 13. 4 at 3s. 4d. in the £.

(196) Bought 63 qrs. 5 bus. of wheat at £3. 3. 0 per qr.; at what price should it be sold so as to gain exactly £2. 2. 5 on the whole?

(197) What is the cost of painting the walls of a room 16 ft. long 14 ft. 6 in. broad and 8 ft. 6 in. high at 1s. 6d. a sq. yd.?

(198) What is the cost of 30 beams of timber each 37 ft. long, 1 ft. 9 in. broad and 1 ft. 9 in. thick at 2s. 6d. per cubic foot?

(199) At £230 a year what is the amount of salary for 2 years 219 days?

(200) Find the total cost of 3 oak king-posts for a roof each 18 ft. by 16 in. by 15 in. at 4s. per cub. ft.; 3 memel tie-beams 22 ft. by 20 in. by 15 in. at 3s. per cub. ft.; and 120 rafters each 21 ft. by 3 in. by 4 in. at 8d. per cub. ft.

(201) Find the cost of papering a room 119 ft. long by 31 ft. wide and 18 ft. high, with French wall-paper which is 18 inches broad, if a roll 12 yards long costs 2s. 3d.

(202) Find the rent of 126 ac. 1 r. 19½ p. at £46 per acre.

(203) What weight of mangolds should be produced by 13 ac. 3 r. 20 p. at 3 tons 5 cwt. per acre?

(204) Find the value of 20 pieces of print each 29 yds. 1 ft. 6 in. at 1s. 6d. per yard.

(205) Find by Practice the value of 1·125 ton + 714285 of a cwt. + 25 of a lb. at £35 per ton.

(206) What is the cost of varnishing inside and outside a box 4 ft. 6 in. long 3 ft. broad and 2 ft. 6 in. deep at 2d. per square foot?

(207) Find the weight of 30 packages each 2 cwt. 1 qr. 26 lbs.

(208) Find the cost of replacing the iron work of a bridge weighing 4796 tons at £8. 9. 6 per ton if £7 per ton be allowed for the old iron work of the bridge which weighs 303 tons 11 cwt. 3 qrs. 14 lbs.

(209) Find the length of 143 rolls of paper for newspaper printing each 4 miles 3 fur. 140 yards long.

(210) What would be the cost of 200 rolls of paper each 6 cwt. 1 qr. 20 lbs. at £34. 10. 0 per ton?

(211) Find the cost of 11 qrs. 3 bus. 3 pks. of barley at 49s. per quarter.

(212) What is the whole cost of graining 24 doors on both sides, each 7 ft. high by 3 ft. 6 in. wide, also 24 window shutters each 5 ft. 6 in. high by 4 ft. 9 in. wide, on one side only at 3*d.* per square foot?

(213) What is the cost of papering the walls of a room 12 ft. long by 11 ft. broad and 9 ft. high with paper 18 inches wide at 1*s.* 6*d.* per roll of 12 yards, if a fireplace 3 ft. by 3 ft. 6 in., a window 6 ft. by 5 ft. 3 in., and two doors each 7 ft. by 3 ft. 6 in. have to be deducted?

(214) A tenant farmer rents 303 ac. 3 r. 13 p. at £6 per acre and sub-lets 195 ac. 3 r. 20 p. at £8. 10. 0 per acre. What does he gain by the arrangement?

(215) At what price per quarter should 1037 qrs. 3 bus. 3 pks. of oats be sold so as to gain £138. 6. 7 on the whole if the cost price was 45*s.* per qr.?

(216) Find the value of 309 c. yds. 14 ft. 864 in. at £2. 1. 0 per c. yd.

(217) Half an estate of 1020 acres was sold at £45. 7. 9 per acre, $\frac{1}{3}$ at £42. 16. 8 per acre, and the remainder at 40 guineas per acre. What did the whole realise?

(218) Bought 306 tons 14 cwt. 1 qr. of lime at £3. 8. 4 per ton, being allowed 2*s.* in the £ discount for ready money. What did I pay?

(219) Find the cost of 103 yds. 1 qr. 1 n. 1 in. of cloth at 18*s.* 9*d.* per yard.

(220) What is the whole cost of laying out and enclosing an estate of 4809 ac., one-half at £4. 14. 0 per ac., one-fourth the remainder at £3. 19. 0 per acre, and the rest at £7. 17. 0 per acre?

BILLS OF PARCELS.

Make an Invoice of each of the following.

(1) London, May 13, 1876. Robt. Gray, Esq. bought of William Graham. $5\frac{1}{2}$ lbs. cheese at $9d.$; $3\frac{3}{4}$ do. at $8d.$; 16 lbs. 12 oz. bacon at $8d.$; $14\frac{1}{4}$ lbs. ham at $11d.$; $9\frac{3}{4}$ lbs. lard at $7d.$; and $8\frac{1}{2}$ dozen eggs at $1s. 2d.$ per doz.

(2) Mr John Jameson bought of Edwin Hughes of Dublin on Jan. 11, 1870. $3\frac{1}{2}$ lbs. tea at $3s. 4d.$; $7\frac{1}{4}$ lbs. do. at $3s. 10d.$; $1\frac{1}{2}$ stones moist sugar at $3\frac{1}{4}d.$ per lb.; $3\frac{1}{2}$ dozen lbs. lump do. at $5\frac{1}{4}d.$ per lb.; $6\frac{1}{4}$ lbs. coffee at $1s. 8d.$; 9 lbs. of cocoa at $1s. 7d.$

(3) Liverpool, Aug. 20, 1869. Mr Henry Roberts bought of George Walker. 71 lbs. soap at $3\frac{3}{4}d.$; $5\frac{1}{4}$ dozen lbs. do. at $3\frac{1}{2}d.$; 5 bars yellow do. each 3 lbs. at $4d.$; 18 doz. lbs. candles at $6\frac{1}{4}d.$; $13\frac{1}{2}$ qts. oil at $6d.$ per gallon, and $3\frac{1}{2}$ gross matches at $5d.$ per dozen boxes.

(4) Birmingham, Jan. 11th, 1877. Mr Jas. Blackwell bought of Grayston and Co. $3\frac{1}{4}$ yds. calico at $6d.$; $8\frac{3}{4}$ yds. do. at $8d.$; $19\frac{1}{4}$ yds. grey do. at $9d.$; $15\frac{1}{2}$ yds. flannel at $3s.$; $11\frac{3}{4}$ yds. ticking at $2s.$; $5\frac{1}{2}$ yds. linen at $2s. 4d.$ and $3\frac{1}{2}$ yds. fine Irish do. at $3s. 6d.$

(5) Sydney, Aug. 4, 1873. Messrs Backhouse bought of Curtis and Co. 52 yds. Alpaca at $1s. 7d.$; 3 pieces each $29\frac{1}{2}$ yds. French merino at $2s. 3d.$; 4 pieces each 156 yds. Irish poplin at $4s. 6d.$ per yd.; $14\frac{1}{4}$ yds. lilac silk at $11s. 8d.$; $11\frac{1}{2}$ yds. black do. at $3s. 7\frac{1}{2}d.$, and $3\frac{3}{8}$ yds. satin at $12s. 6d.$; package $3s. 6d.$

(6) Mr Phillips bought of Wm. Jackson of Leeds, Feb. 9th to March 18, 1876. 13 lbs. 5 oz. beef at $8d.$; $11\frac{1}{4}$ lbs. do. at $11d.$; 3 legs of mutton each 8 lbs. 8 oz. at $9\frac{1}{2}d.$; 2 shoulders do. each 7 lbs. 5 oz. at $8d.$; 10 lbs. 8 oz. veal at $10\frac{1}{2}d.$; $5\frac{1}{4}$ lbs. pork at $7d.$

(7) Birmingham, Mr John Hanbury bought of Norman Reay and Co. 30 lbs. leaf tobacco at 3s. 6*d.*; 8 lbs. 3½ oz. Virginia do. at 4s.; 15¼ lbs. Returns at 3s. 9*d.*; 13 boxes each 3¼ lbs. cigars at 5s. 6*d.* per lb.; 9 boxes Havanas each 4 lbs. at 7s. 10½*d.* per lb. A shilling in the £ discount allowed off the amount for cash.

(8) Durham, Oct. 3rd, 1878, Long, Newton and Co. bought of Gal-loway and Son. 4 ankers each 10 gallons brandy at £1. 7. 9 per gal.; 15 gals. Irish Whiskey at 18s. 6*d.*; 11 puncheons Scotch ditto each 84 gals. at 23s.; 3 pipes of port each 126 gals. at £1. 11. 8 per gal., and 3 tierces of Hollands gin each 42 gals. at 13s. per gal.

(9) Bristol, Sept. 13, 1877, Messrs Holroyd bought of N. Rice and Co.

R. H. No. 1,	1 Chest	Souchong	96 lbs. tea, tare	9 lbs. 10 oz.
No. 2,	2 Chests	do.	each 94 " " "	8 lbs. 11 oz.
No. 3,	4 do.	do.	96 " " "	8 lbs. 10 oz.
No. 4,	1 do.	Pekoe	94 " " "	9 lbs. 4 oz.
No. 5,	4 do.	Hyson	95 " " "	9 lbs. 9 oz.
No. 6.	2 do.	Gunpowder	96 " " "	9 lbs. 8 oz.

at 3s. per lb. average price.

(10) Mrs North bought of James Craig and Co. of London on Jan. 13th, 1875. 13¼ yds. Brussels carpet at 4s. 6*d.*; 18 yds. drugget at 2s. 1½*d.*; 5½ yds. extra wide cocoa matting at 4s. 9*d.*; 30 yds. binding at 1¾*d.*; 8½ yds. oil-cloth at 3s. 2*d.*; 5 door mats at 5s. 6*d.* each. A discount of 1s. 6*d.* in the £ allowed off this account for cash.

(11) Jas. Long, Esq. bought of Messrs Christie of York on July 10, 1878. 3 vols. Cowper's poems at 5s. per vol.; 3 do. Longfellow's at 3s. 6*d.*; 1 set of Waverley novels, 24 vols. at 8s. 6*d.* per vol.; 13 quires foolscap at 8½*d.*; 3½ reams note at 4*d.* per quire; 3250 envelopes at 6*d.* per 100; 320 penny postage stamps, 108 receipt do. and 304 half-penny stamps.

(12) Mr Wm. Gregory bought of Turner, Wrightson and Co. of Sheffield on May 9th, 1872. 13¼ lbs. cut nails at 5*d.*; 28 lbs. rose-headed do. at 4½*d.*; 6 hammers at 2s. 9*d.*; 6 chisels at 10½*d.*; 13½ gross 1 in. screws at 2½*d.* per doz.; 8¼ gross 3 in. ditto at 5*d.* per doz.; 1 doz. rakes at 7½*d.* each; 3 spades at 4s. 6*d.* and 15½ lbs. of white lead at 4*d.*

SIMPLE PROPORTION.

Find the fourth term of

- | | |
|---|---|
| (1) 1 : 2 :: 3 | (19) 11 : 5 :: 91 |
| (2) 4 : 5 :: 6 | (20) 83 : 23 :: 249 |
| (3) 6 : 7 :: 8 | (21) $1\frac{1}{2}$: 6 :: $4\frac{1}{4}$ |
| (4) 9 : 10 :: 18 | (22) $2\frac{3}{4}$: 11 :: $7\frac{1}{2}$ |
| (5) 4 : 7 :: 6 | (23) $9\frac{1}{2}$: $7\frac{1}{2}$:: $28\frac{1}{2}$ |
| (6) 3 : 9 :: 8 | (24) $3\frac{1}{3}$: 10 :: 51 |
| (7) 15 : 27 :: 20 | (25) $9\frac{2}{3}$: $6\frac{2}{3}$:: 17 |
| (8) 18 : 12 :: 6 | (26) $5\frac{1}{2}$: $6\frac{1}{4}$:: $7\frac{3}{4}$ |
| (9) 51 : 17 :: 18 | (27) $18\frac{3}{4}$: $5\frac{1}{2}$:: 75 |
| (10) 40 : 19 :: 20 | (28) $5\frac{5}{8}$: $10\frac{1}{11}$:: $8\frac{1}{2}$ |
| (11) 19 : 57 :: 86 | (29) $12\frac{1}{4}$: $14\frac{1}{4}$:: $15\frac{1}{2}$ |
| (12) 3 : 17 :: 5 | (30) $15\frac{1}{3}$: 12 :: 46 |
| (13) 9 : 15 :: 6 | (31) 1·02 : 5·1 :: 1·03 |
| (14) 11 : 80 :: 70 | (32) 2·07 : ·051 :: ·69 |
| (15) 156 : 31 :: 7 | (33) 17·15 : 6·32 :: 1·87 |
| (16) 1590 : 53 :: 1710 | (34) 9·5 : 7·61 :: 14·8 |
| (17) 14 : 17 :: 12 | (35) 11·1 : 16·38 :: 17·76 |
| (18) 16 : 27 :: 25 | |
| (36) £1. 10. 0 : £1. 15. 0 :: £10 | |
| (37) £2. 6. 8 : £2. 17. 6 :: £15 | |
| (38) £1. 5. 6 : £2. 1. 4 :: £12 | |
| (39) 13s. $7\frac{1}{2}d.$: £2. 0. $10\frac{1}{2}$:: 5s. $8\frac{1}{4}d.$ | |
| (40) £2. 2. $0\frac{1}{2}$: £1. 0. $6\frac{1}{4}$:: £11. 6. 0 | |

- (41) As £1. 10. 6 : £2. 11. 7 :: 366 miles
 (42) „ £5. 1. 6 $\frac{1}{4}$: £35. 10. 7 $\frac{3}{4}$:: 18 tons
 (43) „ £1. 0. 4 $\frac{3}{4}$: £11. 4. 4 $\frac{1}{4}$:: 19 cwt.
 (44) „ 57 miles : 38 miles :: 17 tons 13 cwt. 1 qr.
 (45) „ 11 $\frac{1}{4}$ yards : 78 $\frac{3}{4}$ yards :: £1. 14. 0 $\frac{3}{4}$
 (46) „ 5 dys. 3 hrs. : 61 days 12 hrs. :: £3. 16. 2
 (47) „ 1 $\frac{3}{4}$ guineas : £10. 10. 0 :: 5 tons
 (48) „ 18 $\frac{1}{4}$ cwts. : 7 tons 5 cwts. :: £2. 17. 6
 (49) „ 131 horses : 1048 horses :: £462. 11. 3 $\frac{3}{4}$
 (50) „ 11 $\frac{1}{10}$ inches : 55 $\frac{1}{2}$ yards :: 4s. 6d.
 (51) „ 60° 37' : 360° :: 151 dys. 13 hrs.
 (52) „ £7. 10. 11 : £90. 11. 0 :: 13 men
 (53) „ 3 cwt. 3 qrs. : 52 tons 10 cwt. :: 30 acres
 (54) „ 17 ac. 3 r. : 2 ac. 35 p. :: £3. 10. 0
 (55) „ 18 bus. 3 pks. : 2116 bus. 1 pk. :: £3. 15. 0
 (56) „ 11 tons 5 cwts. : 17 cwts. :: £15
 (57) „ 15 $\frac{3}{4}$ yards : 1 yd. 3 qrs. 3 $\frac{1}{2}$ nls. :: £11
 (58) „ 6 lbs. 10 oz. : 15 lbs. 11 $\frac{3}{4}$ oz. :: 8s. 10d.
 (59) „ 5 ac. 3 r. : 38 ac. 1 r. :: £6. 10. 9 $\frac{3}{4}$
 (60) „ 19 $\frac{3}{4}$ ac. : 11 ac. 2 r. 20 p. :: 79 tons
 (61) If 70 lbs. of tea cost £14. 0. 0 what is that for 15 $\frac{1}{2}$ lbs.?
 (62) Sheep are selling at £80. 10. 0 a score: what is that for 7 score and 6?
 (63) Bought 11 lbs. 8 oz. of beef at the rate of 7s. 6d. per stone of 8 lbs.: what did it cost?
 (64) Find the cost of 119 bushels of apples at 8 $\frac{3}{4}$ d. per peck.
 (65) A person travels 109 miles in 36 hrs. 20 min.: in how many hours would he travel 50 miles?
 (66) A goldsmith manufactured a piece of plate weighing 15 oz. 13 dwts. and charged £23. 4. 6: what was the rate per oz.?
 (67) Sugar is 4 $\frac{1}{2}$ d. per lb.: what is paid for 1 $\frac{7}{8}$ cwt.?
 (68) If 19 $\frac{3}{4}$ cwt. of coal cost £1. 3. 0 $\frac{1}{2}$, what is that per ton?

(69) A ship brings home 69 hhds. of sugar each weighing 6 cwt. 3 qrs. 12 lbs.: what would be their whole value at £1. 8. 0 per cwt.?

(70) If 19 men earn £18. 1. 0 in a week, what would 73 men earn in a year at the same rate?

(71) The rent of 11 ac. 3 r. of land is £42; what would be the rent of 1 ac. 1 r. 35 p.?

(72) If 37 sheep produce a cwt. of wool, what would 481 produce?

(73) If 9 cwt. 3 qrs. 12 lbs. of tobacco cost £193. 4. 0, what is that for $\frac{3}{4}$ lb.?

(74) At the rate of $8\frac{1}{2}d.$ an hour what will a workman's wages amount to in 5 wks. 3 days, if he works 9 hours a day?

(75) Brandy is sold at £3. 18. 0 a dozen; what is that for 13 dozen and 7 bottles?

(76) If the price of a score articles exceeds the price of a dozen by 12s. 10d., what would be the price of 3 score and 10?

(77) If $11\frac{1}{4}$ yds. of calico cost 5s. $7\frac{1}{2}d.$, what is the cost of 5 dozen yards?

(78) A workman digs out $\frac{2}{5}$ of a cubic yard of earth in a quarter of an hour; if he works at a uniform rate, how long would he be occupied in excavating a cellar 5 yards square and 5 yards deep?

(79) If $7\frac{3}{4}$ acres can be mowed in 3 days, how long would it take to mow 54 acres 1 rood?

(80) If 5 cwt. 3 qrs. 18 lbs. cost £41. 7. 6, what is that per ton?

(81) Coals are selling at £1. 8. 0 per ton, what should be paid for 11 cwt. 3 qrs.?

(82) A workman's wages for a week of 57 hours amount to £1. 14. $5\frac{1}{4}$; what is that per hour?

(83) If 2 tons 10 cwt. cost £5. 14. 3; what weight may be bought for £114. 5. 0?

(84) A piece of brickwork 93 yards long is completed in 21 days; how long would it take to finish a similar piece 651 ft. long?

(85) A watch gains 10 min. 11 sec. in 24 hours; what would it gain in 6 days 12 hrs.?

(86) If 13 cwt. 1 qr. 9 lbs. of cheese cost £2. 16. 8, what would 3 cwt. 1 qr. $9\frac{1}{4}$ lbs. cost?

(87) If a bar of iron 11 ft. long weighs 72 lbs., what would 9 similar bars each 15 ft. long weigh?

(88) Pens bought at 2s. 3d. per gross are retailed at $4\frac{1}{2}$ d. per dozen; what is the gain on $3\frac{1}{4}$ gross?

(89) How many dozen copy-books at $2\frac{1}{4}$ d. each can be bought for £9. 0. 0?

(90) If $3\frac{3}{4}$ yards cost 7s. $2\frac{1}{4}$ d., what should be given for 103 yds.?

(91) Find the cost of $19\frac{1}{2}$ yards of leaden piping 17 lbs. to the yard at 2s. 11d. for 5 lbs.

(92) When hay is selling at £4. 10. 0 the ton, what is the price per stone?

(93) If $10\frac{7}{8}$ cwt. of coal cost £ $2\frac{2}{3}$, what is that for 17 cwt. 3 qrs.?

(94) If 193 men earn £203. 9. 1 in a week, what is each man's yearly wages?

(95) If 1.05 lbs. cost £1.25, what would be the price of 11.875 lbs.?

(96) If 12 bus. 1 pk. of oats cost £3. 1. 3, how many may be bought for £45. 6. 3?

(97) If 363 days' work amounts to £381. 3. 0, what is that per week of 6 days?

(98) If the rent of a field of 19 ac. 3 r. 12 p. is £40. 2. 0, what would be the rent of 5 fields each 11 ac. 2 r. 23 poles at the same rate?

(99) Bought 113 cwt. of coffee for £632. 16. 0 and sold it at 1s. 10d. per lb.; what was the total gain?

(100) How many yards of linen at 1s. $9\frac{3}{4}$ d. may be bought for £21. 15. 0?

(101) If the first class railway fare from London to Manchester (185 miles) is £1. 18. $6\frac{1}{2}$, what should be paid from London to Plymouth (246 miles)?

(102) If a person's income be £210 a year, what is that for 73 days?

(103) The newspaper train leaving Euston Square at 5.15 a.m. reaches Tamworth at 9 min. to 8 (a distance of $109\frac{1}{2}$ miles); at what rate per hour does it travel, 10 min. being allowed for stoppages?

(104) What amount of money can be raised on an assessment of £446 if the rate on £23. 10. 0 is 14s. $8\frac{1}{4}$ d.?

(105) If 3 bus. of corn last 8 horses for a week, how many bus. would be required for 18 horses?

(106) If $10\frac{1}{7}$ yards of cloth cost £7. 10. 0, what length can be bought for 20 guineas?

(107) If 6 men do a piece of work in 10 days, how long would it take 30 men to do the same?

(108) A machine does a certain amount of work in 12 hours at a certain rate; if its speed be accelerated $\frac{1}{2}$ how long will it take to accomplish the work?

(109) A bankrupt pays 9s. 8d. in the £; what will be the loss on a debt of £146. 5. 0?

(110) What is the cost of 5 tons 11 cwt., if £1. 16. $6\frac{1}{4}$ will purchase 15 cwt. 3 qrs. 12 lbs.?

(111) If 51 ac. 3 r. 12 poles of land produce 259 qrs. 1 bus. of wheat, what would 15 ac. 1 r. 25 p. produce?

(112) The cost of iron railing is £11. 15. 0 per ton: what would be the cost of enclosing a square meadow 154 yards long if a ton of railing extends 198 feet?

(113) Find the cost of 99 bales of Esparto grass each weighing 3 cwt. 2 qrs. at the rate of £1. 10. 0 for 2 cwt. 3 qrs.

(114) If $9\frac{5}{8}$ lbs. cost £1. 9. 0, what will $1\frac{3}{8}$ lb. cost?

(115) From $\frac{1}{2}$ of 5 cwt. 1 qr. take $\frac{1}{3}$ of 4 cwt. 2 qrs., and find the cost of the remainder at 7s. 6d. for 1 cwt. 1 qr.

(116) If 119.025 cub. ft. of wood cost £2.56, what is that for 96.0125 cub. ft.?

(117) If 13 oxen eat a certain quantity of grass in 7 days, in what time would 91 oxen consume the same quantity?

(118) Nineteen men perform a certain piece of work in 76 days of 7 hours each; how many men would be required to do it in 133 hours?

(119) How many ounces of tobacco can be bought for 8s. $5\frac{1}{2}$ d. at the rate of 4s. 8d. per lb.?

(120) A gentleman pays £116. 13. 4 income-tax at the rate of 4d. in the £; what is his income?

(121) If $5\frac{1}{2}$ gallons of whiskey cost £5. 1. 9, what is that for $18\frac{1}{2}$ gallons?

(122) If the four-pound loaf costs $8d.$ when wheat is at $6s.$ a bushel, what would it cost when wheat is at $7s. 6d.$?

(123) Find the value of 103 cwt. 3 qrs. 11 lbs. at $\pounds 2. 1. 11$ for 12 cwt. 3 qrs. 25 lbs. 14 oz.

(124) A bankrupt owes $\pounds 23068$ and his assets amt. to $\pounds 1537. 17. 4$; what will be the dividend in the \pounds ?

(125) If $\frac{2}{3}$ of $\frac{5}{8}$ of $1\frac{1}{2}$ lbs. tea cost $1\frac{1}{2}$ shillings, what will $\frac{2}{7}$ of $\frac{5}{8}$ in. 2 cwt. 2 qrs. cost?

(126) A servant receives $\pounds 20$ a year; what should she receive from the 23rd Feb. to the 19th July?

(127) The specific gravity of rolled zinc is 7.191 (water being 1); what is the weight of a plate of zinc 18 ft. long 16 ft. broad and $\frac{1}{8}$ in. thick if a cub. ft. of water weighs 1000 oz.?

(128) Water being 1, the specific gravity of pure molten lead is 11.3303 : find the weight of a block of that metal 2 ft. 6 in. long, 2 ft. 5 in. broad and 18 in. thick.

(129) What weight of building stone would be required to complete 93 ft. of walling, if 15 tons 3 cwt. 3 qrs. be required for 8 yards?

(130) A tradesman sells $\frac{3}{8}$ of his stock consisting of 140 cwt. of tea at $2s.$ a lb., thereby losing $\pounds 12. 10. 0$. At what price per lb. must he sell the remainder so as to gain on the whole 150 guineas?

(131) A truck of coals weighing 11 tons 5 cwt. cost $\pounds 8. 8. 0$; what would 5 trucks each 9 tons 10 cwt. cost at the same rate?

(132) If a passage occurs on the 39th page in a book of 429 pages, where will it occur in one having 1287 pages?

(133) A merchant fails for $\pounds 20,000$, his assets shew cash on hand $\pounds 928$, ditto in bank $\pounds 2300$, stock $\pounds 4712$, good securities $\pounds 1,720$ and bad debts $\pounds 960$. What will be the dividend in the \pounds and the loss on $\pounds 500$?

(134) How many dozen pairs of gloves may be bought for $7\frac{1}{2}$ guineas at $3s. 6d.$ a pair?

(135) If 5 cwt. 1 qr. 27 lbs. of cheese cost $\pounds 15. 7. 6$, what will 9 cwt. $22\frac{1}{2}$ lbs. cost?

(136) A bacon-factor buys 1436 hams, each $15\frac{1}{4}$ lbs. at $6d.$ per lb.: at what price per cwt. should he sell so as to gain $\pounds 146. 8. 0$ on the whole?

- (137) Divide 91 into two parts having the ratio of 5 : 8.
- (138) Bought 5 cwt. of goods and sold them so as to gain the cost price of 1 cwt. : if they were sold for £12. 15. 0 what was the cost price per ton?
- (139) Sold $\frac{1}{2}$ of $\frac{2}{3}$ of my goods for £4. 10. 0. If the remainder consist of 15 cwt. 3 qrs. what is the price per ton?
- (140) A coach ran from York to London (200 miles) in 33 hours 40 min., how long would it take to travel 117 miles?
- (141) A piece of work can be done in 9 hrs. 44 min. : if it be done 8 times as fast, how long will it take?
- (142) A piece of ground measuring 826.25 yards is sold for £27. 10. 10: what would be the price of 3 ac. 2 r. 11 poles?
- (143) A person walks $\frac{1}{7}$ of his whole journey for 3 successive days and then completes it by travelling 84 miles by rail and 24 by coach. If he walked 3 miles an hour, how many hours each day did he walk?
- (144) *A* and *B* set out to walk 180 miles. *A* goes at the rate of 3 miles an hour, and *B*, who starts 10 hours later, at the rate of 4 miles an hour. Where and when will *B* overtake *A*?
- (145) If a sum of £193 gains £11. 9. 6 $\frac{1}{4}$ in 53 days, how long should £64. 6. 8 lie to gain the same amount?
- (146) What is the cost of 3 $\frac{1}{2}$ tons of pig iron at £7. 15. 0 for 1 ton 11 $\frac{1}{4}$ cwt.?
- (147) If I gain £20. 12. 6 $\frac{1}{2}$ in 73 days, what should I gain in a year and a half?
- (148) Find the value of 11 cwt. 3 qrs. 19 lbs. at £7 per ton.
- (149) A tradesman sells his debts for $\frac{2}{3}$ of their nominal value; the buyer collects $\frac{5}{8}$ of the debts in full and thus makes a profit of £199. 10. 0 : what was the amount of the debts?
- (150) If $\frac{2}{3}$ of $\frac{3}{14}$ of £1 $\frac{1}{2}$ will buy 1 $\frac{1}{3}$ lbs. tea, find the cost of 5 $\frac{3}{16}$ cwt.
- (151) If the seven-penny loaf weighs 3 $\frac{1}{2}$ lbs. when wheat is at 52s. a quarter, what should it weigh when the price of wheat is 7s. per bushel?
- (152) In every 100 parts parsnips contain 82.039 water, 2.882 sugar, and 3.507 starch. What weight of each is there in 5 tons of parsnips?

(153) If Manchester including Salford has a population of three quarters of a million, and the births average 37·75 and the deaths 23·25 per thousand of the population, what will be the population ten years hence ?

(154) If a person receive a salary of £250 a year, what sum may he spend in 10 wks. 3 dys. so as to lay by £57. 10. 6 besides paying 22 guineas yearly for rent ?

(155) If $16\frac{1}{3}$ oz. Troy cost £110 $\frac{1}{2}$, what would 84 oz. cost ?

(156) If 16 oxen plough a field of 110 ac. in $11\frac{1}{4}$ days, how long will it take 80 oxen to do the same ?

(157) Divide 678 into three parts such that the second shall be $\frac{2}{3}$ of the 1st, and the last $\frac{1}{2}$ of the 2nd.

(158) Pure gold is 24 carats fine, Standard gold 22 carats, and Jewellers' fine gold 18 carats: how many lbs. of pure gold would be required for 3 lbs. 10 oz. of Standard gold and the same weight of Jewellers' fine gold ?

(159) If 153 men can do a piece of work in $5\frac{1}{2}$ days of 8 hrs. each, how many hours would be required by 51 men to complete the same amount of work ?

(160) If 17 lbs. of butter cost £1. 7. $3\frac{1}{4}$, what will $\frac{1}{8}$ of $1\frac{1}{2}$ cwt. cost ?

(161) Find the cost of $11\frac{1}{4}$ tons of nitrate of soda if 3 tons 15 cwt. cost £29. 11. $6\frac{1}{2}$.

(162) A gardener having $3\frac{1}{2}$ acres of land plants it with cabbages, 8400 to the acre, for which he pays $2\frac{1}{2}d.$ per hundred. If he sells the produce at $8d.$ per dozen after paying £15. 10. 0 rent, what is his gain per acre ?

(163) If a ship's crew of 840 men have provisions at the rate of 5 lbs. per man per day for a certain length of time, to what must the rate of allowance be reduced so as to sustain also a rescued crew of 105 men for the voyage ?

(164) If 118 gallons of rum cost £21. 11. 0 and the duty is 10s. $6d.$ per gallon, at what rate per gallon must it be sold so as to gain £34. 10. 0 on the whole ?

(165) A train travels $7\frac{1}{2}$ miles in 12·58 minutes ; how far will it travel in 5 hours ?

(166) Light travels 192500 miles in a second ; what is the distance of the moon if a ray of light takes $1\cdot246753$ seconds to traverse it ?

(167) What is the amount of the wages of 11 men for 7 weeks if they earn £127. 1. 0 for $5\frac{1}{2}$ weeks ?

(168) The English mile contains 4956·6 Paris feet, the Russian verst 3284·8 Paris feet ; how many versts are equal to 100 English miles ?

(169) If a person builds 9 houses at a cost of £113. 17. 6 each, and pays yearly for rates and taxes £20. 10. 0 and for repairs £7. 12. 6, at what rate per annum must he let each so as to gain £8. 15. 0 on each £100 of outlay ?

(170) If £150 gains £12 in 9 months, how much would £220 gain in the same time ?

(171) Find the cost of $10\frac{1}{2}$ cwt. at 3s. $3\frac{1}{2}d.$ for $7\frac{9}{10}$ lbs.

(172) From 11·002 take 1·12 and find the value of the remainder at 6s. 8d. for '0045.

(173) A gentleman leaves $\frac{1}{3}$ of his property to each of his two sons, $\frac{1}{8}$ to his daughter and the rest in various legacies amounting to £5400 ; if the expenses of probate amounted to £6. 7. 0 per £100, what is the net amount each of his sons and his daughter would receive ?

(174) A cubic foot of water weighs $62\frac{1}{2}$ lbs. ; what weight would a vessel 6 in. long, wide and deep contain ?

(175) If $3\frac{3}{4}$ tons of goods are carried 49 miles for £1. 8. $9\frac{3}{4}$, how far ought 26 tons 5 cwt. to be carried for the same money ?

(176) If 36 horses plough a field in $5\frac{1}{2}$ days, how long would it take 9 horses to do the same ?

(177) The driving wheel of an engine is 18 feet in circumference and makes one complete revolution with every stroke of the piston ; how many strokes per minute will the piston make when the train is running at the rate of 45 miles an hour ?

(178) Find the cost of 156 dozen at 15s. 9d. for 3 gross.

(179) If 11·715 acres cost £141. 10. 0, what will 90·38 acres cost ?

(180) If goods are sold at a gain of £12. 10. 0 on £100 worth, what would goods costing £140 be sold for ?

(181) If $\cdot 027$ of 111 acres cost 50 guineas, what would be paid for 8.125 acres?

(182) How many yards of carpet $\frac{3}{4}$ yd. wide would be required for a room 18 ft. long by 13 ft. 6 in. wide? and find the cost at 19s. $8\frac{1}{2}d.$ for $3\frac{1}{2}$ yards.

(183) The estimated expenditure of the country is $79\frac{1}{2}$ millions for a year; what amount should be spent from April 30th to July 25th, both days included?

(184) If $1\frac{1}{3}$ of $43\frac{1}{4}$ of $\pounds 6\frac{2}{3}$ buys $19\frac{3}{4}$ shares, what will 100 shares cost?

(185) If $5\frac{3}{8}$ yards of linen cost $14\frac{1}{3}s.$, how many yards may be bought for $\pounds 5$?

(186) If $1^{\circ} 20'$ measures 65 miles on a certain parallel of latitude, what will $23^{\circ} 13' 30''$ measure?

(187) Find the cost of 17 tons 13 cwt. 3 qrs. of hay at 12s. $6d.$ for 1 cwt. 2 stones.

(188) Hay is selling at $\pounds 4. 10. 0$ per ton; how much may be bought for $\pounds 93. 10. 0$?

(189) If the property tax on $\pounds 23. 5. 0$ amounts to 13s. $6\frac{3}{4}d.$, what is that on $\pounds 400$?

(190) If 1.714285 cwt. cost $\pounds 1.5$, what is the cost of 11 cwt. 3 qrs.?

(191) What is the cost of laying out a road 13 m. 3 fur. long at $\pounds 129. 14. 0$ per mile?

(192) How long will it take to excavate a cellar 18 ft. long, 12 ft. broad and 10 ft. deep at the rate of 3 cub. yards 5 ft. in 1 hour 26 min.?

(193) How many yards of cloth can be bought for $7\frac{1}{2}$ guineas at the rate of $3\frac{1}{4}$ yards for 11s. $4\frac{1}{2}d.$?

(194) If 37 workmen do a piece of work in 15 days, how long will it take 111 men to do the same?

(195) A printing-press throws off 18000 newspapers per hour, how long will it take to print off an edition of 126000 copies?

(196) If an ordinary staff of seventeen workmen could complete a piece of work in a week (6 days), how many men must be added to complete it in 2 days?

(197) If 1000 guineas be lent for 5 weeks 3 days, how long should $\pounds 250$ be lent in return?

(198) How many granite blocks 9 in. by $4\frac{1}{2}$ in. on the face would be required to pave a roadway 3 fur. 109 yards long by 27 feet broad? and find their cost at £2 per ton of 160 blocks.

(199) How many reams of paper would be required to print 1000 copies of a book of 280 octavo pages?

(200) The whole rateable value of a union is £70088 and the expenses amount to £7300. 16. 8; what amount would a parish whose rateable value is £7333. 4. 0 be required to pay and what rate in the £ would furnish the necessary sum?

COMPOUND PROPORTION.

Resolve by cancelling :—

- (1) As 3 : 27 :: 40 men : Ans.
15 : 9
- (2) 11 : 18 :: 55 horses
9 : 7
- (3) 17 : 51 :: £13
40 : 35
- (4) 59 : 63 :: £120. 19. 0
21 : 3
- (5) $11\frac{1}{4}$: $3\frac{3}{4}$:: £3. 3. 0
59 : 177
- (6) 27 : 1 :: £33. 6. 0
37 : 5
- (7) $90\frac{1}{10}$: 70 :: £946. 1. 0
35 : 10
- (8) 133 : 52 :: £16. 12. 6
39 : 8
- (9) 58 : 19 :: £30. 11. 5
18 : 108
57 : 5
- (10) $11\frac{1}{4}$: 90 :: 5 cwt. 3 qrs.
46 : 12
9 : $2\frac{1}{2}$
- (11) $18\frac{3}{4}$: 49 :: 3 lbs. $5\frac{2}{3}$ oz. Troy
28 : 43

- (12) As 53 : 22 :: 35 yds. 1 ft.
 $1\frac{1}{10}$: 2
 $1\frac{3}{7}$: 7
- (13) 15·8 : 1·975 :: £2. 3. 1 $\frac{1}{4}$
 ·076 : 6·08
 10 : 4
- (14) 25 : 1110 :: 580 days
 37 : 3
 696 : 15
- (15) 5 : 17 :: 19 cwt.
 7 : 8
 85 : 25
- (16) $3\frac{2}{5}$: 36 :: 4 cwt.
 30 : 72
 $1\frac{2}{3}$: 3
- (17) $11\frac{1}{3}$: $20\frac{2}{5}$:: 7 lbs. 5 oz. 3 drs.
 9 : 55
 11 : 18
- (18) 3·27 : 4·5 :: £1. 1. 9 $\frac{2}{5}$
 $1\frac{1}{12}$: 46
- (19) 558 : 527 :: £1. 16. 0
 51 : 9
- (20) 18 cwt. 3 qrs. : 5 tons :: £78. 15. 0
 $6\frac{1}{3}$: $14\frac{1}{4}$
- (21) 2 lbs. 15 drs. : 2 lbs. 2 oz. 14 drs. :: £3. 9. 5
 36 : 7·2
- (22) 4 fur. 185 yds. : 5 fur. 36 yds. :: 30 guineas
 56·8 : 53·25
- (23) 13 : 24 :: 52 weeks
 36 : 73
 365 : $10\frac{1}{2}$
- (24) $17\frac{1}{3}$: 30 :: 104 oz.
 6 : 7
 210 : 110
- (25) 26·875 : 37·25 :: 1 ton 3 cwt. 3 qrs. 27 $\frac{1}{2}$ lbs.
 1·02 : 204

- (26) As $1\frac{3}{5} : 5 :: 1 \text{ yr. } 219 \text{ dys.}$
 $5\frac{2}{3} : 9$
- (27) $57 : 18 :: 133 \text{ bushels}$
 $7 : 3$
 $5\frac{3}{5} : 5$
- (28) $\text{£}1. 9. 2. : 2s. 6d. :: \text{£}11. 13. 4$
 $210 : 84$
 $3 : 5$
- (29) $54 \text{ tons} : 17 \text{ cwt. } 16 \text{ lbs.} :: 111 \text{ miles}$
 $37 : 999$
 $27 : 63$
- (30) $5 \text{ cwt. } 27 \text{ lbs. } 8 \text{ oz.} : 30\frac{1}{3} \text{ oz.} :: \text{£}15$
 $12\frac{1}{2} : 11.25$
 $45 : 2\frac{1}{2}$
 $6\frac{1}{2} : 1410$

(31) If £500 gains £11. 10. 0 in 7 months, what will £300 gain in $10\frac{1}{2}$ months?

(32) If 31 bushels of oats last 112 horses for 3 days, how many bushels will last 560 horses a fortnight?

(33) What sum should be placed out for 9 months to gain £45 if £560 gains £14 in 5 months?

(34) If 13 men can do a piece of work in 9 days of 7 hours each, how many hours a day must 91 men work to complete it in one day?

(35) If 5 pecks of flour last a family of 9 persons seven days, how long ought 7 bushels last 18 persons?

(36) If 9 men earn £11. 10. 5 in 5 days of 7 hours each, how much ought 113 men earn in 18 days of 8 hours each?

(37) If 35 tons be carried 90 miles for $12\frac{1}{3}$ guineas, for what sum ought 4 tons 7 cwt. 2 qrs. be carried 200 miles?

(38) If 145 bushels of turnips be consumed by 53 oxen in a fortnight, how long would 435 bushels suffice for 371 oxen?

(39) A person travels 110 miles in 7 days walking 4 hours each day, how many days would he require to go 400 miles walking 6 hours a day at the same rate?

(40) If 17 men earn £24 in 8 days, how many days must 102 men work to earn 120 guineas?

(41) If 5 men can reap 11 acres of oats in 9 days, how long would 18 men require to reap 44 acres at the same rate ?

(42) If $11\frac{1}{4}$ yds. of carpet $1\frac{1}{4}$ yds. wide cost £8, what would 90 yards each $22\frac{1}{2}$ inches wide cost ?

(43) *A* lends *B* £400 for 15 months at 4 per cent., how long in return ought *B* lend *A* £1500 at 3 per cent.?

(44) If £210 be required to maintain 117 persons for a fortnight, what sum would be required to maintain 26 persons during the months of July and August ?

(45) Find the weight of 12 blocks of marble each 9 ft. 6 in. long, 7 ft. 6 in. broad and 3 ft. thick, if 5 blocks each 5 ft. 8 in. long, 3 ft. 9 in. broad and 2 ft. thick weigh $59\frac{1}{2}$ tons.

(46) If 50 gallons of spirits of proof strength cost £40, what ought 90 gallons 20 per cent. above proof cost ?

(47) If 50 yards of cloth three quarters of a yard wide be bought for £23. 10. 0, find the cost of $12\frac{1}{2}$ yds. each $\frac{2}{3}$ of a yard wide.

(48) If 100 men do a piece of work in 18 days working at a certain rate, how many days would 150 men require to do 5 times as much working at one half the rate ?

(49) If the shilling loaf weighs 6 lbs. when wheat is at 60s. the quarter, what ought the ninepenny loaf weigh when wheat is at 6s. 9d. per bushel ?

(50) A locomotive making 162 strokes per minute travels 90 miles in 2 hours, how many strokes per minute must the same engine make to travel 200 miles in $4\frac{1}{2}$ hours ?

(51) If 3 compositors working $10\frac{1}{2}$ hours a day set up 20 columns of type, each 150 lines, in $2\frac{1}{2}$ days, how many days of 7 hours long would be required by 12 compositors to set up 15 columns, each 180 lines, of the same type ?

(52) A town is garrisoned with 50000 troops and has provisions sufficient for that number for $3\frac{1}{2}$ months, allowing a ration of 2 lbs. daily to each man ; how many must be sent away so that by giving an additional $\frac{1}{2}$ lb. to each man the provisions may last 14 months ?

(53) If 13 men dig a trench 19 yds. long, 5 ft. broad and 8 ft. deep in 14 days of 6 hours each, how many days of 8 hours long would be required by 91 men to dig a trench 64 yds. long by 19 ft. wide and 5 yds. deep ?

(54) If 3 men, 5 women or 8 boys can weed 18 acres in 9 days, how long would it take 5 men 8 women and 3 boys to weed 109 ac. 1 r.?

(55) If $\frac{5}{7}$ of a cargo valued at £15000 be insured for £10500, what should $\frac{1}{3}$ of a cargo worth £20000 be insured for, so that in case of loss a proportionate amount may be recovered?

(56) When wheat is at 12s. 6d. the boll (2 bushels) the sixpenny loaf weighs $3\frac{1}{2}$ lbs.; what should be the weight of the fourpenny loaf when wheat is selling at 64s. the quarter?

(57) If 5 men or 12 boys can do a certain piece of work in 9 days of 7 hours each, how long would it take 15 men and 8 boys to do 3 times as much, working 8 hours per day?

(58) If £400 gain £30. 12. 0 in 6 months, in what length of time would £900 gain £25. 10. 0?

(59) If 18 masons build a wall 30 yds. long, 2 ft. 3 in. thick, and 10 ft. high in 6 days, how many masons would be required to build a wall 144 ft. long, 5 ft. high and 3 ft. thick in 16 days, supposing that 10 of the latter men be equal to 9 of the former?

(60) How many men of ordinary ability working 6 hours a day for 17 days would be able to do 3 times as much work as 14 men working 8 hours a day for $8\frac{1}{2}$ days, if the abilities of the latter be $\frac{5}{7}$ of the others?

(61) If $\frac{3\frac{1}{3} \text{ of } 11\frac{1}{2}}{13\frac{1}{2}}$ of £2 $\frac{8}{3}$ will purchase $\frac{3}{8}$ of $\frac{2}{3}$ of 192 yards of steel rails weighing 70 lbs. per yard, what should be the weight per yard of

2 fur. 120 yds. of the same quality of rails which cost $\frac{\frac{11\frac{1}{3}}{7} \div \frac{1}{3}}{\frac{17}{810}}$?

(62) If 3 per cent. of a certain company's capital amounts to £75, and the whole capital is $\frac{5}{7}$ of the combined capitals of three other companies whose respective amounts are in the ratio to one another of 3, 5, and 7; find the ratio of the capital of each of these companies to that of the first-mentioned company.

(63) If 3 lbs. of sugar cost as much as 5 lbs. of rice, and 7 lbs. rice be equivalent to 4 lbs. currants, and 9 lbs. currants equivalent to 1 lb. 5 oz. tea; what is the cost of sugar per cwt. when tea is 3s. per lb.?

PER CENTAGES.

(1) An article bought for 25s. is sold for 27s. 6d., what is the gain per cent.?

(2) Find the gain per cent. on an article which cost 5s. 6d. and was sold for 6s. 5d.

(3) Buying sugar at £1. 17. 4 per cwt. and selling it at $4\frac{1}{2}d.$ per lb., what do I gain per cent.?

(4) Sold goods at £4. 19. 0 thus gaining 10 per cent., find the cost price.

(5) If I gain three half-pence in a shilling, what do I gain per cent.?

(6) The prime cost of goods is £3. 15. 0, for what must they be sold so as to gain $15\frac{1}{2}$ per cent.?

(7) Wheat is selling at 54s. the quarter wholesale, but is retailed at an advance of $12\frac{1}{2}$ per cent.; what is the price per bushel at the latter rate?

(8) A tradesman marks his goods 25 per cent. above cash price; what cash will he take for an article marked at 13s. $0\frac{1}{4}d.$?

(9) If by selling at 7s. $11\frac{1}{2}d.$ per yard I lose $4\frac{1}{2}$ per cent., at what price ought I to sell to gain 15 per cent.?

(10) What was the selling price of 30 yards of cloth which was sold at an advance of 20 per cent. on the original cost, 4s. 7d. per yard?

(11) A man earning 45s. weekly obtains an advance of 10 per cent., what is his present rate of wages?

(12) Sold 320 yards of serge for £44. 12. 6 which had cost 2s. $7\frac{1}{2}d.$ per yard; find the total gain and the gain per cent.

(13) Bought eggs at 16 for a shilling and sold them 13 for a shilling; what is my gain per cent.?

(14) Bought 176 yds. of ribbon at a certain price, and sold the whole for £8. 5. 0, thus gaining $12\frac{1}{2}$ per cent.; find the cost price per yard.

(15) For what must an article which cost 9s. $4\frac{1}{2}d.$ be sold so as to gain 16 per cent.?

(16) Iron bars were selling at £9. 5. 10 per ton, but sellers offered them at 10 per cent. less for cash; what was the cash price?

(17) A merchant sells 95 bags of rice for £35. 12. 6, thus gaining $12\frac{1}{2}$ per cent.; what was the prime cost per bag?

(18) By selling sherry at 45s. a dozen which cost me half-a-crown a bottle, what is my gain per cent.?

(19) Out of a cargo of 96 tons 3 cwt. of fish which cost 7s. 6d. per cwt. 5 per cent. was unfit for sale. At what rate per cwt. should the remainder be sold so as to gain 20 per cent. on the whole?

(20) Bought oranges at the rate of 3 for a penny; how many should be sold for 5d. to gain $6\frac{3}{4}$ per cent.?

(21) Find the prime cost of soap per cwt. which is selling for £1. 12. $9\frac{3}{4}$ at a gain of $31\frac{1}{4}$ per cent.

(22) A retail dealer sells an article for £5. 16. $10\frac{1}{2}$, at an advance of $6\frac{1}{4}$ per cent. on the wholesale price which is 10 per cent. gain on the manufacturer's price; what was the prime cost?

(23) The prime cost of 36 cwt. of cheese is £134. 8. 0; at what price per lb. must it be sold so as to gain $3\frac{1}{8}$ per cent.?

(24) Sold 58 tons 13 cwt. of oil cake for £615. 16. 6 thereby gaining 5 per cent.; what was the prime cost per ton?

(25) A fruiterer bought oranges at 1s. a score and sold them at 1s. a dozen; what was his gain per cent.?

(26) What is the loss per cent. by selling 38 yards of merino for £7. 2. 6 which cost 4s. 2d. a yard?

(27) By selling eggs at 15 for 1s. I gain 6 times as much per cent. as I should had I sold them at 20 a shilling. Find the prime cost of 125 dozen.

(28) What is the brokerage upon £447. 10. 0 at $\frac{1}{8}$ per cent.?

(29) A commission of 5 per cent. is charged by an agent on an account of £20. 11. 8; what sum does he pay to his employer?

(30) A vessel worth £37500 is insured at $6\frac{3}{4}$ per cent.; what is the premium paid?

(31) A vessel worth £39500 is insured for $67\frac{1}{2}$ per cent. of its value. What loss would the owners sustain in case of wreck?

(32) What ready-money payment will settle a bill of £43. 17. 6, discount being allowed at the rate of 5 per cent.?

(33) A ton of cannel coal costing 18s. 6d. gives off 40 per cent. more gas than ordinary coal, what price per ton should be paid for the latter for gas making?

(34) For how much should a tradesman's stock worth £5122 be insured at $2\frac{1}{2}$ per cent., so that in case of loss the value of the stock and the amount of premium may be recovered?

(35) What is the commission on £374. 8. 6 at $12\frac{1}{2}$ per cent.?

(36) A person paid £18. 15. 3 after being allowed 5 per cent. for cash; what was the amount of his bill?

(37) If £3. 6. 8 per cent. be charged as premium on a policy of insurance for a certain age, what would be the yearly premium on a policy of £459. 17. 6?

(38) A bankrupt's assets are 36 per cent. of his liabilities, what would a creditor for £510 lose supposing legal expenses to absorb 10 per cent. of the assets?

(39) For what sum should a cargo worth £9254. 12. 6 be insured at $7\frac{1}{2}$ per cent., so that in case of loss the value of the cargo and the premium paid may be recovered?

(40) Find the ready-money payment of a bill of £3. 7. 6, discount being allowed at the rate of 25 per cent.

(41) If I pay £7. 6. 0 in settlement of an account after an allowance of 4 per cent. discount has been made, what was the original amount of the bill?

(42) By selling for 11s. a bushel what cost me 74s. 8d. a quarter, what do I gain per cent.?

(43) If I buy at 30 a shilling and sell at 9d. per dozen, what is my gain per cent. and my whole gain on 60 dozen?

(44) Paid £10. 18. 9 premium on a policy of insurance at the rate of $3\frac{1}{2}$ per cent., what sum is assured?

(45) What is the commission on £47. 10. 10 at 5 per cent.?

(46) What would be the ready-money payment of an account of £30. 12. 0, discount being at $8\frac{1}{3}$ per cent.?

(47) What is the brokerage on £715. 15. 0 at half-a-crown per cent.?

(48) Goods are insured above their real value for £400 at $4\frac{1}{2}$ per cent. so that in case of loss their real value and the premium may be recovered; what is their real value?

(49) Find the brokerage on £4700 at 3s. 4d. per cent.

(50) Sold half my goods at double their value, and the rest at half their value thereby gaining £52. 10. 0; what did I receive for them?

SIMPLE INTEREST.

Find the Simple Interest of

(1)	£200	for	3	years at	4	per cent. per annum.
(2)	£250	"	5	"	3	" "
(3)	£175	"	4	"	4	" "
(4)	£260	"	6	"	4	" "
(5)	£195	"	4	"	3	" "
(6)	£1150	"	4	"	5	" "
(7)	£920	"	$2\frac{1}{2}$	"	5	" "
(8)	£180	"	$3\frac{1}{4}$	"	4	" "
(9)	£500	"	$4\frac{3}{4}$	"	$3\frac{1}{2}$	" "
(10)	£290	"	$11\frac{1}{2}$	"	$2\frac{1}{4}$	" "
(11)	£516	"	$12\frac{1}{2}$	"	8	" "
(12)	£420. 10. 0	"	$5\frac{1}{2}$	"	$3\frac{1}{2}$	" "
(13)	£510. 12. 6	"	4	"	4	" "
(14)	£920. 18. 0	"	20	"	$2\frac{1}{2}$	" "
(15)	£144	"	$1\frac{3}{8}$	"	$1\frac{1}{5}$	" "
(16)	£249. 18. 4	"	$11\frac{3}{4}$	"	7	" "
(17)	£909. 19. 9	"	$7\frac{5}{12}$	"	$2\frac{1}{3}$	" "
(18)	£400	"	$6\frac{1}{12}$	"	$3\frac{3}{8}$	" "
(19)	£124. 15. 6	"	$3\frac{5}{8}$	"	$3\frac{5}{8}$	" "
(20)	£750	"	$19\frac{3}{5}$	"	$4\frac{1}{4}$	" "
(21)	£302. 12. 6	"	$4\frac{1}{5}$	"	$2\frac{3}{4}$	" "
(22)	£1250	"	$9\frac{1}{8}$	"	$1\frac{3}{5}$	" "

- (23) £7002. 16. 0 for $51\frac{1}{4}$ years at $2\frac{3}{14}$ per cent. per annum.
 (24) £1100. 0. 0 " $13\frac{3}{11}$ " " $6\frac{3}{8}$ " "
 (25) £205.25 " 18.375 " " 5.75 " "
 (26) £1900.875 " 6.125 " " 4.45 " "
 (27) £280.14 " 5.19 " " 3.86 " "
 (28) £150. 10. 0 " 3yrs. 3mths. " $3\frac{3}{4}$ " "
 (29) £125 $\frac{5}{8}$ " 9yrs. 10mths. $7\frac{1}{2}$ " "
 (30) £3000 " 1yr. 11mths. " $1\frac{9}{10}$ " "

(31) Find the amount on £430 for 11 years 3 mths. at 2 per cent.

(32) Find the Simple Interest of £720 for 5 yrs. 7 mths. at $3\frac{1}{2}$ per cent.

(33) Find the amount on £140. 12. 6 placed out at Simple Interest for 6 yrs. 73 days at 4 per cent.

(34) In what time will £44. 11. $9\frac{3}{4}$ double itself at $4\frac{1}{2}$ per cent. yearly?

(35) What is the Simple Interest of £150. 17. 8 for 2 yrs. 146 days at £3. 10. 0 per cent. yearly?

(36) At £1. 17. 6 per cent. per annum, what would £400. 4. 0 amount to in 15 years?

(37) At 4 per cent. Simple Interest, what would £230. 12. 6 amount to in 7 yrs. 219 days?

(38) In what time will £6060 amount to £6696. 6. 0 at 3 per cent. per annum?

(39) At what rate per cent. will £490. 12. 6 amount to £686. 17. 6 in 8 years?

(40) At what rate per cent. will £500 amount to £562. 10. 0 in 4 years?

(41) Find the Simple Interest on £476. 13. $9\frac{1}{2}$ for 5 yrs. 11 mths. at $3\frac{1}{2}$ per cent.

(42) What sum will produce £62. 10. 0 Simple Interest in 5 years at $2\frac{1}{2}$ per cent. per annum?

(43) What sum will produce £106. 13. 4 Simple Interest in 4 years at $3\frac{1}{2}$ per cent.?

(44) What is the Simple Interest on £360 from Jan. 30 to Dec. 30 of 1868 at $3\frac{1}{4}$ per cent.?

(45) Find the Simple Interest on £1100 from Jan. 6, 1865 to June 19, 1871 at 5 per cent. per annum.

(46) What sum placed out at Simple Interest for $7\frac{1}{4}$ years at $3\frac{1}{2}$ per cent. will produce £101. 10. 0 interest?

(47) Find the Simple Interest of £90.35 for .58 year at 3.025 per cent.

(48) In what time will £1075 amount to £1200 at 5 per cent. per annum Simple Interest?

(49) In how many years will £1030. 12. 11 double itself if placed out at $2\frac{1}{2}$ per cent. Simple Interest?

(50) At what rate per cent. will £301. 12. 6 amount in 5 years to £346. 17. $4\frac{1}{2}$?

(51) At what rate per cent. will £90 amount to £111. 9. 0 in $3\frac{1}{4}$ years?

(52) Find the Simple Interest on £440 for 11 yrs. 5 mths. at £4. 10. 0 per cent.

(53) What sum placed out at Simple Interest will produce £86.12.6 in $3\frac{1}{2}$ years at $2\frac{1}{4}$ per cent. yearly?

(54) In how many years will £474 produce £59. 5. 0 at 2 per cent.?

(55) At what rate per cent. will £105700 amount to £116270 in 10 years?

(56) Find the Simple Interest on £26. 10. 0 for $3\frac{1}{4}$ years at $1\frac{1}{2}$ per cent. monthly.

(57) Find the Simple Interest on £730. 10. 6 for $8\frac{3}{4}$ years at $2\frac{1}{4}$ per cent.

(58) At $\frac{3}{8}$ per cent. monthly, find the Simple Interest on £25 for 1 year 11 months.

(59) Find the Simple Interest on £4000 from Jan. 11, 1873 to July 8, 1875 at $3\frac{1}{4}$ per cent.

(60) Find the Simple Interest on £7050 from Oct. 30, 1843 to Jan. 3, 1876 at 5 per cent. taking account of Leap years.

(61) Find the Simple Interest on £4700 from Nov. 11 to Dec. 7 of the same year at $\frac{5}{8}$ per cent. per month.

(62) At what rate per cent. will £5000 amount to £5400 in 1 year 219 days?

(63) Find the amount of £300.275 placed out at Simple Interest for 3.758 years at 2.125 per cent.

(64) In what time will £370 gain £123. 6. 8 at $3\frac{1}{2}$ per cent. per annum?

(65) Find the amount of Interest to be paid on £200 for 11 mths., £250 for 9 mths., and £300 for 6 mths., at 5 per cent. per annum.

COMPOUND INTEREST.

Find the Compound Interest on

- | | | | | | | | | |
|------|---|-----|-----------------|----------|----------------|-----------|-------------|--|
| (1) | £400 | for | 2 | years at | 3 | per cent. | per annum. | |
| (2) | £560 | „ | 3 | „ | $3\frac{1}{2}$ | „ | „ | |
| (3) | £800 | „ | 4 | „ | $4\frac{1}{4}$ | „ | „ | |
| (4) | £926 | „ | 5 | „ | 5 | „ | „ | |
| (5) | £720 | „ | 6 | „ | 4 | „ | „ | |
| (6) | £814 | „ | 11 | „ | 6 | „ | „ | |
| (7) | £964 | „ | 5 | „ | 3 | „ | „ | |
| (8) | £1796 | „ | $8\frac{1}{2}$ | „ | 4 | „ | half-yearly | |
| (9) | £1900 | „ | $5\frac{1}{2}$ | „ | 6 | „ | „ | |
| (10) | £4702 | „ | $16\frac{1}{2}$ | „ | 5 | „ | „ | |
| (11) | £41951 | „ | 22 | „ | 4 | „ | „ | |
| (12) | £1400 | „ | $3\frac{1}{4}$ | „ | 5 | „ | quarterly | |
| (13) | £925 | „ | $2\frac{1}{2}$ | „ | 4 | „ | „ | |
| (14) | £1726 | „ | $3\frac{3}{4}$ | „ | 5 | „ | „ | |
| (15) | £8021 | „ | $2\frac{3}{4}$ | „ | 6 | „ | „ | |
| (16) | £70211 | „ | $8\frac{3}{4}$ | „ | 4 | „ | „ | |
| (17) | £832 | „ | $1\frac{3}{4}$ | „ | 3 | „ | „ | |
| (18) | £4280 | „ | $1\frac{1}{2}$ | „ | 3 | „ | „ | |
| (19) | £3021 | „ | $4\frac{1}{4}$ | „ | 3 | „ | „ | |
| (20) | £5060 | „ | $3\frac{1}{2}$ | „ | 4 | „ | „ | |
| (21) | Find the amount of £305. 7. 6 for 7 years at 4 per cent. Compound Interest. | | | | | | | |

(22) How much money put out to Compound Interest for 3 years at 5 per cent. will amount to £1157. 12. 6?

(23) Find the amount of £509 for $5\frac{1}{4}$ years at 3 per cent. quarterly.

(24) Find the difference between the Simple and Compound Interest on £200 for 3 years at 2 per cent.

(25) At what rate per cent. Compound Interest will £500 amount to £595. 10. $1\frac{2}{5}$ in 3 years?

(26) Find the Compound Interest on £225 for 5 years at 4 per cent.

(27) What will £140 amount to in $2\frac{1}{4}$ years at 2 per cent. quarterly?

(28) What is the Compound Interest of £203 for $5\frac{1}{2}$ years at 4 per cent. half yearly?

(29) Find the amount on £4009 for $3\frac{1}{4}$ years at 3 per cent. quarterly.

(30) Find the Compound Interest of £302. 12. 6 for 7 years at 3 per cent. per annum.

(31) In how many years will £1000 amount to £1124. 17. $3\frac{9}{5}$ at 4 per cent. per annum?

(32) What sum will amount to £12155. 1. 3 in 4 years at 5 per cent. Compound Interest?

DISCOUNT.

(1) Find the present worth of £4081 due in 5 years reckoning discount at 2 per cent.

(2) What is the present worth of £559. 7. 0 due in $2\frac{1}{2}$ years discount being at 5 per cent.?

(3) Find the present value of £1213. 6. 0 due in 4 years discount at $2\frac{1}{2}$ per cent.

(4) What is the present worth of £793. 7. 6 due in 3 years 4 months at 3 per cent. discount.?

(5) What sum paid now would satisfy a bill of £1650 due in $1\frac{1}{4}$ years at $2\frac{1}{2}$ per cent.?

(6) What is the true discount on a bill of £1608. 0. 0 due in $11\frac{1}{3}$ years at 3 per cent.?

(7) Find the present worth of £322. 7. 0 due in 8 months at $3\frac{1}{2}$ per cent.

(8) What is the present worth of a bill of £81. 3. 5 due in 5 mths. discount at $1\frac{1}{2}$ per cent.?

(9) Find the true discount on £733. 4. 0 due in 1 year 4 months at 3 per cent.

(10) What sum of money paid at the beginning of the year would be equivalent to a salary of £336. 3. 0 per annum paid quarterly, allowing discount at the rate of 5 per cent. per annum?

(11) Find the difference between Banker's and True Discount on a bill of £209 due in 18 months at 3 per cent.

(12) Find the ordinary discount on a bill of £110. 10. 0 due in 2 yrs. 6 mths. at 4 per cent.

Find the Ordinary or Banker's discount upon the following bills :

	Amount		When drawn	Term	When Discounted	Rate of Discount
(13)	£1095 0 0		Jan. 12, 1870	3 mths.	Feb. 14	5 per cent.
(14)	£584 0 0		Oct. 3	1 mth.	Oct. 12	4 „
(15)	£730 0 0		Feb. 11, 1871	6 mths.	Feb. 19	5 „
(16)	£4380 0 0		Jan. 1, 1867	6 mths.	June 3	5 „
(17)	£1485 0 0		Jan. 10, 1843	2 mths.	Mar. 3	2½ „
(18)	£383 5 0		Aug. 5, 1876	3 mths.	Sep. 10	3 „
(19)	£182 10 0		July 14, 1878	6 mths.	Oct. 5	4½ „
(20)	£4573 2 11		Dec. 4, 1877	60 days	Jan. 5, 1878	3½ „

Find the true discount upon

(21)	£368 8 0		Sep. 9, 1874	3 mths.	Oct. 5, 1874	5 „
(22)	£167 14 1		Oct. 3, 1875	60 days	Nov. 5, 1875	3 „
(23)	£1220 2 8		Mar. 11, 1876	30 days	Mar. 18, 1876	4 „
(24)	£297 7 6		Mar. 9, 1878	2 mths.	Apr. 12, 1878	3½ „
(25)	£2797 18 3		Aug. 11, 1877	8 mths.	Oct. 17, 1877	4½ „
(26)	£609 9 2		Sep. 5, 1869	3 mths.	Nov. 11, 1869	2½ „
(27)	£126 5 0		Mar. 9, 1878	5 mths.	May 31, 1878	5 „
(28)	£1105 10 1		May 10, 1871	60 days	June 3, 1871	4 „
(29)	£2286 13 9		Nov. 3	1 mth.	Nov. 7	3 „
(30)	£68 11 4½		Aug. 9	3 mths.	Oct. 15	2½ „

STOCKS.

(1) When the $3\frac{1}{2}$ per cents. are at 92, what money must I invest to receive an income of £175?

(2) If I invest £3694. 10. 0 in the 3 per cents. at 90, what income should I derive?

(3) A person places 1000 guineas in the 3 per cents. at 90, and a like sum in the $3\frac{1}{2}$ per cents. at 95. What does he receive from one investment more than from the other?

(4) In which is it most advantageous to invest, the $3\frac{1}{2}$ per cents. being at 92, and the 4 per cents. at 95?

(5) The shares of a Company originally issued at 100 have depreciated 15 per cent. and bear interest at 4 per cent.; the preference shares of the same Company bearing interest at 6 per cent. are at 20 per cent. premium. How much would an income be decreased by transferring £1530 stock from the preference to the ordinary shares?

(6) A person invested £1112. 10 in the $3\frac{1}{2}$ per cents. at 89, and on their rising to $90\frac{1}{2}$ sold out; what did he gain?

(7) The dividend on the shares of a Company is at the rate of 8 per cent. per annum; had the profits been £450 more, a dividend of $8\frac{1}{2}$ per cent. could have been declared: what is the share capital?

(8) Find the income arising from the investment of £996. 17. 6 in the $3\frac{1}{2}$ per cents. at $90\frac{1}{2}$.

(9) A person lays out £5000 in the 3 per cents. at 75 and afterwards transfers to the 4 per cents. at 80; what is the difference of income?

(10) After investing £8750 in the 3 per cents. at $87\frac{1}{2}$ I sell out on a rise of $\frac{1}{2}$ per cent., investing what I realize in $2\frac{1}{2}$ per cent. railway stock at 44. What is the increase in my income?

(11) The 3 per cents. at 90 decline to $88\frac{3}{8}$. What does a person lose who has invested £4500 at the former price and sells at the latter?

(12) A person has an income of £311. 10. 0 from the $3\frac{1}{2}$ per cents. which he purchased at 91. What sum did he invest?

(13) A person invests £6330 in the 4 per cents. at $79\frac{1}{8}$, and after receiving a year's dividend sells out, investing both stock and profit in the $3\frac{1}{2}$ per cents. at $66\frac{1}{2}$. What is the increase in his income?

(14) If I sell out £19100 stock at $84\frac{3}{8}$, and invest the proceeds in the 4 per cents. at $95\frac{1}{2}$, what income do I thence derive?

(15) A person places £1000 out at Compound Interest for 3 years at 5 per cent., and with £1000 more purchases 3 per cent. stock at $92\frac{1}{2}$ which he holds for the same period, and then sells out at 95. What is his total increase of capital?

(16) Which offers the highest rate of interest, the $3\frac{1}{2}$ per cents. at $73\frac{1}{2}$, or the 4 per cents. at 85?

(17) A has £1750 in the 4 per cents. at $87\frac{1}{2}$. What sum must B have in the $3\frac{1}{2}$ per cents. at 77 to yield him an equal amount of interest?

(18) A person has invested £1092 in the $3\frac{1}{2}$ per cents. at 78, and after receiving a year's dividend sells out at 83, and places the proceeds out at Simple Interest for $2\frac{1}{2}$ years at 4 per cent. What is his total increase of capital at the end of that time?

(19) If £1150 stock be sold out of the 3 per cents. at 72, and £5400 stock out of the $3\frac{1}{2}$ per cents. at 83, and the proceeds be invested in the 4 per cents. at $88\frac{1}{2}$, what is the difference of income?

(20) A person lays out a certain sum in the 3 per cents. at 85, and £4860 in the 4 per cents. at 90; his yearly income from these sources is £426. What amount does he invest in the 3 per cents.?

PROPORTIONAL PARTS.

- (1) Divide 738 into three parts having the ratio of $\frac{1}{2}$, $\frac{1}{3}$ and $\frac{1}{6}$.
- (2) Divide 540 into four parts having the ratio of 8, 5, 7, 10.
- (3) Divide 52 into three parts so that the first may be $\frac{1}{3}$ of the second, and the third $\frac{1}{2}$ of the second and first together.
- (4) Divide 123·21 into three parts having the ratio of 11·1, 1·11 and ·111.
- (5) Standard gold is $\frac{1}{12}$ fine. If a sovereign weighs 123 grains, find the weight of pure gold in 360 sovereigns.
- (6) Divide 93 into two parts so that $\frac{3}{4}$ of the one may be equal to $\frac{4}{5}$ of the other.
- (7) Divide 126 into parts having the ratio of 2, 7 and 9; and also into parts having the ratio of $\frac{1}{2}$, $\frac{1}{3}$ and $\frac{1}{6}$.
- (8) If jewellers' fine gold be 18 carats fine, how much pure gold is there in a piece of plate weighing 33 lbs.? and find its value if a sovereign be 22 carats fine and weighs 123 grains.
- (9) In every 100 parts of ashes of wheat there is, potash 15 parts, phosphate of lime 32, chloride of potassium 0·16, earthy phosphates 44·5, silica 0·5, metallic oxides 0·25, and there is a loss of 7·59. Find the weight of each in a ton of wheat.
- (10) Divide 644 into two parts, so that $\frac{8}{9}$ of the one may be equal to $\frac{9}{10}$ of the other.
- (11) Divide 720 into three parts, so that the first multiplied by 4, the second by 5, and the third by 6 give the same product.
- (12) Sea-water contains by weight 2·65 per cent. of chloride of sodium, ·46 per cent. of sulphate of soda, and ·51 of chloride of magnesium. Find the weight of each in 50 tons of sea-water.

(13) Divide £520 amongst four persons, so that their shares shall be in the ratio $1\frac{1}{2}$, $2\frac{1}{2}$, 4, and 5.

(14) Pure gold is mixed with copper to make standard gold which is 22 carats fine. Find the weight of copper contained in 400 sovereigns, each weighing 120 grains Troy.

(15) One half of *A*'s money is in notes, $\frac{1}{3}$ in gold, $\frac{1}{9}$ in silver, and the remainder, £5, in copper; how much has he of each kind?

(16) The analysis of rye shews that it contains of water 13 per cent., flesh-forming substances 13·8 per cent., heat-givers 71·5 per cent., and mineral matters 1·7 per cent. Find the proportions of each in a cwt. of rye.

(17) *A* has $\frac{1}{2}$ of a certain sum, *B* $\frac{1}{3}$ as much as *A*, *C* $\frac{1}{3}$ as much as *B*, and *D* who has the remainder has £6. 13. 4 more than *B*. How much has each?

(18) Divide 3717 into parts having the ratio of 17, 19 and 23.

(19) Divide 38 into two parts so that the quotient of the lesser divided by the greater may be $\frac{5}{19}$.

(20) Divide £700 among three persons so that the first may have half as much as the second, and the third twice as much as the first and second together.

(21) A debtor owes to *A* £21. 10. 0; to *B* £302. 11. 0; to *C* £119. 10. 6; and to *D* £175. 8. 6. His effects are worth £51. 11. 8. What can he pay to each?

(22) *A* and *B* contribute a certain amount of capital, and gain £45, of which *A* receives £3. 10. 0 more than *B*. What is the ratio of their respective amounts of capital?

(23) *A* contributes £300 to the capital of a partnership, *B* £750 and *C* £850. They gain £399; what amount is due to each?

(24) A joint capital produces £250 gain, of which *A* receives $\frac{1}{3}$; *B* $\frac{1}{4}$; and *C*, who contributed £495, the remainder. Find *A*'s and *B*'s shares of the capital.

(25) Divide £100 between two persons so that one may have five times as much as half of the other's share.

(26) A ship valued at £28000 is lost and is only insured to $\frac{3}{4}$ its value. What amount of loss would fall on each of the owners if *A* owns $\frac{1}{2}$, *B* $\frac{1}{7}$ and *C* and *D* the remainder equally?

(27) The rates paid to the Treasurer of a Union amount to £23261. 4. 0 $\frac{1}{2}$, and are paid by seven parishes in the proportion of 15, 9, 7, 8, 3, 11 and 5 parts respectively; what was the contribution of each parish?

(28) The capital of a company consists of £58000 in shares of £100 each. *A* holds 90 shares; *B* 162; *C* 135; and *D* the remainder. The whole gain is £3480; find the gain of each.

(29) A piece of land measuring 30 ac. is let to three tenants; the first has a certain extent and pays £40, the second has 5 acres for a proportionate rent, the third pays £60 for as much land as the first and second have together. Find the rent per acre.

(30) Of the crew of a merchant-ship $\frac{1}{3}$ are English, $\frac{1}{7}$ Irish, $\frac{2}{9}$ German and the remaining 57 Scotch. Find the number of each nationality.

(31) One thirteenth part of the cargo of a ship consists of iron, $\frac{1}{13}$ of the remainder of grain, $\frac{1}{13}$ of both these quantities of provisions, and the remainder, which weighs 1847 tons, of coals. Find the weight of iron, grain, and provisions.

(32) The gross amount earned by a railway company was £8470400 in 4 years. A dividend at the rate of 10 per cent. per annum is paid on the company's share capital of £12000000. Of the remainder, 30 per cent. is paid in wages, &c., 18 per cent. in maintenance of the permanent way, 25 per cent. for rolling stock, 17 per cent. for materials, and 10 per cent. in passenger-duty, rates, taxes, &c. Find the amount of each of these items yearly.

(33) *A*, *B* and *C* enter into partnership. *A* invests £400 for 3 months, *B* £700 for 7 months, and *C* £900 for 9 months. Find each one's share of the gain, £710.

INVOLUTION.

Find the value of :—

- | | |
|-------------------------------------|---|
| (1) 31^3 | (19) $39^2 \times 48^3$ |
| (2) 925^2 | (20) $756^3 \times 756^2$ |
| (3) 456^4 | (21) $(806^2 + 31^2) \times 59$ |
| (4) $31 \cdot 5^3$ | (22) $(571^3 - 621^2) \times 11^3$ |
| (5) $1 \cdot 13^3$ | (23) $(397^2 + 397^3) \div 39700$ |
| (6) $9 \cdot 289^3$ | (24) $(15^2 - 1 \cdot 31^2) \div 15$ |
| (7) 51^6 | (25) $(3 \cdot 04^3 + 30 \cdot 4^2) \div 304^2$ |
| (8) 17^9 | (26) $31(31^2 + 72^3 + 23^4)$ |
| (9) 529^4 | (27) $1 \cdot 03(4 \cdot 07 + 3 \cdot 16)^2$ |
| (10) $10 \cdot 05^3$ | (28) $3000(1 \cdot 1 \times \cdot 031)^3$ |
| (11) $23^2 + 15^2 + 3^3$ | (29) $7 \cdot 06^2 \times 3 \cdot 14^3$ |
| (12) $17^2 + 36^3 + 19^4$ | (30) $(7 \cdot 03^2 \times \cdot 19)^2 \div (3 \cdot 14 \times \cdot 02)^3$ |
| (13) $516^3 - 496^2$ | (31) $(\frac{17}{34})^2$ |
| (14) $1 \cdot 031^3 - 1 \cdot 03^2$ | (32) $(\frac{18}{19})^3$ |
| (15) $372 \cdot 5^2 - 36^3$ | (33) $(\frac{5}{8})^5$ |
| (16) $506^2 + 506^3 - 307^3$ | (34) $(\frac{17}{21})^5$ |
| (17) $38^2 + 17^3 - 18^3$ | (35) $(\frac{119}{598})^3$ |
| (18) $502^3 + 18^3 - 1376^2$ | (36) $(2\frac{1}{7})^4$ |

EVOLUTION.

Find the value of the following, correct to 5 places of decimals :

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| (1) $\sqrt{379456}$ | (21) $\sqrt{328} + \sqrt{7} + \sqrt{5}$ |
| (2) $\sqrt{276676}$ | (22) $\sqrt{44} + \sqrt{91} - \sqrt{38}$ |
| (3) $\sqrt{531441}$ | (23) $\sqrt{713} + \sqrt{962} + \sqrt{512}$ |
| (4) $\sqrt{665856}$ | (24) $\sqrt{361} + \sqrt{64009}$ |
| (5) $\sqrt{226576}$ | (25) $\sqrt{1142 \cdot 44} + \sqrt{11 \cdot 6281}$ |
| (6) $\sqrt{351649}$ | (26) $5\sqrt{3} + 3\sqrt{5}$ |
| (7) $\sqrt{763876}$ | (27) $11\sqrt{31} - 3\sqrt{29}$ |
| (8) $\sqrt{268324}$ | (28) $8\sqrt{71} \times 3\sqrt{05}$ |
| (9) $\sqrt{94249}$ | (29) $5\sqrt{02} \times 4\sqrt{3 \cdot 8}$ |
| (10) $\sqrt{1002001}$ | (30) $3\sqrt{2} + \sqrt{7} - \sqrt{3}$ |
| (11) $\sqrt{1 \cdot 0609}$ | (31) $\sqrt{97} \div \sqrt{90}$ |
| (12) $\sqrt{158 \cdot 76}$ | (32) $\sqrt[3]{1728}$ |
| (13) $\sqrt{36 \cdot 3609}$ | (33) $\sqrt[3]{29791}$ |
| (14) $\sqrt{3113 \cdot 64}$ | (34) $\sqrt[3]{912673}$ |
| (15) $\sqrt{796}$ | (35) $\sqrt[3]{54872}$ |
| (16) $\sqrt{801}$ | (36) $\sqrt[3]{103823}$ |
| (17) $\sqrt{638}$ | (37) $\sqrt[3]{157464}$ |
| (18) $\sqrt{4 \cdot 03}$ | (38) $\sqrt[3]{4741632}$ |
| (19) $\sqrt{3 \cdot 69}$ | (39) $\sqrt[3]{207474688}$ |
| (20) $\sqrt{81 \cdot 4}$ | (40) $\sqrt[3]{392223168}$ |

- | | |
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| (41) $\sqrt[3]{73}$ | (56) $\sqrt[3]{\cdot 000128024064}$ |
| (42) $\sqrt[3]{962}$ | (57) $\sqrt{\frac{2\frac{2}{5}}{3\frac{2}{5}}}$ |
| (43) $\sqrt[3]{108}$ | (58) $\sqrt{\frac{81}{225}}$ |
| (44) $\sqrt[3]{312}$ | (59) $\sqrt{\frac{121}{256}}$ |
| (45) $\sqrt[3]{946}$ | (60) $\sqrt{\frac{1681}{2601}}$ |
| (46) $\sqrt[3]{813}$ | (61) $\sqrt{\frac{5329}{7921}}$ |
| (47) $\sqrt[3]{594}$ | (62) $\sqrt{\frac{2209}{3481}}$ |
| (48) $\sqrt[3]{725}$ | (63) $\sqrt{\frac{4624}{529}}$ |
| (49) $\sqrt[3]{29}$ | (64) $\sqrt{\frac{14161}{519841}}$ |
| (50) $\sqrt[3]{38}$ | (65) $\sqrt{\frac{4761}{336400}}$ |
| (51) $\sqrt[3]{112}$ | (66) $\sqrt[3]{\frac{512}{2197}}$ |
| (52) $\sqrt[3]{53} + \sqrt[3]{19}$ | (67) $\sqrt[3]{\frac{729}{157464}}$ |
| (53) $\sqrt[3]{\cdot 41} + \sqrt[3]{\cdot 85}$ | (68) $\sqrt[3]{\frac{300763}{1367631}}$ |
| (54) $\sqrt[3]{\cdot 000714} + \sqrt[3]{32}$ | (69) $\sqrt[3]{\frac{196122941}{197137368}}$ |
| (55) $\sqrt{\cdot 000000634}$ | (70) $\sqrt{\frac{28934443}{337153536}}$ |

INVOLUTION AND EVOLUTION.

- (1) Find the cube root of the fourth power of 112.
- (2) What is the length of the side of a square containing 1151 sq. yds.?
- (3) What is the length of a square field containing an acre?
- (4) In any right-angled triangle the square of the hypotenuse is equal to the sum of the squares of the other two sides: find the area of a square field whose diagonal (*i. e.* a straight line joining two opposite corners) is 380 yards.
- (5) How many cubic feet of water are contained in a tank $15\frac{1}{2}$ yards long, broad, and deep?
- (6) Find the content of a cubical vessel whose side is 41 ft. $6\frac{1}{2}$ in.
- (7) How many cubical blocks, each edge measuring 4 in., may be cut from a piece of timber 4 feet long, broad and thick?
- (8) Applying Ex. 4. find the content of a cube, whose greatest diameter is 15 inches.
- (9) Find the value of $\sqrt[4]{32} + \sqrt[3]{32} + \sqrt{32}$.
- (10) From $\sqrt[3]{\frac{1331}{3375}}$ take $\sqrt{\frac{224}{784}}$.
- (11) Find the value of $\sqrt[3]{\frac{4913}{5832}} + \sqrt{\frac{324}{361}} - \sqrt[3]{\frac{3375}{54872}}$.
- (12) To the square of $1\frac{2}{3}$ add the cube of $1\frac{2}{3}$.
- (13) "The areas of circles are to each other as the squares of their diameters." Find the area of a circular pond whose diameter is $3\frac{1}{2}$ times as great as another circular pond containing 819 square yards.
- (14) Find the square root of a number equal to the sum of the squares of 9 and 17.

(15) A ladder 28 ft. long, the foot of which is placed 7 ft. from a house, just reaches a window-sill; find the height of the window-sill from the ground.

(16) What is the length of the side of a cube, which contains 9 cub. yards 11 ft. 64 inches?

(17) A square field contains 35 acres: find the length of its diagonal.

(18) The diameter of a circle is 12 ft.; what is the length of the side of the inscribed square?

(19) The length of the side of the inscribed square of a circle is 31 ft.; find the area of the circumscribed square.

(20) How many square inches does the surface of a cube contain, the diagonal of whose side is 16 inches?

(21) Find the mean proportional between 9 and 16.

(22) Find the mean proportional between 5 and 9·8.

(23) Find the mean proportional between 50 and 79·38.

(24) Find the two mean proportionals between 3 and 24.

(25) Find the two mean proportionals between 5 and 40.

(26) Find the two mean proportionals between $1\frac{1}{10}$ and $70\frac{2}{3}$.

(27) The weights of solid spheres of the same material are to each other as the cubes of their diameters. If a hollow spherical mould 4 inches in diameter will contain 1·25 lbs. Av. of water, find the weight of a round shot 12 inches in diameter, the specific gravity of cast iron being 7·250.

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EXAMINATION PAPERS.

PAPER I.

1. Write in figures, one hundred and three, seven thousand six hundred and nine, forty thousand and twenty, eighteen hundred and six, and nine thousand four hundred and seven.

2. Give the following numbers in words: 7021, 307, 3009, 18087, 5010.

3. Add together 1509, 302, 27, 416 and 29.

4. Three and a half dozen books are bought for the first class, ninety-six for the second, one hundred and forty-four for the third, three score for the fourth, and seven dozen and three for the fifth. How many were bought altogether?

5. Twenty thousand five hundred and six persons visited the Crystal Palace on Monday, seventeen thousand and seventeen on Tuesday, three thousand two hundred and six on Wednesday, five thousand seven hundred and eight on Thursday, eleven thousand six hundred and ten on Friday, and thirty-seven thousand five hundred and eighty on Saturday. How many visited the palace during the week?

6. Add together 3170, 90061, 3117, 8694, 92184 and 4729; and give the answer in words.

7. Express in words the following numbers: 70070, 707, 5706, 9011610, 3210, 10176, and 40400.

8. Eleven thousand three hundred bales of cotton were landed on Monday, thirty-three thousand six hundred and eight on Tuesday, one hundred and four thousand three hundred and sixty on Friday, and three thousand seven hundred and nine on Saturday. How many were landed during the week?

9. Add together 3190, 187965, 931472, 8296 and 3147; and express the result in words.

10. Add together thirty millions five hundred and eight thousand six hundred, twenty-three thousand twenty-three hundred and twenty-three, ninety-one thousand and nineteen, eighteen thousand eighteen hundred and eight, and fifty-nine millions eleven thousand and one.

PAPER II.

1. Out of a box containing two hundred oranges, which were selling at sixteen for a shilling, a fruiterer sold three shillings worth, five sixpenny-worths, and 14 threepenny-worths. How many were left?

2. Seventeen thousand three hundred bales of cotton were brought to Manchester on Monday, and the sales were two thousand three hundred and twenty bales; eight thousand were brought on Wednesday and ten thousand six hundred and twenty-six were sold; while on Saturday four hundred and seven were brought and three thousand six hundred and forty-six were sold. How many remained in stock?

3. From one million one thousand and one, take thirty-seven thousand thirty-seven hundred and thirty-seven.

4. Multiply the sum of $379 + 3894 + 92016 + 109 + 3991$ by 27 times 28.

5. To 9 times 1106 add 7 times 596, and from the sum take 7935.

6. Take thirty-seven millions thirty-five thousand six hundred and eighteen from 110011007; and give the result in words.

7. Take eleven thousand and nineteen from thirty-three times eleven hundred and seventy-six.

8. A person bought 119 dozen, 70 score, and sixteen quarts of plums, and sold 796 quarts; how many remained?

9. Add together 30210, 4719, 8726, 3824, and 4967; take 40791 from the sum and multiply the result by 25.

10. To the seventh part of 83412 add 5 times 965.

PAPER III.

1. From the sum of eleven thousand seven hundred and seventy-five, and eleven thousand one hundred and eighty-nine, take seven times their difference.

2. How many times is four hundred and four thousand and sixty contained in eleven millions ten thousand and forty?

3. After subtracting 357 thirty-five times from a certain number there remains 309; what is the number?

4. Multiply the half of eleven hundred and sixty-two by twice the third part of 402.
5. Take three thousand and ninety-two from four thousand one hundred and ninety-one and multiply the remainder by 608.
6. A book consists of 72 sheets, each containing 8 pages; how many pages are there in 3 dozen copies?
7. A year consists of 365 days; how many days are there in 19 years 213 days?
8. Find the sum of the third, fourth, fifth, sixth, and seventh parts of 32760.
9. Divide 10190715 by 999.
10. Multiply 371259 by 3710059.

PAPER IV.

1. Reduce 3180 threepences to fourpences.
2. What number is that which multiplied by 7 gives 217?
3. How many times is 19 contained in 71318?
4. What is the difference between seven times 814 and five times 998?
5. How many farthings are there in £11. 15. 3?
6. What amount of money will purchase 11 tea sets at 15s. 9½d. each?
7. How many dozens are there in 126 scores?
8. Multiply the half of 3156 by the half of 998.
9. A person sells 5½ gross boxes of matches, gaining 2½d. per dozen. How much is gained altogether?
10. Reduce 90611 sixpences to pounds, &c.

PAPER V.

1. Divide 3011011 by 346.
2. From £5. 1. 6 take £3. 12. 9½.
3. How many times is 10½d. contained in 3 guineas?
4. Find the ninth part of £70. 17. 10½.
5. Find the cost of 83 tons of Nitrate of Soda at £12. 2. 4 per ton.
6. Multiply £42. 7. 7¼ by 162.
7. Reduce 7000 farthings to pounds, &c.
8. What amount of money divided equally amongst 17 persons will give £5. 7. 9 to each?

9. Divide £32. 11. 4 $\frac{1}{2}$ by the twenty-seventh part of 999.
10. How many yards of linen at 2s. 10d. per yard must be given in exchange for 1628 yds. of calico at 8 $\frac{1}{2}$ d?

PAPER VI.

1. A tradesman gains £931 in a year; what is that per week?
2. Multiply £39. 16. 0 $\frac{1}{2}$ by 39.
3. Divide £702. 11. 6 $\frac{1}{4}$ by 37.
4. What is the cost of 7 dozen at 3s. 6 $\frac{1}{2}$ d. each?
5. Divide 70213169 by 83.
6. A person in receipt of £200 a-year pays 8s. 6d. weekly for rent, and £7. 10. 0 for rates and taxes yearly; how much may he spend weekly so as to save thirty guineas in the year?
7. How many lbs. of butter at 1s. 9d. may be bought for £3. 10. 0?
8. What would 7 $\frac{1}{4}$ dozen books cost at 2s. 6d. per copy?
9. Reduce 108 fourpences to threepences.
10. Find the cost of 17 $\frac{1}{2}$ yards of calico at 8 $\frac{1}{2}$ d. per yard.

PAPER VII.

1. Find the sixty-third part of £72. 11. 10 and 117 times £1. 19. 9 $\frac{1}{2}$ d.
2. Find the cost of 43 lbs. of gold at £3. 17. 10 $\frac{1}{2}$ per ounce.
3. Find the amount of 73 days' wages at the rate of 150 guineas per annum.
4. How much cloth at 11s. 3d. per yard may be bought for £446?
5. How many days are there from March 16 to Dec. 13?
6. How often may 5s. 6 $\frac{1}{2}$ d. be taken away from £5. 10s. 10d.?
7. How many times does a clock beating seconds tick in a week?
8. What is the cost of 19 $\frac{1}{2}$ articles at £3. 2s. 6d. each?
9. If a person spend 10s. 11 $\frac{1}{2}$ d. daily, what does he save from an income of £250 a year?
10. If £52. 1s. 9d. pays the weekly wages of 36 women, what does each one earn per month?

PAPER VIII.

1. If a person spends on the average 8s. 1 $\frac{3}{4}$ d. per day, what does he spend in a year?
2. Reduce 7 millions of feet to miles.

3. A person receiving £220 a year spends 10s. $1\frac{1}{2}d.$ per day during the months of January, March, and April, 11s. $7\frac{3}{4}d.$ per day during June, July, and December, and 5s. $8\frac{1}{2}d.$ per day during the rest of the year. What does he save yearly?

4. A gardener has two trees, each bearing 125 score 7 dozen and sixteen apples, which he sells at 5 for $2d.$ What does he realise?

5. Find the cost of 17 bushels of oats at $10\frac{1}{2}d.$ per peck.

6. Divide 308 guineas equally amongst 42 persons.

7. How many sixpences are there in £7. 6s. $6d.$?

8. Find the cost of $11\frac{1}{2}$ lbs. of butter at 1s. $5d.$ per lb.

9. Find the difference of £31. 13s. $7\frac{1}{2}d.$ and 70310 farthings.

10. Divide 8 times 7s. $9\frac{1}{2}d.$ by 17.

PAPER IX.

1. A ham weighing 17 lbs. cost 14s. $2d.$, what is that per lb.?

2. A farmer bought 11 oxen at £27 each, and sold 48 sheep at 47s. each. How much more money would he pay than he received?

3. Divide the third part of 3 guineas and a half amongst seven persons equally.

4. Multiply £3. 13s. $7\frac{3}{4}d.$ by 474.

5. Divide £201. 11s. $10\frac{1}{4}d.$ by 37.

6. The wages of 7 men for a day is £1. 11. $9\frac{1}{2}$; what is that for each?

7. How many articles at 4s. $3d.$ for 17 may be purchased for £5?

8. What is the cost of $13\frac{1}{2}$ gross at 7s. $6d.$ per dozen?

9. By how many is six dozen dozen greater than half-a-dozen dozen?

10. What is the difference of seven times the half of £1. 2. 9 and four times the seventh part of 5 guineas?

PAPER X.

1. How many at 5s. $8\frac{1}{2}d.$ each may be bought for £31. 7. 11?

2. What is the cost of 115 yds. of linen at $11\frac{1}{4}d.$ per yard?

3. Find the cost of $5\frac{1}{2}$ tons of coal at 15s. $9\frac{1}{2}d.$ per ton.

4. A load of hay containing 40 trusses is sold for £4. 10. 0; what is the price per truss?

5. When hay is at 1s. 2d. per stone, what will a ton cost?
6. The rent of a house is £14. 6. 0 per year, what is that per week?
7. Take 3 times 11s. 6½d. from the half of five guineas.
8. Reduce 25 guineas to half-crowns.
9. Reduce the sum of £4. 11. 10, £5. 1. 6, £8. 3. 9, and £7. 2. 6 to pence.
10. The windows of a row of houses, 27 in number, each house having 7 windows containing 16 panes of glass each, are glazed at a cost of 7d. per pane; what is the entire cost of glazing?

PAPER XI.

1. Divide 314276921 by 17, and by 23.
2. How many days are there from March 2 to Aug. 23 of the same year?
3. Multiply £3. 12. 9¼ by 37 and 43.
4. Divide £345. 13. 2¾ by 95.
5. A boy earns 13s. 7¼d. weekly, in what time will he earn £11. 11. 11¾?
6. Out of 17305 votes the successful candidate at an election received 1707 more than his opponent; what were the numbers of each?
7. On dividing 312476921 by a certain number the quotient is 6648445 with 6 as a remainder; what is the divisor?
8. Divide £15. 14. 8¼ by 7½.
9. If 5 men, 9 women, and 8 boys jointly earn £780 in a year, and a man earns as much as three women or four boys, what does each earn weekly?
10. Reduce 312061 yards to miles.

PAPER XII.

1. How many threepences are there in the sum of £5, 5 half-sovereigns, 5 crowns, 5 half-crowns, 5 shillings, and 5 sixpences?
2. What is the cost of 11¾ lbs. of beef at 10d. per lb.?
3. How many dozen pairs of gloves may be bought for £21 at 3s. 6d. per pair?
4. A person spends 35s. 7d. weekly, thus saving £33. 10. 6 out of his income yearly; what is his income?

5. At 3s. 3½d. per yard I buy 19½ yards of serge and tender a five pound note in payment; what change should I receive?
6. What cash with 13 dozens of wine at 45s. per doz. must be given in exchange for 11 pieces of cloth, each 12½ yards, at 7s. 6d. per yard?
7. What must be given for 14 tons of hay at £4. 19. 0 per ton?
8. What weight of potatoes at £3. 12. 9¼ per ton may be bought for £134. 12. 6¼?
9. Multiply £3. 17. 10¼ by 93 and by 218.
10. What does the sale of 55½ dozen of sherry realise at 30s. per dozen?

PAPER XIII.

1. What number contains 3756 exactly 13½ times?
2. If a pace be 20½ inches, how far does a person go in making 11300 paces?
3. What number divided by 91 will give 37 as quotient and a remainder of 38?
4. By how much is £7000 greater than seven hundred and seven thousand and ten pence?
5. From sixteen thousand and ten pounds take sixteen thousand sixteen hundred and sixteen pence.
6. How many shillings are there in 81904 half-farthings?
7. What number multiplied by 36 will give 58008096?
8. The number of eggs annually consumed in Paris during the five years 1847—51 are thus given in the official returns: 129940724; 106747222; 113587732; 124597150 and 129732297. Find the average yearly consumption.
9. Find the cost of 75½ dozen eggs at two for three-halfpence.
10. A boy earns 8s. 9d. a week; what is that in a year?

PAPER XIV.

1. From eleven hundred cwt. take eleven hundred lbs.
2. What is the weight of 17 parcels, each 19½ stoness?
3. From 11 acres subtract 1 r. 1 p. 1 yd., and multiply the remainder by 11.

4. How many gallons are contained in 51 qrs, 3 bus, 3 pks.?
5. Reduce 93216 pints to bushels, and the same number of farthings to £.
6. On dividing a certain sum of money among 89 persons, each receives £5. 12. $8\frac{1}{2}$; what would each have received had there been 13 persons less?
7. Reduce 370215 farthings to £, and £57. 12. 9 to threepences.
8. Divide £36. 13. $0\frac{1}{4}$ by $8\frac{3}{4}$.
9. How far will a person walk in $3\frac{1}{2}$ hours if he takes 520 steps of $2\frac{1}{2}$ ft. each every 4 minutes?
10. Reduce 3410 dollars, each worth 4s. 6d., to English money, and find the number of cents (100 to the dollar) in £3. 16. 6.

PAPER XV.

1. Divide £80. 11. 10 by 38.
2. Reduce £15. 19. $10\frac{3}{4}$ to farthings.
3. Find the cost of 89 ounces of gold at £3. 17. $10\frac{1}{2}$ per oz.
4. A certain parish has a rateable value of £9061; what will a rate of twopence in the £. produce?
5. What would be the amount of seven third-class railway fares from Tamworth to London at 9s. $1\frac{1}{2}d.$, and two first-class at 15s. 7d.?
6. How many posts, each 6 ft. apart, would be required in fencing a circular plot of ground half a mile round?
7. How many sovereigns are there in 70215 halfpence?
8. Multiply £3. 14. $2\frac{1}{2}$ by 796.
9. Divide £5. 11. $6\frac{1}{4}$ by $3\frac{1}{2}$.
10. If £2190. 3. $0\frac{1}{2}$ maintains 146 persons, what is the average cost of each?

PAPER XVI.

1. Divide five thousand pounds equally amongst 72 persons.
2. How many paces, each 1 ft. 9 in., would a person take in walking $3\frac{1}{2}$ miles?
3. From the difference of 407 pounds and 407 half-guineas take the difference of 407 half-crowns and 407 farthings.

4. Find the difference between eleven hundred and six times £31 and 1106 times 31 pence.
5. What is the cost of $3\frac{1}{2}$ gross of lead-pencils at $3\frac{1}{2}d.$ per dozen?
6. Multiply 19s. $3\frac{1}{2}d.$ by 37.
7. Find the weight of 13031 packets of corn flour, each weighing 8 ounces.
8. Divide seventy thousand five hundred and eighty cwt. by 250.
9. What is the cost of 27 panes of glass at $11\frac{3}{4}d.$ each?
10. *A* has a certain sum; if he had 1s. $7\frac{1}{2}d.$ more he would have seven times as much. What has he? Give reasons for the method of solution.

PAPER XVII.

1. From £130. 10. 0 take 1300 pence.
2. *A* has £10. 11. 0 and pays *B* 535 pence; *B* has 2700 pence at first and pays *A* £2. 11. 9. How much has *A* now more than *B*?
3. A timber merchant buys 11 trees containing on the average 473 feet of timber each; if he sells the whole at $3\frac{1}{2}d.$ a foot what does he realise?
4. How many revolutions does a cart wheel 12 ft. round make in going a mile and a half?
5. How many gallons of water are there in a cistern containing $11\frac{3}{4}$ cwt., supposing a quart of water to weigh 2 lbs.?
6. Multiply £11. 4. $9\frac{1}{2}$ by 389.
7. What sum of money divided equally amongst 23 men will give £2. 1. 4 to each?
8. In the construction of a bridge 277125 bricks are used. Find their cost at £3. 14. 6 per thousand.
9. After paying the amount of $5\frac{1}{2}$ fares, each 13s. $8\frac{1}{2}d.$, what change do I receive out of a £5 note?
10. To five times the third part of £4. 11. $9\frac{3}{4}$ add six times the fifth part of £9. 11. 3.

PAPER XVIII.

1. How many boys standing in a straight line and placed 5 feet apart would reach a quarter of a mile?
2. Divide 7916037 by 79, and prove the correctness of the result.

3. How many times is 3s. 6d. contained in $7\frac{1}{2}$ guineas?
4. A merchant bought 51 cwt. 1 qr. 14 lbs. of butter at 135s. per cwt., and retailed it at 1s. 5d. per lb.; what was his gain on the whole?
5. What amount of rate should a row of 13 houses pay, each assessed at £15, if the rate be 2s. 4d. in the £?
6. The North Eastern Railway Company carried in a certain period 10,500,000 passengers, of whom $\frac{1}{5}$ were first-class at an average fare of 11s. 8d. each, $\frac{1}{10}$ second-class at 5s. 9d. each, and the remainder third-class at a fare of 7s. $10\frac{1}{2}$ d. each. What was the total amount received?
7. Reduce 504 guineas to florins.
8. A mile contains 1760 yds. and a knot 2000 yards. What is the difference between 16 miles and 16 knots?
9. A ham weighing 19 lbs. cost 18s. $2\frac{1}{2}$ d. What was that per lb.?
10. Reduce 70711234 grs. Troy to lbs.

PAPER XIX.

1. What is the cost of $41\frac{1}{2}$ dozen primers at $3\frac{3}{4}$ d. per copy?
2. From 3 times the fourth part of £2. 10. 0 take the half of the fifth part of ten guineas.
3. What number multiplied by 16 will give 12 score?
4. Reduce 30313 lbs. to tons.
5. How many boys' suits at 8s. 11d. each can be obtained for £26. 15. 0?
6. From thirteen hundred pounds take thirteen hundred and thirty half-crowns.
7. Find the cost of $3\frac{1}{2}$ gross of copy-books at 1s. $7\frac{1}{2}$ d. per dozen.
8. Find the total cost of $3\frac{1}{2}$ first-class fares at 8s. 6d., 9 second-class at 6s. $7\frac{1}{2}$ d., and $26\frac{1}{2}$ third-class at 4s. 3d.
9. Find the cost of carriage of 1 ton $11\frac{1}{4}$ cwt. for 107 miles at $6\frac{1}{4}$ d. per mile.
10. Find the value of $323\frac{1}{4}$ cwts. of butter at £4. 11. 8 per cwt.

PAPER XX.

1. Divide £9013. 10. 3 by 122.
2. What in English money would be the weekly wages of a workman earning 38 dollars a month, reckoning a dollar to be 4s. 2d.?

3. What remains after subtracting 297 as often as possible from 30051638?
4. Find the rent of 7 acres of land at £3. 17. 10 $\frac{3}{4}$ per acre.
5. Divide a million by 427, and prove the result.
6. What is the cost of 746 tons of wrought iron at £9. 19. 11 $\frac{3}{4}$ per ton?
7. A farm of 87 acres is rented for £369. 11. 4 $\frac{1}{2}$; what is that per acre, and find the rent of 5 $\frac{1}{2}$ acres at the same rate?
8. Reduce 3 lbs. 5 oz. 11 dwts. 13 grs. to grains.
9. How many times is 3 ft. 2 $\frac{1}{2}$ in. contained in 3 m. 2 $\frac{1}{2}$ poles?
10. Which is the greater and by how much, 3 times 4 cwt. 3 qrs. 7 lbs. or 5 times the fourth part of 1 $\frac{1}{4}$ tons?

PAPER XXI.

1. How many hurdles, each 7 ft. 6 in. long, would be required to fence a piece of ground a furlong square?
2. Find the weight of sugar in 22 casks, if each cask weighs 5 cwt. 3 qrs. 11 lbs. gross and $\frac{1}{11}$ of this be deducted as tare.
3. What is the yearly out-put of coal at a colliery which sends 1 ton 12 cwt. to the surface every 5 minutes night and day, working from 6 A.M. on Monday to 2 P.M. on Saturday each week?
4. Reduce 3045813 ounces to tons, and the same number of inches to miles.
5. Reduce 14 ac. 1 r. 25 p. 11 $\frac{3}{4}$ yds. 7 ft. 111 sq. inches to sq. inches, and 2 yrs. 316 dys. 1 hr. 59 m. 27 sec. to seconds.
6. If a horse consumes 1 $\frac{1}{4}$ bus. of oats weekly, what quantity would be required by 71 horses for 2 $\frac{1}{2}$ years?
7. Divide the sixth part of the half of 2 tons 5 cwt. by 3 times the fourth part of $\frac{1}{7}$ of 21.
8. From 1 ton 3 qrs. 12 lbs. take 13 cwt. 3 qrs. 27 lbs. 9 oz.
9. Divide 312 cub. yds. 3 ft. 123 in. by 51, and prove the result.
10. What is the cost of 3 cwt. 3 qrs. 12 lbs. of flour at 2s. 4d. per stone?

PAPER XXII.

1. The height of Chimborazo, one of the Andes, is 21440 feet. Express it in miles, &c.
2. Multiply £2. 1. 7 by 17, and subtract half the result from 21 guineas.

3. Write down the square of 59178 and the cube of 3479.
4. Reduce 4 millions of inches to miles, &c.
5. A certain number divided by 87 gives 909239 and 24 remainder. Find it.
6. How many days are there in $1\frac{3}{4}$ centuries?
7. Reduce 101 m. 3 fur. 1 yd. to half yards.
8. What length of cloth is contained in 11 bales, each consisting of 5 parcels, each parcel being 10 pieces, and each piece 33 yds. 1 qr.?
9. A gardener sends to market 30 baskets of potatoes, each basket containing $2\frac{1}{2}$ bushels. If they are sold at 1d. per lb. what would they realise, supposing a peck to contain 14 lbs.?
10. A rail maker buys 190 tons of old iron rails at £4. 14. 0 per ton, and sells 376 tons new rails at £11. 10. 0 per ton. What is the difference in the amounts?

PAPER XXIII.

1. What is the cost of a gross of packets of lead-pencils, each packet containing a dozen, at $5\frac{1}{2}d.$ per doz.?
2. What amount of wages is due to a person for 73 days service at $5s. 7\frac{1}{2}d.$ per day?
3. Within a certain period 209510 bushels of corn were delivered by steamer at the port of London; the average rate of wharfage was 1s. 2d. per quarter. What did this amount to?
4. Multiply 3 tons 17 cwt. 2 qrs. 11 lbs. 9 oz. by 2127.
5. How many times is 77 cwts. 2 qrs. 11 lbs. 9 oz. contained in 15758 tons 3 qrs. 12 lbs. 11 oz.?
6. What is the cost of $11\frac{1}{2}$ yds. of flannel at 1s. 6d. per yard?
7. A tap discharges $2\frac{1}{2}$ gallons per minute. How long would it take to empty a cistern containing 125 gallons?
8. How many times does a carriage wheel 5 ft. round revolve in a journey of $4\frac{1}{2}$ miles?
9. A person exchanges 11 yards of cloth at 11s. 8d. per yard for 70 yards of calico at $6\frac{1}{2}d.$ per yard; what money should he also receive?
10. Find the difference between $7\frac{1}{2}$ times 11s. $6\frac{1}{2}d.$ and 3 times the fourth part of 5 half-guineas.

PAPER XXIV.

1. A boy was born on the 9th March, 1862; how many days old was he on the 23rd October, 1878, taking account of leap years?
2. The 29th July is on a Monday; on what day of the week does Christmas day fall in that year?
3. How many halfpence are contained in the change received out of a sovereign after paying for 5 yards of linen at 2s. 11½d. per yard?
4. If I draw £400 from the bank, pay £306. 12. 10½, and receive £73. 19. 6½, what have I left?
5. What is the cost of 2¼ score sheep at £3. 11. 10 per head?
6. After cutting away one-seventh of the length of a beam I find it is still 10 yds. 2 ft. long. What was its former length?
7. How many days are there from the 29th Feb. to the 16th Nov. of the same year?
8. Find the whole cost of 12½ gross of pens at 6¾d. per dozen, 5¼ gross copy-books at 1½d. each, 13 dozen and 7 slates at 5d. each, and 8 boxes of pencils at 7½d. per box.
9. Multiply £3. 16. 8¾ by seven times 119.
10. A tradesman pays 42 guineas a year rent; how much is that per week?

PAPER XXV.

1. Find the cost of equipping 32000 troops, each with a blanket at 8s. 9d., uniform suit at 45s., 3 months provisions costing £19. 16. 8, a rifle at £2. 17. 0, and a tent costing £4. 5. 0 for every 4 men.
2. A gas meter shews a total consumption of 50854 cub. ft.; last quarter it indicated 43729. Find the cost of consumption for the quarter at 4s. 6d. per thousand.
3. How many days are there from Jan. 18th, 1854, to July 6, 1878, both inclusive, taking account of leap years?
4. How many drain pipes, each 1 ft. 4½ in. long, would be required for laying three drains, 199 yards, 302½ yards, and 472 feet respectively?
5. Reduce 70711234 drams to tons.
6. In 5 ac. 3 r. 12 p. how many yards? Prove the correctness of the result.

7. How many articles at 1s. $6\frac{1}{4}d.$ each may be bought for £18. 5. 0?

8. At a collection there was found in the boxes 11 sovereigns, 19 half-sovereigns, 5 crown pieces, 107 half-crowns, 130 florins, 268 shillings, 119 sixpences, 58 fourpenny pieces, 111 threepenny do., 19 pence, 5 halfpence and a farthing. What was the whole sum collected?

9. How many hours are there in $3\frac{1}{2}$ weeks?

10. Find the cost of 13008 articles at £2. 1. $11\frac{1}{4}$ each.

PAPER XXVI.

1. Reduce 7000000 lbs. to tons.

2. Divide £12. 0. $7\frac{3}{4}$ by 57, and prove the result.

3. From 19 cwt. 3 qrs. take 17 cwt. 1 qr. 19 lbs., and find the value of the remainder at $7d.$ per lb.

4. How many cub. yds. are there in 70711234 cubic inches?

5. Find the cost of 960 tons of old iron at £3. 0. $11\frac{1}{4}$ per ton.

6. Reduce 703 guineas to account money.

7. Multiply the half of £1. 11. $10\frac{1}{2}$ by 3 times the half of 68.

8. How many articles at 6s. $8d.$ each may be bought for £25. 13. 4?

9. If 5 score and nine articles cost £54. 19. 1, what is that for one?

10. What was the cost of $16\frac{3}{4}$ tons of coal at 13s. $4d.$ per ton?

PAPER XXVII.

1. Reduce 1100 inches to yards, and 1100 yards to poles.

2. How many days are there from July 1st to Sept. 15 of the same year, both days included?

3. How many articles at 7s. $6d.$ for 3 can be purchased for $2\frac{1}{2}$ guineas?

4. Reduce 11 millions of square inches to acres.

5. What is the Simple Interest on £200 for $4\frac{1}{2}$ years at $1\frac{1}{4}$ per cent.?

6. How many acres of land may be bought for £9680 at $1\frac{1}{2}d.$ per square yard?

7. Find the total cost of 11 lbs. tea at 3s. $4d.$, 9 do. at 4s. $6d.$, 25 lbs. sugar at $4\frac{1}{2}d.$, 2 stones do. at $3\frac{1}{2}d.$ per lb., $5\frac{1}{2}$ lbs. coffee at 1s. $10d.$, 11 lbs. butter at 1s. $5d.$, 18 lbs. biscuits at $8d.$, and 7 bars soap, each $3\frac{1}{2}$ lbs., at $4d.$ per lb.

8. Multiply £2. 11. 10½ by 51, and the result by 6.
9. Reduce 39168 half-crowns to guineas.
10. A bar of tempered steel 1 inch square will bear a strain of 153741 lbs. Express this weight in tons.

PAPER XXVIII.

1. Multiply 3 lbs. 5 oz. 11 dwts. 13 grs. by 370.
2. Reduce 5 million square inches to roods.
3. Find the value of 11 ac. 3 r. 11 p. at £2. 10. 0 per acre.
4. Find by the rule of Practice the value of 705 articles at £1. 19. 8¼ each.
5. If 15 cwt. cost 11s. 6d., what is that per ton?
6. Find the cost of 3 tons 7 cwt. 2 qrs. at 2 guineas for 1 ton 1 cwt.
7. If 7 men mow 3 ac., how many men would be required to mow 42 acres in the same time?
8. Find the cost of 11 cwt. 3 qrs. 12 lbs. of leaden piping at 7s. per yard, if each yard weighs 18 lbs.
9. How many yards of matting at 5 half-crowns for 100 yards may be bought for £15?
10. The 7.10 a.m. train from Tamworth passes Nuneaton, a distance of 13 miles, at 7.36. If it travels at a uniform rate, when will it reach London, a distance from Nuneaton of 96½ miles?

PAPER XXIX.

1. Reduce 70319 grains Troy to lbs. Troy and Avoirdupois.
2. In 36 lbs. 4 oz. Avoirdupois how many Troy grains?
3. Reduce 93 lbs. Avoirdupois to Troy weight.
4. A farmer bought four score and six sheep at £3. 9. 4 a head, and sold 11 bullocks at 23 guineas each; what was the difference in the sums paid and received?
5. A gas company charges 4s. 3d. per thousand cubic feet, and a fish-tail burner consumes 2½ ft. per hour. What would be the charge for lighting a town with 200 lamps for a fortnight if each lamp be kept burning on the average 12½ hours per day?

6. A person starts to pick up 20 stones placed in a straight line a yard apart, carrying each one separately to the end of the line. What distance does he travel?

7. What is the average price of wheat per qr. when on Monday it is quoted at 69s. 11d., on Tuesday at 71s. 6d., on Thursday at 69s., and on Saturday at a further decline of 1s. 6d. per qr.? Explain the meaning of the term "average."

8. How many articles at 19s. 3½d. each may be bought for £38. 11. 8?

9. Find the cost of 13 cwt. 3 qrs. 12 lbs. 8 oz. at £9. 10. 0 per cwt.

10. What is the value of 11 yds. 2 ft. 6 in. at 3s. 9d. per yard?

PAPER XXX.

1. What is the cost of 7 chests of tea, each weighing 95 lbs., at 3s. 4d. per lb.?

2. The poor's rate on a certain property at 7d. in the £ produced £9. 11. 8. What was the rateable value?

3. What is the weight of 17 trucks of merchandise containing on the average 5 tons 11 cwt. 3 qrs. 12 lbs. each?

4. A crop of grass averages 2 tons 9 cwt. 3 qrs. per acre; what is that for 110 ac. 3 r. 30 p.?

5. Reduce 70711234 gallons to loads.

6. Find the value of 68 ac. 1 r. 24 p. at £25 per acre.

7. Bought oranges at the rate of two for three-halfpence and sold them at seven for sixpence; how much was gained on a box containing 3 gross?

8. A person buys the freehold of 107 acres 0 r. 13 p. at £80 per acre; what does he pay for it?

9. Multiply 3 tons 17 cwt. 2 qrs. 11 lbs. 9 oz. by 4963.

10. How many times may 17s. 11½d. be taken from 19 guineas?

PAPER XXXI.

1. If 25 francs = £1 sterling, reduce 3½ millions of francs to English money.

2. Reduce 70711234 inches to miles.

3. The cost of maintaining 70000 refugees averaged 2 piastres (each 2½d.) per head per day. What sum of money would be required to maintain the whole during the month of May?

4. Find the value of 84 ac. 0 r. 20 p. of land cropped with potatoes at £15. 10. 0 per acre.
5. How many times may 7s. 3d. be taken from £5. 8. 9?
6. What is the sum received per month (4 wks.) on the sale of the "Standard," averaging 202451 copies daily, at $7\frac{1}{2}d.$ per dozen copies?
7. How many days are there from Jan. 20th, 1878, to July 9, 1879?
8. Write down the square of 395167.
9. What weight of metal is contained in 11 bars, each weighing 5 cwt. 3 qrs. 11 lbs.?
10. Five barrels of tobacco, each weighing 3 cwt. 1 qr. 5 lbs. nett, were bought at the rate of 2s. 8d. per lb. What did the whole cost?

PAPER XXXII.

1. Reduce 70711234 grs. to lbs. Apothecaries' weight.
2. How many yards of cloth at 1s. 5d. per yard must be given in exchange for 620 yards calico at $4\frac{1}{4}d.$?
3. A bankrupt owing £600 can pay 5s. 3d. in the £; what is the amount of his assets?
4. Reduce 11000000 square yards to square miles. Explain the method of reducing square yards to poles.
5. A horse and carriage cost 80 guineas, but the horse cost $\frac{1}{4}$ as much again as the carriage. What was the price of each?
6. How many bricks, each 9 in. long by $4\frac{1}{2}$ in. wide, will pave a square courtyard one side of which is 60 feet?
7. Find the Simple Interest on £200 from Jan. 6th, 1870, to July 5, 1874, at 3 per cent. Explain by reference to this example the meanings of: *Simple Interest, Per Cent., Principal and Amount.*
8. Find the value of 31 ac. 3 r. 12 p. at £16 per acre.
9. A person pays £111. 5. 0 income tax at the rate of 4d. in the £; what was his income?
10. How many yards of calico at $6\frac{3}{4}d.$ may be bought for £1. 7. 0?

PAPER XXXIII.

1. Reduce 9603711 inches to miles, &c. Show how the tables of Square and Cubic Measures may be constructed from Long Measure.
2. A tradesman allows 5 per cent. discount for cash; if he takes 2s. 6d. off a bill of £3. 12. 6, what is this less than the right amount of discount?

3. A has now 8 times as much as B , if he had £4. 12. 0 more he would have 9 times as much. How much has B ?
4. If 13 men do a piece of work in 9 days, how long would 26 men require to do half the work? Define "*Ratio*" and "*Proportion*." What is meant by "*Inverse Ratio*"?
5. What is the cost of 13 tons at £6. 10 for 5 tons 10 cwt.?
6. How many yards of canvas $\frac{3}{4}$ of a yard wide would be required for an awning 93 ft. long by $3\frac{3}{4}$ yards wide?
7. Reduce 11 lacs of rupees (each 100000) to English money, reckoning the rupee at 1s. $9\frac{1}{2}d$.
8. How many pairs of gloves at £1. 1. 0 the half dozen may be bought for £7?
9. Find the cost of $111\frac{3}{4}$ yards at 18s. $6d$. for 37 yds. 0 ft. 9 in.
10. Find the sum of 17 sovereigns, 51 half-sovereigns, 19 crowns, 113 half-crowns, 211 florins, 1396 shillings, 417 sixpences, 117 threepences, 99 pence, and 92 farthings.

PAPER XXXIV.

1. A certain ore yields 38 per cent. of iron. What amount of iron would be produced from 715 tons of ore?
2. Find the Simple Interest of £716 for 5 years at 3 per cent.
3. What is the value of 37 ac. 3 r. $11\frac{1}{2}$ p. at £20 per acre? Give the meaning of the term "*Aliquot Part*."
4. If 15 men mow 7 ac. in 3 days, how long will it take 3 men to do twice as much?
5. If 19 ac. 3 r. cost £101, what is that for 138 ac. 1 r.?
6. A person dies in Paris leaving half a million of francs. What sum does this represent in English money if the £ sterling be equal to 25 francs?
7. What is the weight of 11 ricks of hay, each averaging 11 tons 13 cwt. 2 qrs.?
8. Divide £1. 10. 0 between A and B , giving A thrice as much as the half of B 's share.
9. The amount of the Government Vote of Credit actually spent in 1878 was £3,500,000. What weight of gold does this represent if each sovereign weighs 123 grains and there are 7000 grs. to the lb. Avoirdupois?
10. What will £111. 14. 6 amount to in 3 years at $2\frac{1}{2}$ per cent. per annum Simple Interest?

PAPER XXXV.

1. Find the cost of $11\frac{1}{4}$ yards of silk at 8s. 11d. per yard.
2. Make an invoice of
 $3\frac{1}{2}$ lbs. tea at 3s. 8d., $2\frac{1}{2}$ lbs. Indian tea at 4s. 2d., 6 lbs. coffee at 1s. 8d., $2\frac{1}{2}$ stones of soap at $4\frac{1}{4}$ d. per lb., $1\frac{1}{4}$ doz. lbs. candles at $6\frac{1}{2}$ d. per lb., $3\frac{1}{4}$ stones sugar at 5d. per lb., and 18 lbs. of moist do. at 3s. 6d. per stone.
3. Reduce 1102169 square feet to acres.
4. How many beams of timber, each 16 ft. long, would be required to make 192 posts, each 7 ft. $9\frac{1}{2}$ in. long?
5. Divide £947. 4. 11 among 17 men and 13 boys, giving each man twice as much as a boy.
6. How many times is the sum of a penny, a sixpence, a shilling and a florin contained in £5. 7. 6?
7. If *A* begins to work at 6 each morning and *B* at 7.30, both leaving at the same time in the evening, how much would *A* earn more than *B* in a year, reckoning their wages at $9\frac{1}{2}$ d. per hour?
8. From the third part of 17 yds. 1 ft. take the fourth part of 17 yds. 2 ft. 6 in., and find the value of the remainder at 3s. per foot.
9. How many steps, each having a $7\frac{1}{2}$ inch riser, would be required for a staircase reaching a perpendicular height of 18 ft. $1\frac{1}{2}$ in.?
10. At what rate per lb. should I sell 5 cwts. of coffee for which I gave £44. 6. 8 so as to gain £2. 6. 8 on the whole?

PAPER XXXVI.

1. If the fare from Birmingham to London is 9s. $1\frac{1}{2}$ d. third-class and 17s. 8d. first-class, what would be the total fares paid by 7 first-class and 23 third-class passengers?
2. Reduce 70711234 square inches to acres.
3. What is the profit on the sale of seven gross, 3 score, and $3\frac{1}{2}$ dozen newspapers selling at 1d. each and bought at $8\frac{1}{2}$ d. per dozen?
4. How much tea at 3s. 4d. per lb. together with $7\frac{1}{2}$ half-pounds of raisins at 7d. per lb. may be bought for 35s. $6\frac{1}{4}$ d.?
5. What is the weight of five casks, three of which contain 2 cwt. 1 qr. 11 lbs. each, and the others 3 cwt. 3 qrs. 3 lbs. each?
6. Divide 1s. 6d. between two boys, giving one $1\frac{1}{2}$ d. more than the other.

7. What is the total cost of 3 lbs. tea at 3s. 8d., 15 lbs. sugar at 5½d., 1 stone soap at 3½d. per lb., and 9 lbs. butter at 1s. 5½d.?
8. How many cubic feet of timber would be required for the sleepers of a double line of railway 18 miles long if each sleeper be 9 ft. long, 10 in. broad, and 8 in. thick, and they are placed 3 ft. apart?
9. Find the cost of 19 ac. 1 r. 10 p. of clover at £17. 10. 0 per acre.
10. Multiply 3 tons 17 cwt. 2 qrs. 11 lbs. 9 oz. by 709.

PAPER XXXVII.

1. From 11 tons 5 cwt. 3 qrs. 12 lbs. take the seventh part of 46 cwt. and find the value of the remainder at £2 per ton.
2. How many acres may be rented for £115. 4. 2 at the rate of £1. 9. 2 per acre?
3. Find the value of 316½ tons of pig iron at £4. 3. 11½ per ton.
4. How many cubic yards are there in 390051 cubic inches?
5. A has a certain amount, if he had £5. 10. 0 more he would have six times as much. How much has he?
6. Bought 13 cwt. of sugar at £1. 7. 9 per cwt., and retailed the whole at 4½d. per lb. What was the total gain?
7. If 15 horses plough 19 ac. 3 r. 20 p. in a certain time, how many acres could 45 horses plough in half the time?
8. A train travels 9¼ miles in ten minutes; how far will it go in 1 hr. 45 min.?
9. Reduce to tons the sum of 11 cwt., 53 qrs., 475 stones, 2195 lbs. and 115 ounces.
10. If a yard measure expands $\frac{1}{11}$ of an inch at a certain temperature, what error would arise in measuring 5½ furlongs?

PAPER XXXVIII.

1. If 8 cwt. 3 qrs. of tea cost £160, what is that per lb.?
2. How many at 1½d. each may be bought for 7 half-crowns?
3. Reduce 111¼ miles to yards, and 11¼ acres to square yards.
4. Reduce 70711234 seconds to years.
5. How many sleepers, placed 3 ft. apart, would be required for a double line of rails 3½ miles long?

6. A train travels at the rate of 5 miles in 6 minutes ; how far will it go in an hour and a half?

7. Multiply the half of $7\frac{1}{2}$ guineas by 7.

8. After paying income tax at the rate of 5*d.* in the £. a person had £616. 17. 6 remaining. What was his income?

9. Divide 3 times the half of 1108 by 5 times the fourth part of 7 times 16.

10. Find the whole cost of

15 parcels, each	17 lbs. sugar	at $4\frac{1}{2}d.$
3 " "	19 lbs. do.	at $5d.$
12 " "	11 lbs. rice	at $3\frac{1}{2}d.$
9 " "	18 lbs. currants	at $5\frac{1}{4}d.$
7 " "	9 lbs. raisins	at $6d.$
	and $18\frac{1}{2}$ lbs. butter	at $1s. 6d.$

PAPER XXXIX.

1. If 16 men can do a piece of work in 5 days, how many could do it in 40 days?

2. What is the difference of 3 times the half of $5\frac{1}{2}$ guineas and 7 times the fourth part of 4500 farthings?

3. Find the cost of 11 lbs. at 2*s.* 4*d.* per cwt.

4. What is the cost of 3 yards of calico if a roll measuring 84 yards cost two guineas?

5. How many yards of cloth at 1*s.* 6*d.* may be purchased for £6. 18. 0?

6. Multiply £3. 19. $6\frac{1}{2}$ by 708, and work out the same result by Practice.

7. In a town containing 11500 inhabitants there are on the average 22 deaths and 73 births per year in each thousand. What will be the increase in 20 years?

8. Find the value of 3 ricks of hay each 11 tons 13 cwt., at 4 guineas per ton.

9. A field of 7 ac. 2 r. is rented at £37. 10. 0 a year. What is that for 19 ac. 3 r.?

10. A cask of ale containing 36 gallons costs £1. 18. 0 and is retailed at 6*d.* per quart. What is the whole gain?

PAPER XL.

1. If 11 articles cost $17\frac{3}{4}$ guineas, how much is that for one?
2. A person earning 180 guineas a year spends on the average 6s. 9d. a day and saves 40 guineas in the year. Of the rest he pays $\frac{3}{4}$ for rent and $\frac{1}{4}$ for rates. Find the amount of each of these latter items.
3. What is the half of three-fourths of five times seven shillings and six-pence?
4. How many times is $\frac{1}{8}$ of £78. 6. 6 contained in £156. 13. 0?
5. Divide $\frac{1}{3}$ of $\frac{1}{4}$ of $\frac{5}{8}$ by $\frac{2\frac{1}{4} - 2\frac{1}{7}}{3}$, and reduce the result to a decimal.
6. From $\frac{1}{2}$ of $\frac{2}{7}$ of 4s. 8d. take $\frac{1}{30} - \frac{1}{32}$ of £5, and express the result as a decimal of a shilling.
7. Add $\frac{1}{3}$ of a guinea, $\frac{1}{3}$ of a sovereign, $\frac{1}{3}$ of a crown, $\frac{1}{3}$ of a shilling, and $\frac{1}{3}$ of a penny.
8. Two persons start at the same time, one from Tamworth walking at the rate of 3 miles an hour, the other from Lichfield driving at 10 miles an hour. Where and when will they meet, the distance between the two places being $6\frac{1}{2}$ miles?
9. Find the square root of 9000426005041.
10. If 15 cwt. 3 qrs. 21 lbs. cost £47. 16. 3, how much may be obtained for £150?

PAPER XLI.

1. Find the Simple Interest of £216. 13. 4 for $6\frac{1}{4}$ years at $3\frac{1}{2}$ per cent.
2. What is the Simple Interest of £720 from March 11th to July 9th of the same year at $7\frac{1}{2}$ per cent.?
3. Find the cost of erecting 51 yds. 1 ft. 11 in. of oaken palisades at 2s. 6d. per yard.
4. What is the cost of 38 qrs. 5 bus. 1 pk. of old wheat at 78s. per quarter?
5. How many quarters of oats are there in 307 pecks? Find their value at 1s. 3d. per peck.
6. Reduce £1. 9. $10\frac{1}{2}$ to the decimal of £2. 14. 0.
7. Find the value of

$$\frac{3\frac{3}{4} + 1\frac{7}{8} \text{ of } 6}{13\frac{1}{3} \times \frac{3}{10}} \text{ of } 5\frac{5}{8} \text{ of } £6. 10. 10.$$
8. Take 703 half-guineas from 703 times 5 half-crowns.

9. Divide £3. 10. 0 between two persons in such a manner that one may have 12s. 6d. more than the other. Explain the method adopted in solving this and similar questions.

10. Find the cost of 11 yds. 2 ft. 6 in. at 3s. 9d. per lineal yard.

PAPER XLII.

1. Find by Practice the value of 11023 at £2. 17. 11 $\frac{3}{4}$ each.

2. Find the value of 370·25 dollars in English money if 4·75 dollars are equivalent to the £ sterling.

3. A $\frac{3}{4}$ -in. plank 8 inches wide contains exactly 2 cub. ft. of timber; what is its length?

4. Find the value of $2\frac{1}{2} \times 3\frac{1}{3} \times 2\frac{1}{7}$ of $1\frac{1}{4}$ quarters of a cwt.

5. The Simple Interest on a certain sum of money for 1 yr. 11 $\frac{1}{2}$ mths. at 2 per cent. was £7. 16. 8; find the amount of principal.

6. It is proposed to give an additional six inches of depth to a part of a canal six miles long and with an average width of 25 feet. How many tons of earth must be removed for this purpose, if a cubic yard weighs 23 $\frac{1}{2}$ cwt.?

7. Add $1\frac{1}{8} + 2\frac{2}{9} + 3\frac{7}{10} + 1\frac{5}{9}$, and divide the sum by 20·1.

8. Take $2\frac{3}{8}$ from the sum of $5\frac{5}{9} + 7\frac{4}{11} + 3\frac{2}{7}$.

9. Reduce 17 m. 3 fur. 19 po. 3 yds. 2 ft. 6 in. to inches.

10. Reduce 7091036 sq. ft. to acres, and the same number of cub. in. to cub. yds.

PAPER XLIII.

1. If 35 workmen can do a piece of work in 18 days, in what time would 210 men do the same, working only half as quickly?

2. Find the value of $\cdot\dot{i}2087\dot{9}$ of £4. 11. 0.

3. How many bricks 9 in. by $4\frac{1}{2}$ in. will pave 3 courtyards, each 81 ft. square?

4. How many yards of carpet $\frac{5}{8}$ of a yd. wide will be required for a room 16 ft. by 12 ft. 6 in.?

5. Find the total cost of the carpet in the preceding example if 5s. per yard be charged for it, and 3d. per foot for making, &c.

6. What money should be given with 20 yds. of silk at 11s. 10d., to pay for fourscore and ten dozen quires of paper at 5s. per ream?

7. Find the value of $\cdot\dot{0}2\dot{7} \times \cdot\dot{0}3\dot{7}$ of 1 m. 1237 yds.

8. Reduce $\frac{4}{7}$ of $\frac{5}{8}$ of 7 p. $3\frac{1}{2}$ yds. to the decimal of $\frac{1}{17}$ of a mile.
9. *A* by working on piece-work $\frac{1}{3}$ as fast again as *B* is able to earn 10*d.* per day more; how much does each earn per day?
10. If $11\frac{1}{4}$ cub. yds. can be excavated in 3 days by an ordinary workman, how many such workmen, together with 13 others of $\frac{2}{3}$ more than ordinary ability, must be employed to dig out 1317 cub. yds. of soil in a day?

PAPER XLIV.

1. From the third part of 10 a. 1 r. 1 p. take the fifth part of 14 ac. 0 r. 25 p., and find the value of the remainder at £5 per acre.
2. If $11\frac{3}{4}$ yds. flannel cost £1. 0. $6\frac{3}{4}$, find the cost of $20\frac{1}{2}$ yards.
3. Find the Simple Interest of £210. 10. 6 for 5 years at 4 per cent.
4. By how much does 11300000 sq. in. exceed $1\frac{1}{4}$ acres?
5. Find the value of $\frac{1}{2}$ of $\frac{7}{10}$ of $16\frac{2}{3}$ s. + $\frac{1}{3}$ of $\frac{4}{5}$ of 9s. + $\frac{1}{12}$ of $\frac{5}{7}$ of 14s.
6. Find the 13th term of the series $1 + 2\frac{1}{4} + 3\frac{1}{2} + \&c.$
7. The expenses of a Union whose total rateable value is £179800 amount to £23598. 15. 0. Find the proportionate amounts payable by each of the five parishes in the Union whose rateable values are £3021, £55986. 10. 0, £44320. 10. 0, £42119, and £34353, respectively.
8. If a person receiving £2. 2. 0 weekly gets an advance of 15 per cent., what will he then receive?
9. Find the whole cost of $5\frac{1}{2}$ lbs. cheese at $8\frac{1}{2}$ *d.*, $7\frac{3}{4}$ lbs. bacon at 7 *d.*, $3\frac{1}{2}$ stones sugar at $4\frac{1}{2}$ *d.* per lb., 11 stones soda at $1\frac{3}{4}$ *d.* per lb., and 18 gallons of vinegar at $2\frac{1}{4}$ *d.* per pint.
10. From £3·1475 take £3·10475 and reduce the remainder to the decimal of 10 shillings.

PAPER XLV.

1. Find by the rule of Practice the value of 316 articles at £2. 19. 6 each.
2. If 13 bushels cost 45*s.* 6*d.*, what will $19\frac{1}{2}$ bushels cost?
3. Find the cost of $13\frac{1}{4}$ yds. if 11 cost £2. 19. 7.
4. If 7 men, working 7 hours a day, do a certain piece of work in 8 days, how many days of 5 hours each would 10 men require to do the same?
5. What is the Simple Interest on £430. 17. 6 for 1 yr. 8 mths. at 5 per cent.?
6. Reduce 11210330 sq. ft. to acres.

7. What is the Compound Interest on £650 for 5 years at 4 per cent. ?
8. Find the value of 317285 of 3 tons $10\frac{1}{2}$ cwt.
9. By selling at 11s. 3d. I lose 10 per cent. ; what was the cost price?
10. Make an invoice of the following, for which Mr Chas. Younger became indebted to Halliday & Co., of New York, on Dec. 21, 1877 :
13769 feet of deal at $1\frac{1}{4}$ d. per foot; 8213 feet of American Walnut at $13\frac{1}{2}$ d. ; $32\frac{1}{2}$ tons of hickory at £2. 19. 0 per ton; 13 logs, each 70ft., of Spanish mahogany at $11\frac{1}{2}$ d. per ft.; and 1990 ft. baywood at $7\frac{1}{2}$ d. ; Freight £290. 12. 0; Insurance £19. 17. 6.

PAPER XLVI.

1. A ship fired a signal to her consort which was answered after an interval of three seconds; the report of the answering gun being heard exactly $18\frac{1}{4}$ seconds after the first gun was fired. What distance were the ships apart, sound travelling 1142 feet per second?
2. Find the cost of 118 tons of iron ore at £3. 11. 6 per ton, a discount of 5 per cent. being allowed for cash.
3. Find the Simple Interest of £209 for $2\frac{3}{4}$ years at $2\frac{3}{4}$ per cent.
4. If 17 steamers, each consuming 23 tons of coal daily, be employed from January 13 to March 11, 1878, what would their supply of coal cost at 9s. $10\frac{1}{2}$ d. per ton?
5. A barrel of ale is sold for £2. 14. 0; what is the price per quart?
6. What will £550 amount to in 11 years at $3\frac{1}{8}$ per cent. Simple Interest?
7. Reduce £3875 to account money, and 5s. $10\frac{1}{2}$ d. to the dec. of £1.
8. Reduce 3 cwt. 1 qr. 12 lbs. to the decimal of a ton.
9. If 3.125 acres cost £8.4755, what is that for 14.35 poles?
10. Find the cost of 119 articles at 2s. $11\frac{3}{4}$ d. each.

PAPER XLVII.

1. A King's share in the New River Co. realised £90312 and was bought by 27 persons; what was the average amount paid by each?
2. What will £500 amount to in 3 years at 5 per cent. Compound Interest?
3. The toll raised on a certain bridge amounted to £7113 during the month of April; how many people crossed daily at $\frac{1}{2}$ d. per head?

4. What is the Simple Interest of £200 for $4\frac{1}{4}$ years at $2\frac{1}{2}$ per cent.?
5. How many articles at 3s. $6\frac{1}{2}d.$ each may be bought for 480 guineas?
6. Find the cost of $111\frac{1}{4}$ at £2. 13. $9\frac{1}{2}$ each, by Practice and by Compound Multiplication.
7. Find the value of $\frac{\frac{1}{2} + \frac{1}{3} + \frac{1}{4}}{\frac{1}{6} + \frac{1}{8} + \frac{1}{9}}$ of $\frac{1}{3}$ of 8s. 11d.
8. Reduce 4·96031 tons to its equivalent in tons, cwts., qrs., &c.
9. Express 5 lbs. 8 dwts. 3 grs. as the decimal of 5 lbs. Troy.
10. Find the Simple Interest of £7070 for $3\frac{1}{2}$ years at $6\frac{2}{3}$ per cent.

PAPER XLVIII.

1. Find the value of $\frac{2}{3}$ of $\frac{3}{4}$ of 6s. $7\frac{1}{2}d.$ and of 5·307 of 10s.
2. A person gives $\frac{1}{3}$ of his money to A, $\frac{1}{4}$ to B, and $\frac{1}{2}$ the remainder to C, he had then $9\frac{1}{2}d.$ left; what had he at first?
3. What would £360 amount to in $7\frac{1}{4}$ years at $2\frac{1}{2}$ per cent. Simple Interest?
4. Three ships bring over a cargo of rum consisting in all of 5000 puncheons each 84 gallons, the price of which is 1s. $5d.$ per gallon, the duty is 10s. $5d.$ per gallon, portorage 1s. $9d.$ per puncheon, and dock dues $4\frac{1}{4}d.$ per gallon. If sold at the retail rate of 2s. $0d.$ per pint, what would be the total gain?
5. When are the hour and minute hands of a clock pointing in directly opposite directions between two and three o'clock? Give reasons for the method of solution.
6. Find the cost of $5\frac{1}{2}$ cwt. of tobacco at 3s. $4d.$ per lb., and express the result as the decimal of £100.
7. How much should be given for $1\frac{1}{2}$ of $\frac{1}{30}$ of a piece of ground measuring 50 acres at £7. 7. 0 per acre?
8. Simplify $\frac{1 - \frac{1}{2}}{1 + \frac{1}{2}} + \frac{3}{8} \times 8\frac{1}{2}$ of $\frac{1}{17}$. What is meant by the "reciprocal" of a number? Give the reciprocals of 3, $\frac{5}{7}$ and ·5.
9. Bought goods for £50, sold $\frac{1}{2}$ at a gain of 20 per cent., $\frac{1}{3}$ at gain of 10 per cent., charged £6 $\frac{2}{3}$ for the remainder; how much per cent. is lost or gained on the whole?
10. One-fourth of a garden containing $1\frac{3}{4}$ acres is planted with potatoes, $\frac{1}{4}$ with cabbages, $\frac{1}{12}$ with various vegetables, and the remainder is occupied by paths. What is the length of the paths if they have an average breadth of 5 feet?

PAPER XLIX.

1. From $11\frac{3}{4}$ lbs. Troy take $11\frac{3}{4}$ oz. Avoir. and multiply the remainder by 8.
2. Find the cost of 19 lbs. 4 oz. Avoir. at $\cdot 11d.$ per lb.
3. Find the Simple Interest on £39. 12. 6 for 5 years at $2\frac{1}{2}$ per cent.
4. How many cwts. may be bought for £45. 1. $10\frac{1}{2}$ at £4. 17. 6 per ton?
5. If 11 horses require $5\frac{1}{2}$ tons of hay in 5 weeks, what weight would be required by 99 horses in 7 days?
6. Find the Compound Interest on £50 for $3\frac{1}{2}$ years at 2 per cent. half-yearly?
7. What is the cost of 3 cwt. 2 qr. 12 lbs. at 20s. 6d. per ton?
8. Simplify

$$(10 - 9\frac{8}{15}) \times \frac{\frac{5}{6} \times \frac{57}{115}}{1\frac{1}{3} \times 7} \text{ of } \frac{1\frac{3}{4} \text{ of } 287}{8\frac{3}{5}}.$$
9. Express 5 per cent. of £11. 11. 6 as the decimal of a pound.
10. Find the difference between the Simple and Compound Interest of £300 for 4 years at 3 per cent. quarterly.

PAPER L.

1. Find the cost of $15\frac{1}{2}$ dozen, threescore, and three at 7s. $9\frac{1}{2}d.$ for 6 dozen and 11.
2. Reduce $\cdot 041\dot{6}$ to a vulgar fraction. Give the rule for reducing recurring decimals to their equivalent vulgar fractions.
3. Find the value of $3\cdot 80215$ tons + $5\cdot 1125$ cwts. - $21\cdot 75$ lbs.
4. If 5 men do a piece of work in 11 half-hours, how long would it take 8 men to do three times the work, working at $\frac{2}{3}$ of the rate?
5. From $\cdot 0314$ take $\cdot 007$ and find the value of the remainder at the rate of £61 for 3·05.
6. Divide $3\cdot 071$ by $\cdot 003071$, and find the value of £31·8765.
7. If $\frac{1}{2}$ of $\frac{5}{8}$ of a share in an undertaking cost £70. 7. 1, find the value of $\cdot 28125$ of a share.
8. If 15 horses consume 11 bushels of corn in 9 days, how long would 44 bushels last 45 horses?

9. Reduce to the simplest form

$$\frac{1}{\frac{1}{2} + \frac{1}{\frac{1}{2} + \frac{1}{\frac{1}{2}}}} \text{ of } \frac{13\frac{1}{4} \text{ of } 5\frac{1}{2}}{1\frac{2}{3} \text{ of } 1\frac{1}{5} \text{ of } 53}.$$

10. If A does a piece of work in 3 days which B can do in 4 days, in what time would they do it working together?

PAPER LI.

- Find the Circulating Decimals of $\frac{1}{7}$ and $\frac{1}{13}$. Define the terms *proper*, *compound* and *complex* as applied to Vulgar Fractions.
- How many square yards are there in $9\frac{1}{4}$ square miles?
- Find the entire cost of:—11 yds. calico at $6\frac{3}{4}d.$, 19 do. at $7\frac{1}{2}d.$, 13 yds. flannel at $1s. 7d.$, and $56\frac{1}{4}$ yds. chintz at $10\frac{1}{2}d.$
- A wheel of a locomotive 4 ft. in diameter, making 300 revolutions per minute, is travelling for 4 hrs. 10 min.; how far does it go in that time?
- It is estimated that light travels at the rate of 192500 miles per second. What time would a ray of light take to traverse the distance from the Sun to the Earth (91 millions of miles)?
- Find the Simple Interest of £474 for 5 years 3 months at 4 per cent.
- From the sum of $3\frac{1}{10}$ and $1\frac{1}{11}$ take half the difference. What is the effect of multiplying (i) the numerator, (ii) the denominator of a fraction by a whole number.
- Find the value of $\frac{7}{8}$ of £2 + $\frac{1}{12}$ of 5 florins + $\frac{2}{7}$ of half a guinea + $\frac{1}{8}$ of half a crown.
- What is the amount of £316 for 9 years $2\frac{1}{2}$ months at $3\frac{1}{2}$ per cent. per annum Simple Interest?
- Find the difference of the Simple and Compound Interest of £200 for 5 years at 5 per cent. per annum.

PAPER LII.

- If 37 men can do a piece of work in 91 days of 9 hours each, by how many hours per day should the working time be increased so that 333 men could at the same rate do the work in 8 days?
- If the carriage of 110 cwt. for 66 miles amounts to £1. 2. 0, what should be the cost of carriage of 11 tons for 80 miles?
- In what time would £390. 10. 0 amount to £524. 4. $11\frac{1}{10}$ at 3 per cent. Simple Interest?

4. What should be charged for goods so as to gain $29\frac{1}{4}$ per cent. if by selling at a certain price 19 per cent. is gained, and by selling for £3. 11. $9\frac{1}{2}$ less, $13\frac{1}{2}$ per cent. is lost?
5. What sum placed out at Compound Interest for 5 years at 4 per cent. will gain £151. 13. $1\frac{1}{2}$?
6. Bought eggs at 1s. 3d. per score; how many may be sold for a shilling so as to gain $12\frac{1}{2}$ per cent.?
7. Find the Compound Interest on £1500 for 4 years at 4 per cent.
8. At £2 per ton find the value of 3 cwt. $3\text{ }64\text{ }28\text{ }57\text{ }1$ qrs.
9. If goods be bought for £10. 2. 6 with 3 months credit, at what price should they be forthwith sold with 9 months credit so as to gain 15 per cent. on the cost price, reckoning interest at 5 per cent.?
10. A square field 800 yards long is let at £8 per acre; what rent should be charged for a part one-fourth as long and also square at an advance of 20 per cent. on the rate for the whole?

PAPER LIII.

1. The rent of a farm of 630 ac. 3 ro. 20 po. is £5 per acre, and the rates amount to 2s. in the £. on the rental; what does the tenant pay altogether?
2. A train 80 yards long, travelling at the rate of 30 miles an hour, passes another 30 yds. long travelling in an opposite direction in 5 seconds, at what rate per hour was the latter train running?
3. A person gave to *A* $\frac{1}{2}$ his money, to *B* $\frac{1}{2}$ what was left, to *C* $\frac{1}{2}$ of the remainder, and had then 2s. $7\frac{1}{4}$ d. left; what had he at first?
4. Find the total cost of $111\frac{1}{4}$ yds. flannel at 1s. 6d., $23\frac{3}{4}$ do. at 2s. 8d., 7 yds. cambric at 9s. 10d., $18\frac{1}{4}$ yds. linen at 2s. 9d., 13 doz. handkerchiefs at $11\frac{3}{4}$ d. each, and 51 yds. calico at $6\frac{3}{4}$ d.
5. Bought 13 cwt. 2 qrs. at £2. 10. 0 per cwt. and sold so as to gain five guineas in all; what was the selling price per lb.?
6. Find the cost of 101 m. 3 fur. 110 yds. at £4. 10. 0 per mile?
7. Express $\frac{1}{17}$ as a Recurring Decimal, and $\cdot 5001\bar{4}$ as a Vulgar Fraction.
8. A paper making machine throws off 3 rolls of paper each 4 miles 240 yds. in $1\frac{1}{4}$ hours; what total length would 5 machines throw off in a week of 6 days, working day and night?
9. How many reels of cotton at 1s. 10d. per dozen may be bought for £11?
10. Find the value of 19 tons 11 cwt. 1 qr. 7 lbs. at 12s. 6d. per ton?

PAPER LIV.

1. In the latitude of Derby a degree measures 365000 English feet, reduce this to miles, &c., and express it as a decimal of $69\frac{1}{10}$ miles.

2. The French toise is equivalent to 1.94904 metres and a metre = 1.0936331 English yards; express a toise in English yards.

3. The earth is spheroidal in form having a major axis of 41847400 feet from East to West, and a minor axis of 41707600 feet passing through the poles from North to South. Find the amount of flattening at each pole in miles, &c.

4. Bought goods at £31. 10. 0, at what price should they be sold to gain $7\frac{1}{2}$ per cent.?

5. Express the sum of $1\frac{1}{2}$ yds. + $1\frac{1}{2}$ ft. + $1\frac{1}{2}$ in. as the decimal of a yard.

6. Find the true discount on a bill of £4700 due 5 months hence at $4\frac{1}{2}$ per cent.

7. Simplify

$$\left\{ 2\frac{2}{3} + \left(1\frac{5}{9} \text{ of } \frac{7}{11}\right) \div \frac{5\frac{1}{2} \times (3\frac{1}{2} - 1\frac{2}{3})}{16\frac{1}{4} + 3\frac{3}{8} \text{ of } \frac{7}{5}} \right\} + \frac{11\frac{1}{8} \text{ of } 3\frac{1}{5} \text{ of } 1\frac{1}{4}}{89 \times \frac{7}{8} \text{ of } 4}$$

8. Express $31^{\circ} 3' 30''$ as a decimal of the circumference of a circle, correct to five places.

9. Find the square root of 316 and the cube root of 423, correct to five places of decimals.

10. Find the value of $\frac{1}{2}\frac{7}{8}$ of 133 ac. 3 r. 36 po.

PAPER LV.

1. Divide a guinea and a half between *A*, *B* and *C*, giving *A* three times as much as *B*, and *C* $\frac{1}{2}$ as much as *A* and *B* together.

2. Find the value of $\frac{1}{3}$ of 5s. 0d. + $\frac{2}{5}$ of 7s. 6d. + $\frac{5}{8}$ of £2. 10. 0 + $\frac{9}{7}$ of 3 guineas - $\frac{2}{3}$ of 11s. 3d. Prove the rule for the division of Vulgar Fractions.

3. A clock which gains uniformly ten seconds per hour is set right at 6 p.m. on April 22, when will it again denote correct time?

4. Divide £1155 amongst 17 men and 13 boys, giving 3 boys as much as 2 men.

5. Reduce .37025 of an acre to square yards.

6. From £.062725 + £3.005 take the sum of 15.825s. + 51.25d.

7. *A* and *B* are 59 miles apart when they commence walking towards each other, *A* going 1 mile and 1 furlong faster than *B* per hour; they meet in 8 hours. What are their respective rates of travelling?

8. A house cost £450, the rates amount to 2s. in the £. on the rent, and the repairs cost £9 annually. At what rent must it be let to gain 10 per cent. yearly?

9. What was the prime cost of an article which on being sold at a gain of $7\frac{1}{2}$ per cent. yields 2s. 1d. more than if it were sold at $12\frac{1}{2}$ per cent. loss?

10. A person paid for 5 tons of hay with a bill of £20. 5. 0 due in 3 months. Reckoning discount at 5 per cent. what was the ready money price of the hay per ton?

PAPER LVI.

1. Find the value of $\cdot 07$ of a ton + $\cdot 95$ cwt. + $\cdot 125$ lbs.

2. If a ration of 20 oz. of provisions be served out to each soldier daily, what length of time would 1500 tons of provisions last 32000 troops?

3. The circumference of a circle is to its diameter as 3.1416 : 1; find the circumference of a circle whose diameter is 4 ft. 6 in.

4. A person lends £200 for 3 years at 5 per cent. Simple Interest; for how long should £490 be lent at 2 per cent. to obtain the same interest?

5. If 150 workmen excavate a piece of ground 30 yds. long, 15 ft. broad, and 7 ft. 6 in. deep in 8 days of 9 hours each, how long would 90 men require to dig out a piece of ground 200 yds. long, 6 yds. broad and 10 ft. deep, working 8 hours per day?

6. A cistern holding a thousand gallons can be filled by a pipe in 20 minutes and emptied by another in 50 minutes; if both these pipes be opened when the cistern is empty, how many gallons will it contain at the end of 30 minutes?

7. If *A* can do a piece of work in 6 hours which *B* can do in 10 hours, how long would it take *B* to complete the work if both were employed on it the first hour and then *A* was withdrawn?

8. At what price should a tradesman mark goods which he sells for 15s. 0d., at a reduction of 25 per cent.?

9. Divide six shillings between *A*, *B* and *C*, giving *A* $\frac{1}{2}$ as much as *B*, and *B* $\frac{1}{3}$ as much as *C*.

10. Find the value of £371 + 316s. + 285 half-crowns + 618 pence.

PAPER LVII.

1. What is left after deducting $6\frac{2}{3}$ per cent. of a bill of £15. 3. 9?
2. Find the difference between the Simple and Compound Interest of £450 for 11 years at 4 per cent.
3. What number is that to which if twice its value be added, the fourth part of the sum is $4\frac{1}{2}$?
4. If a certain piece of work can be done by 11 men working at a certain speed in 43 hours, how long would it take the remainder to complete it if after 24 hours work 3 men be taken off but the speed is increased by $\frac{1}{8}$?
5. Find the True Discount on a bill of £40 due in 3 months at 4 per cent. per annum. Show that the difference between True and Ordinary Discount is the Interest on the True Discount.
6. *A* starts from Plymouth by road at the rate of $3\frac{1}{2}$ miles an hour to walk to London (246 miles), and is followed after an interval of 14 hours by *B* going on horseback at the rate of $10\frac{1}{2}$ miles an hour. At what distance from Plymouth, and in what time from starting will *A* be overtaken?
7. Reduce 37003151 Troy grains to Avoirdupois weight.
8. Express $\cdot932\bar{1}4$ as a Vulgar fraction.
9. Find the value of $\cdot3475$ of £5. 10. 0.
10. Find the value of $3\cdot03 \times 71\cdot09 \div 7\cdot15$.

PAPER LVIII.

1. Find the prime cost per ton of hay, 11 tons of which were sold for £50. 12. 0 at a gain of 15 per cent.
2. If 14 men do a piece of work in 5 days of 8 hours each, how many men each doing $\frac{1}{3}$ more work would be required to do the same piece of work in 3 days of 10 hours each?
3. *A* can do a piece of work in 5 hours, *B* in 6, and *C* in 7 hours; in what time could they do it working together?
4. Find the average of

$$\sqrt{371}, \sqrt[3]{291}, \sqrt[3]{791}, \sqrt{216}, 7\sqrt[3]{417}$$
 correct to five places of decimals.
5. Find the True discount of a bill of £120 due in 1 year 3 months, reckoning discount at $3\frac{1}{2}$ per cent. per annum.

6. Find the difference between the Simple and Compound Interest of £1100 for 3 years at $3\frac{1}{3}$ per cent.

7. Simplify

$$\frac{\frac{13}{17} \times \frac{15}{31}}{1\frac{1}{17} \text{ of } 1\frac{7}{12}} \text{ of } \frac{34}{45} \text{ of } 7\frac{2}{13} \text{ of } 5 \text{ cwt. 1 qr. 1 lb.}$$

8. A certain number multiplied by 7, and divided by 12, gives $\frac{1}{2}$ of $\frac{1}{3}$ of the sum of 4.265, and 42.6; find it.

9. Find the value of .70875 of 8 lbs. Troy.

10. Reduce 3 cwt. 1 qr. 21 lbs. to the decimal of a ton.

PAPER LIX.

1. How much tea at 3s. 4d. per lb. must be mixed with $20\frac{1}{2}$ lbs. at 3s. 10d., so that if the mixture be sold at 4s. $1\frac{1}{2}$ d. per lb. there may be a gain of $11\frac{1}{2}$ per cent. on the whole?

2. A bankrupt's assets amount to £9630, and he can pay 17s. 10d. in the £. What amount of debt remains unpaid?

3. Simplify

$$\left\{ \frac{5}{7} \text{ of } \frac{77}{41^{\frac{3}{5}}} + \frac{5\frac{1}{2} \times \frac{17}{31}}{3\frac{2}{3}} \right\} \text{ of } \text{£}1. 10. 0.$$

4. Find the cost of 11.7875 tons at £3.1475 per cwt.

5. If 13 be added to the half of a certain number, one-fourth of the sum is 12.625; find the number.

6. Find by Practice the value of 13 lbs. 5 oz. 10 dwts. 12 grs. at £4 per oz.

7. By selling an article at £4. 7. 6 I lose $12\frac{1}{2}$ per cent.; at what price should I sell it so as to gain $16\frac{1}{8}$ per cent.?

8. A broker charges $\frac{1}{8}$ per cent. commission on a certain transaction. He gains altogether £27. 18. 9. What was the amount of the transaction?

9. Reduce $\frac{1}{3}$ to a recurring decimal, and $\frac{4}{11}$ of £1 to the fraction of 5s. 6d.

10. Find the cube root of 5000211000. Give the rule for extracting the cube root.

PAPER LX.

1. When the barometer stands at 30 inches and the Fahrenheit thermometer at 62° , a cubic foot of water weighs 62.3210608 lbs. Avoirdupois. From this, determine the solid content of a block of granite weighing 186 tons, the specific gravity of granite being 2.688.

2. Find the sum of the series $1 + 3\frac{1}{2} + 5\frac{1}{2} + \&c.$ to 11 terms.
3. The Earth's Equatorial Radius is 20921665, and its polar radius 20852394 English feet. Express the difference in English miles.
4. Write down the 2nd power of 376, and the 3rd power of 416.
5. Find the difference between Banker's and True Discount on a bill of £400 due in 9 months, reckoning discount at 4 per cent.
6. Find the Compound Interest on £310 for $3\frac{1}{2}$ years at 3 per cent. quarterly.
7. A person places £150 yearly in the bank for 7 years. What amount has he at the end of that time reckoning Simple Interest at the rate of 5 per cent.?
8. A solar year consists of 365 days 5 hours 48 min. 49·536 seconds. Express this as the decimal of a day.
9. Find the present worth of £3160 due 9 months hence, discount being at $3\frac{1}{2}$ per cent. per annum.
10. A invests £4000 in the $3\frac{1}{2}$ per cents. at 94: what is his income?

PAPER LXI.

1. In how many years will £300 amount to £326 at a certain rate of interest if £460 amounts to £526 in $6\frac{1}{2}$ years at the same rate?
2. Sold $\frac{1}{3}$ of my goods so as to realize the prime cost of the whole, and the remainder for £7. 10. 0, thus losing on this portion 25 per cent. of cost price. Had I sold the whole for £20. 10. 0, what would have been my gain or loss per cent.?
3. A vessel steaming at a uniform rate of 11 knots (each 2000 yards) an hour fires a gun for her consort. The report is heard by the crew of the latter vessel 12 seconds after the flash is seen. At what rate per hour in miles must they steam to overtake the first vessel in 3 hours, if sound travels 1100 feet per second?
4. Find the Bank discount of a bill of £474 due in 219 days at 4 per cent.
5. Bought 50 copies of a work, part at 3s. 6d. per copy, and part at 5s. Paid in all £10. 17. 0. How many of each edition did I buy?
6. Reduce 17 per cent. of £10. 16. 8 to the decimal of half-a-sovereign.
7. A town has at present 11510 inhabitants, during the past 10 years it has lost 22·7 per cent. by deaths and removals, and has gained 37·8 per cent. by births, &c. What was the population 10 years ago?

8. Find the Compound Interest on £50 for 7 years at 3 per cent.
9. What principal at $3\frac{1}{2}$ per cent. Simple Interest will amount to £640 in 8 years?
10. Express $\frac{1}{4}$ of $\frac{2}{3}$ of 13s. 4d. as a decimal of £2.

PAPER LXII.

1. If I gain 15 per cent. by selling an article for £8. 12. 6, what was the cost price?
2. Find the Compound Interest of £320 for $3\frac{1}{2}$ years at 3 per cent. half-yearly.
3. In what time will £300 amount to £365 at 5 per cent. per annum Simple Interest?
4. Reduce $302\frac{1}{2}$ lbs. Troy to Avoirdupois weight, and express 1 oz. Troy as a decimal of 1 lb. Avoirdupois.
5. If a kilogram is equivalent to $2\frac{1}{8}$ English lbs. Avoirdupois, express in kilograms one-fourth of a ton.
6. A cistern capable of holding 637 gallons can be filled in 40 minutes by a supply pipe and emptied in 25 minutes by a discharge pipe. If both be set running when the cistern is full, in what time will it be emptied?
7. Reduce $11103\frac{1}{2}$ chains, each 66 feet to miles.
8. Find the value of 15 per cent. of 40 guineas.
9. Find the present value of a bill due in 30 days, worth then £300, if discount be reckoned at 4 per cent.
10. Find the value of

$$\frac{3\frac{2}{3}}{12\frac{3}{4}} \text{ of } \frac{1\frac{4}{8}}{2\frac{1}{8}} \text{ of } 3\frac{1}{2}$$

and express the result as a decimal fraction.

PAPER LXIII.

1. Reduce 1109163 square inches to poles.
2. Find the Simple Interest of £702. 11. 3 for $5\frac{1}{2}$ years at 3 per cent.
3. Bought 30 pairs of gloves, some at 2s. 6d., some at 3s. 6d. per pair; spent £4. 12. 0 in all. How many of each kind did I buy?
4. In what time will £905 amount to £995. 10. 0 at $3\frac{1}{2}$ per cent. per annum Simple Interest?

5. Find the difference between the Simple and Compound Interest of £700 for 7 years at 4 per cent.
6. Reduce $1\frac{1}{4}$ to a decimal fraction.
7. Bought oranges half at 2 a penny, and the remainder at 3 a penny. Sold the whole at 5 for 2d. What do I lose or gain per cent.?
8. Bought goods at £3 per ton; at what price per cwt. should they be sold so as to gain 15 per cent.?
9. Find the cube root of 751337340571.
10. A person walks from Uppingham to London in 4 days, and back in 5 days, going each day one mile less than on the day preceding. What is the distance from Uppingham to London?

PAPER LXIV.

1. The time is between 2 and 3 o'clock when the minute-hand of a watch intercepts an angle of 90° with the hour hand. What is the exact time?
2. What number added to $\frac{1}{10}$ of $3\frac{1}{3}$ will give unity?
3. A circular estate is left to 5 sons. The diameter of the whole estate is $1\frac{1}{2}$ miles. Each of 4 sons is to receive a share equal to a circle whose radius is 400 yards, and the eldest the residue. What is the share of each, the area of a circle being $\cdot7854$ times the square of the diameter?
4. The diameter of the driving wheel of a locomotive is 5 feet 9 in.; how many revolutions would it make in travelling from London to Manchester, 183 miles? The ratio of diameter to circumference in a circle is as 1 : 3·1416.
5. How many planks $1\frac{1}{2}$ ins. thick by 10 ins. wide, can be cut from 17 logs each 1 ft. 8 in. square, and 19 ft. long?
6. The French litre = $\cdot22009687$ English Imperial gallons. Express 52030 litres in English Imperial measure.
7. Simplify

$$\frac{\cdot071 + \cdot0385}{\cdot71 - \cdot007} \div \frac{3\cdot14153 \div 70}{\cdot041 \times \cdot015}$$
8. The Cambridge crew rowed from Putney to Mortlake a distance of $4\frac{1}{2}$ miles in 23 minutes 20 seconds. What was the rate per hour?
9. Find the value of $3\frac{3}{4}$ of $7\frac{1}{5}$ of £2, and reduce the result to the decimal of £100.
10. Find the Compound Interest of £300 for 11 years at 3 per cent.

PAPER LXV.

1. The engine of a train having a driving wheel 9 feet in diameter is making 180 strokes per minute. At what rate per hour is the train travelling?

2. A certain corporation borrows £4000 on the security of the rates on the property within the borough, proposing to repay the loan in ten equal yearly instalments together with interest at the rate of 5 p. c. each year on the outstanding balance. What amount would be paid altogether?

3. Supposing in the preceding example the rateable value of the property to be £50000; what rate in the £, each year, would suffice to pay principal and interest?

4. Find the value of 3.031 times 3.031 of 5 years 130 days.

5. Find the Cube Root of 239483061, and of .00002197.

6. Having sold 15 yds. of cloth for £1. 13. 9 and thereby lost 10 per cent., find the cost price per yard.

7. Find by the Rule of Practice the value of $37^{\circ} 16' 30''$ at 63 m. 3 fur. 120 yds. for each degree.

8. Find the Simple Interest of £300 for 1.85 years at 3.64 per cent.

9. Find the true discount on a bill of £713 due in 219 days at 5 per cent.

10. Find the value of $\sqrt{928} + \sqrt[3]{360} + 4\sqrt[3]{715}$.

PAPER LXVI.

1. What is the value of $.019\dot{7}\dot{6} + (3.0\dot{3} \times 5.2\dot{0}\dot{7}) - 12.1\dot{2}0\dot{2}$ correct to 4 places?

2. Reduce 3.04165 tons to its equivalent in tons, cwts., &c.

3. A certain number on being divided by .091 and the quotient multiplied by .35 gives 38. Find the number.

4. By what would my income differ if, instead of investing £6631 in the 3 per cents. at $87\frac{1}{4}$, I had invested that sum in the 4 per cents. at 95?

5. In what time will £7300 amount to £7619 at $2\frac{1}{2}$ p. c. per annum. Simple Interest?

6. If the 3 per cents. may be bought at $88\frac{3}{4}$, what should be the price of the 4 per cents.?

7. At what rate per cent. will £446 amount to £490. 12. 0 in 3 years, Simple Interest?

8. What is the value of $\cdot 371625$ of a year?

9. Simplify

$$\frac{3\frac{1}{2} \text{ of } 10\frac{1}{2} \text{ of } 27}{1\frac{1}{3} \text{ of } 1\frac{1}{2}} \text{ of } \frac{5\frac{2}{3} \text{ of } 1\frac{2}{3}}{\frac{5}{42} \times \frac{1}{2}} \text{ of } \pounds 1.$$

10. In what time will $\pounds 365$. 12. 6 amount to $\pounds 401$. 11. 3 at $3\frac{1}{2}$ p. c. per annum Simple Interest?

PAPER LXVII.

1. If 5 lbs. of cherries be worth 12 lbs. of pears, and 8 lbs. of pears are worth 15 lbs. of apples, and $1\frac{1}{2}$ stones of apples cost 2s. 4d.; find the cost of 10 stones of cherries.

2. Bought tea at $\pounds 10$. 16. 0 for a chest of 96 lbs. and sold it at 2s. 8d. per lb. What did I gain per cent., and what was my gain on the sale of 3 cwt. 3 qrs.?

3. The Fahrenheit thermometer marks freezing point at 32° , and boiling point at 212° . The Centigrade freezing point is zero and the boiling point 100° . What degree of Fahrenheit corresponds to 70° Centigrade?

4. A surveyor reads on his vernier at one sight $17^{\circ} 14' 30''$, at another $25^{\circ} 3' 28''$; find the contained angle. "The three interior angles of every triangle are together equal to two right angles." Find the angles of a triangle which stand in the ratio of 7, 8, and 9 respectively.

5. There are three numbers in the ratio of $\frac{1}{3}$, $\frac{1}{7}$, $\frac{1}{11}$, their sum is 861. Find them.

6. How many acres can be mowed by 11 men in 3 days if 9 men can mow 15 acres in 5 days?

7. Find the value of $\sqrt{315} + \sqrt[3]{144} + \sqrt[4]{576}$ correct to six places.

8. A, B, and C are in partnership; A puts in $\pounds 300$ for 3 months, B $\pounds 400$ for 4 months, and C a certain sum for 6 months. They gain altogether $\pounds 120$, of which B receives $\pounds 40$. Find A's gain and C's stock.

9. Multiply $\frac{2}{3}$ of $\frac{2}{7}$ of $\pounds 5$. 10. 3 by $\cdot 025$, and express 3 per cent. of the result as a decimal of half a guinea.

10. A clock gains 5 seconds in every hour it indicates. How should it be set at 6 p.m. on Saturday so as to denote correct time at 9 a.m. the following Monday?

PAPER LXVIII.

1. I buy pears at 3 for a penny and an equal number at 4 for a penny. I sell all at 7 for 2d. thereby losing a shilling. With how many do I trade?

2. Find the value of $\sqrt{\cdot 316} - 3\sqrt[3]{\cdot 000316}$.

3. A sovereign is divided amongst *A*, *B* and *C*. *A* has $\frac{2}{3}$, *B* $\frac{1}{3}$ of the remainder, and *C* what is left. Express *C*'s share as a decimal of *A*'s.

4. Goods which cost £31. 0. 10 are sold at a gain of 19 per cent. Find the selling price.

5. Find the true discount upon a bill of £76. 6. 2 $\frac{1}{2}$ due in 37 days, discount being at 3 $\frac{1}{2}$ per cent.

6. A person having spent $\frac{5}{8}$ of his income in a twelvemonth besides paying £20 rent finds that the remainder at 4 $\frac{1}{2}$ per cent. yields him three guineas. What was his income?

7. A bankrupt's assets valued at £2250 are 7 $\frac{1}{2}$ per cent. of his liabilities. What does he owe, and what could he pay to a creditor for £225?

8. Find the sum of the series 1·03 + 1·36 + 1·69 &c. to 17 terms.

9. Divide 1300 into three parts having the ratio of 17, 19 and 29, and into three parts having the ratio of 11, 1·1 and ·9.

10. Divide 147 into two parts so that $\frac{4}{5}$ of the one shall be $\frac{5}{6}$ of the other.

PAPER LXIX.

1. The gradient of a line of railway between two towns 18 miles apart is 1 in 120 descending, for the first 7 $\frac{1}{2}$ miles, the line then runs level for 4 $\frac{3}{4}$ miles, and rises 1 in 400 for the remaining distance. What is the difference in level of the two places?

2. Find the difference between the Simple and Compound Interest of £300 for 3 $\frac{1}{2}$ years at 2 $\frac{1}{2}$ per cent. half yearly.

3. If 11 men do a piece of work in 9 days of 8 hours each, how many hours per day would 56 men work to do four times as much in 12 days?

4. *A* can do a piece of work in 15 days, *B* in 18 days. They work together for 3 days, when *A* leaves; in what time can *B* finish the work?

5. Simplify

$$\frac{\frac{1}{2} + 2\frac{2}{3} \text{ of } \frac{3}{4}}{5\frac{1}{2} - 1\frac{1}{3}} + \frac{11\frac{1}{2} \times 8\frac{1}{3}}{3\frac{2}{3} \div \frac{6}{7}} \text{ of } \text{£}5. 10. 0.$$

6. Goods cost £20. 10. 0 per ton and are sold at a gain of 15 per cent. Find the selling price per cwt.; and the gain on 11 tons 3 cwt. 3 qrs.

7. If I sold £8000 stock out of the 3 per cents. at 75 and invested the proceeds in the 4 per cents. at 96, what would be the difference of my income?

8. Bought articles some at 3 a penny and an equal number at 4 a penny. Sold the whole at 7 for 2d. What did I lose or gain on 7 gross?

9. Reduce $\cdot 1145$ cwt. to Troy Weight.
10. Divide 1241 into parts which shall be to each other as the ratio of 4, 6, 7.

PAPER LXX.

1. What is the True discount of a bill of £375 due in 60 days at 4 per cent.?
2. How many yards of cloth may be bought for £130. 13. 4 if $19\frac{3}{4}$ yds. cost £6. 11. 8?
3. Find the value of the series $1\frac{2}{3} + 4 + 6\frac{2}{3} + \&c.$ to 14 terms.
4. A person exchanges £5070 stock from the 3 per cents. at 85 to the 4 per cents. at 92. What is the difference in his income?
5. The Interest on a certain sum at 3 per cent. per annum is 5s. 6d. for a calendar month. Find the principal.
6. By selling at 26s. I lose $12\frac{1}{2}$ per cent.; at what price should I sell to gain 10 per cent.?
7. The present worth of a certain sum due 11 months hence is £316. Find the sum reckoning discount at 4 per cent.
8. Find the difference between Banker's and True discount on a bill of £479. 16. 0 due in 30 days at 5 per cent.
9. A person sells half his stock at double its cost price and the remainder at half its cost price. He thus gains £11. 10. 9. What does he receive for the whole?
10. The hands of a watch intercept an angle of 30° between 10 and 11 o'clock. What is the time?

PAPER LXXI.

1. A person having had his wages increased 15 per cent. is now in receipt of £2. 17. 6 weekly. What per centage must be taken off this sum to reduce his wages to their original amount?
2. A degree of longitude causes a difference of 4 minutes in time; what is the difference in time of two places situate $30^\circ 45' 30''$ of longitude apart?
3. Reckoning 4 minutes *before* Greenwich mean time for every degree East, and 4 min. *after* for every degree West of Greenwich, find the time in the following capitals when Greenwich mean time denotes 12 noon. St Petersburg, $30^\circ 20'$ East longitude; Berlin, $13^\circ 24'$ East; Paris, $2^\circ 20'$ East; Dublin, $6^\circ 16'$ West; and New York, $73^\circ 58'$ West Long.

4. Divide $\cdot 3103$ by $\cdot 071$; and give the quotient as the decimal of $5\cdot 051$.
5. Find by Practice the weight of 13 cub. yds, 18 ft. 864 in. at 1 ton $10\frac{1}{2}$ cwt. per cub. yard.
6. If 16 horses consume $11\frac{1}{2}$ bushels of corn in 8 days, how much corn would be consumed by 48 horses in 56 days?
7. Find the length of an arc of $23^{\circ} 12' 30''$ reckoning 63 miles to each degree.
8. Find the value of $\pounds 1\cdot 115 + 1\cdot 26s. + \cdot 375d.$
9. If $\frac{3}{11}$ of a share be worth $\pounds 51. 15. 9\frac{3}{4}$ find the value of $2\frac{1}{2}$ shares.
10. What degree of the Centigrade thermometer corresponds to 40° Fahrenheit, and what degree Fahrenheit to 30° Centigrade? (*See Paper LXVII. 3.*)

PAPER LXXII.

1. Find the continued product of $244\cdot 146$, 625 , $\cdot 15625$, $1\cdot 024$ and $\cdot 0256$.
2. From the sum of the fractions $\frac{3\frac{5}{8}}{\frac{5}{8}}$ and $\frac{3\frac{5}{8}}{\frac{5}{8}}$ take their difference.
3. If a certain sum of money be divided among a certain number of persons, each will get 7s. If the number of persons be increased by 6, each will get 2s. less. How much money was to be divided?
4. Find the cube root of 2197354919110343 and the square root of $\cdot 00848241$.
5. Sold 19 yards of cloth at 11s. per yard, thus gaining the cost price of 5 yards. Find the cost price per yard.
6. What number multiplied by the twenty-fourth part of itself will give 216 as the result?
7. Having paid an income-tax of 6d. in the \pounds out of my income, I find I have $\pounds 245. 9. 1\frac{1}{2}$ left. What amount of tax did I pay?
8. Divide $\pounds 1. 19. 0\frac{3}{4}$ between two persons, giving one $3\frac{3}{4}d.$ less than half as much again as the other.
9. Goods which originally cost $\pounds 30. 8. 4$ for 2 tons 7 cwt. are sold at a gain of $17\frac{1}{2}$ per cent. Find the selling price per cwt.
10. Simplify

$$\frac{\cdot 07692\dot{3}}{\cdot 0\dot{3}7} \times \frac{999}{\cdot 027} \times \frac{\cdot 001}{111} \times \frac{13}{\cdot 009}.$$

PAPER LXXIII.

1. Find the value of $13\sqrt{78} + 5^3\sqrt{39} + \sqrt[4]{576}$ correct to 5 places of decimals.

2. Multiply 3.03 by .03313, and divide the result by .025.
3. Find the difference between placing £440 out at Compound Interest for $4\frac{1}{2}$ years at 5 per cent. half-yearly, and investing an equal amount for the same time in Railway Preference Stock at $46\frac{2}{3}$ premium, which yields a half-yearly dividend of $7\frac{1}{2}$ per cent.
4. What income should I derive from an investment of £6900 in the 3 per cents. at $87\frac{3}{8}$? How much must be invested in the 4 per cents. at 112 to yield an equal sum?
5. What sum paid now would meet a bill of £230 due in 146 days, discount being at the rate of $2\frac{1}{2}$ per cent. per annum?
6. What sum must be invested in $3\frac{1}{2}$ per cent. stock at 95 to produce an income of £175?
7. If 5 men or 16 boys can do a piece of work in 11 hours, in what time could 3 men and 48 boys do the same work?
8. *A* can do a piece of work in 5 hours, *B* in 6, and *C* in 7 hours. In what time could they do it working together; and in what time could *A* and *C* together do twice as much work?
9. *A* and *B* are in partnership. *A* invests £4700 for 12 months, and receives £446. 10. 0 as his share of the profits. How much should *B* receive, who invests £2300 for 9 months?
10. Find the cost of 470 shares at $83\frac{3}{8}$, $\frac{1}{8}$ per cent. on the purchase money being paid for brokerage; and what sum would they produce annually at £3. 10. 6 interest per share?

PAPER LXXIV.

1. At what rate per cent. per annum Simple Interest will £70 amount to £89. 12. 0 in $3\frac{1}{2}$ years?
2. Find the value correct to 5 places of decimals of

$$\sqrt{315} + 3\sqrt{881} + \sqrt{590} + \sqrt{51}.$$
3. Find the difference between Banker's and True discount on £3700 due in 1 year 219 days at 5 per cent. per annum.
4. Find the Commission on £29. 10. 4 at $14\frac{7}{8}$ per cent.
5. If 9 lbs. of rice cost as much as 4 lbs. of sugar, and 14 lbs. of sugar are worth as much as $1\frac{1}{2}$ lbs. of tea, and 2 lbs. of tea are worth 5 lbs. of coffee, find the cost of 11 lbs. of coffee if $2\frac{1}{2}$ lbs. of rice cost *5d.*

6. Divide £1. 10. 0 among *A*, *B* and *C* in the ratio of $\frac{2}{3}$, $\frac{3}{4}$ and $\frac{4}{5}$.
7. Find by the rule of Practice the value of 31.075 acres at £72.315 per acre.
8. By selling goods at 11s. 3d. I gain $12\frac{1}{2}$ per cent.; at what price should they be sold to lose $12\frac{1}{2}$ per cent.?
9. What ready money will pay a bill of £49. 17. 6, discount being allowed at the rate of 5 per cent.?
10. A sum of money is placed out at Compound Interest at 5 per cent. per annum, and at the end of two years £338. 10. 0 is added to it. At the expiration of 5 years from the first investment, the whole principal and interest amounted to £1157. 12. 6. Find the sum originally invested.

PAPER LXXV.

1. The shortest distance from a house to a circular lake is exactly 4 miles; a road proceeding in a straight line from the house past the shore of the lake touches the shore at a point 8 miles from the house. What is the area of the lake?
2. A person having invested £10500 in the $3\frac{1}{2}$ per cents. at 98 for seven years sells out at the end of that time. He invests both stock and profit in Railway Debentures at 129 $\frac{3}{8}$, bearing interest at the rate of $2\frac{3}{4}$ per cent. half-yearly. What is the difference in his annual income?
3. If I buy 308 tons of pig iron at £5. 16. 8 per ton, and sell the whole for £1848, find my whole gain, and what I gain per cent.
4. Find the Compound Interest of £403 for $2\frac{3}{4}$ years at 3 per cent. quarterly; and compute what Principal would be necessary to produce £23863. 10. 0 interest in a quarter of a century at 5 per cent. Compound Interest.
5. At what time between 5 and 6 o'clock are the hour and minute hands of a watch (i) together, (ii) at right angles, and (iii) intercepting an angle of 165° ?
6. The closing price of the following Railway shares on Thursday, Oct. 23, 1879, was, London and North Western, 4 per cent. stock 109 $\frac{1}{4}$; London, Chatham, and Dover, $4\frac{1}{2}$ per cent. 113 $\frac{1}{4}$; Great Western, 4 per cent. 108 $\frac{3}{4}$; and Midland, 4 per cent. 108 $\frac{3}{4}$. What must a person invest in each description of stock so that, receiving altogether a dividend of 1000 guineas annually, the interest derived from his shares in the Companies named may be in the ratio of 5, 4, 3 and 2 respectively?

7. Simplify

$$\frac{\cdot\dot{1}4285\dot{7} \times \cdot\dot{0}7692\dot{3}}{\cdot\dot{0}1098\dot{9}} + \frac{2\cdot7\dot{5} \times 11\cdot2\dot{5}}{6\cdot2}.$$

8. Find the value correct to 6 places of decimals of

$$\sqrt[3]{45} + \sqrt[3]{982} + 5\sqrt{15} + 9\sqrt{380}.$$

9. Official statistics give the population of Chicago in 1830 as 70, in 1840 it was 4853, in 1850 it had increased to 29963, in 1860 it amounted to 112172, and in 1870 to 298977 inhabitants. Give the increase per cent. for each decade, and find the population for 1880 supposing half the rate of increase during the decade ending with 1870 to be maintained.

10. Divide 40 guineas among *A*, *B*, *C* and *D* in such a manner that *A*'s money shall be one-fourth as much again as *B*'s, one-third less than twice as much as *C*'s, and equivalent to *C*'s and *D*'s shares combined.

A TABLE OF THE AMOUNTS OF £1 AT COMPOUND INTEREST
FROM 1 TO 40 TERMS OF PAYMENT,

Corrected to five places of decimals.

Terms.	3 per cent.	4 per cent.	5 per cent.	6 per cent.
1	1·03000	1·04000	1·05000	1·06000
2	1·06090	1·08160	1·10250	1·12360
3	1·09273	1·12486	1·15762	1·19102
4	1·12551	1·16986	1·21551	1·26248
5	1·15927	1·21665	1·27628	1·33823
6	1·19406	1·26532	1·34010	1·41852
7	1·22938	1·31593	1·40710	1·50363
8	1·26678	1·36857	1·47745	1·59385
9	1·30477	1·42331	1·55132	1·68948
10	1·34392	1·48024	1·62889	1·79085
11	1·38423	1·53945	1·71034	1·89830
12	1·42576	1·60103	1·79586	2·01220
13	1·46853	1·66507	1·88565	2·13293
14	1·51259	1·73167	1·97993	2·26091
15	1·55797	1·80094	2·07893	2·39656
16	1·60471	1·87298	2·18287	2·54035
17	1·65285	1·94790	2·29202	2·69277
18	1·70244	2·02582	2·40662	2·85434
19	1·75351	2·10685	2·52695	3·02560
20	1·80612	2·19112	2·65330	3·20714
21	1·86030	2·27877	2·78596	3·39957
22	1·91610	2·36992	2·92526	3·60354
23	1·97358	2·46472	3·07152	3·81975
24	2·03279	2·56331	3·22510	4·04893
25	2·09377	2·66584	3·38635	4·29187
26	2·15658	2·77247	3·55567	4·54938
27	2·22128	2·88337	3·73346	4·82234
28	2·28792	2·99870	3·92013	5·11168
29	2·35656	3·11865	4·11614	5·41838
30	2·42726	3·24340	4·32195	5·74349
31	2·50008	3·37314	4·53805	6·08810
32	2·57508	3·50807	4·76495	6·45339
33	2·65233	3·64839	5·00319	6·84059
34	2·73190	3·79433	5·25335	7·25103
35	2·81386	3·94609	5·51601	7·68609
36	2·89828	4·10393	5·79182	8·14725
37	2·98523	4·26809	6·08141	8·63609
38	3·07479	4·43881	6·38548	9·15425
39	3·16703	4·61637	6·70475	9·70351
40	3·26204	4·80102	7·03999	10·28572

A TABLE OF THE SPECIFIC GRAVITIES OF
COMMON SUBSTANCES.

(Distilled water is reckoned at 1·000. A cubic foot of water weighs
1000 oz. Avoir.)

<i>Metals.</i>		Mahogany	1·063
Brass	8·200	Oak	0·678
Bronze	8·758	Pine	0·537
Copper	8·726	Poplar.....	0·393
Gold	19·361	Willow	0·487
„ standard.....	18·888		
Gun-metal	8·784	<i>Various Bodies.</i>	
Iron, cast	7·250	Alcohol	0·815
„ wrought.....	7·548	Beer	1·030
Lead	11·388	Brick	1·710
Platinum, wire drawn	21·250	Chalk.....	1·793 to 2·475
Quicksilver	13·568	Coal	1·232 to 1·510
Silver	10·510	Earth, common	1·485
Steel, cast	7·919	„ moist sand	2·055
„ wrought	7·840	„ gravelly soil	2·075
Tin	7·299	„ clay	2·150
Zinc, rolled	7·191	Flint	2·672
		Glass	2·642
<i>Dry Woods.</i>		Granite	2·688
Alder.....	0·500	Ice	0·916
Ash	0·644	Ivory	1·825
Birch.....	0·627	Lime	1·842
Box	0·591	Olive-oil	0·915
Cork	0·240	Portland Stone	2·496
Elm	0·547	Rock Salt	2·250
Fir	0·555	Sea Water.....	1·026 to 1·033
Logwood	0·913 to 0·925	Sulphur	1·989

ANSWERS TO THE EXAMPLES.

SIMPLE ADDITION.

- | | | | | |
|------------------|------------------|------------------|----------------|-------------|
| (1) 6964. | (2) 8659. | (3) 9777. | (4) 7863. | (5) 8656. |
| (6) 8573. | (7) 8719. | (8) 9306. | (9) 8611. | (10) 10524. |
| (11) 8534. | (12) 3943. | (13) 4858. | (14) 6623. | (15) 4657. |
| (16) 4203. | (17) 4286. | (18) 6420. | (19) 7115. | (20) 5207. |
| (21) 98362. | (22) 111273. | (23) 97592. | (24) 82421. | |
| (25) 92430. | (26) 88598. | (27) 84216. | (28) 97071. | |
| (29) 44041. | (30) 61897. | (31) 49174. | (32) 81508. | |
| (33) 40904. | (34) 65581. | (35) 79761. | (36) 68625. | |
| (37) 1013818. | (38) 665304. | (39) 732653. | (40) 589089. | |
| (41) 753387. | (42) 629461. | (43) 523865. | (44) 756309. | |
| (45) 793394. | (46) 987471. | (47) 774053. | (48) 698866. | |
| (49) 582763. | (50) 393641. | (51) 661065. | (52) 614520. | |
| (53) 808487. | (54) 322873. | (55) 478172. | (56) 426683. | |
| (57) 616169. | (58) 664642. | (59) 800224. | (60) 495332. | |
| (61) 573644. | (62) 653238. | (63) 548416. | (64) 482283. | |
| (65) 830524983. | (66) 2854439402. | (67) 150553632. | | |
| (68) 5964265303. | (69) 699083471. | (70) 2068846208. | | |
| (71) 485889455. | (72) 1204905616. | (73) 397507829. | | |
| (74) 368211498. | (75) 342713436. | (76) 88648003. | (77) 12349901. | |
| (78) 11355508. | (79) 30179163. | (80) 27273169. | (81) 25863930. | |
| (82) 1908002. | (83) 1726226. | (84) 4700581. | (85) 565451. | |
| (86) 4306586. | (87) 1809081. | (88) 1448473. | (89) 6183844. | |
| (90) 10801950. | (91) 7841123. | (92) 10273608. | (93) 5281275. | |
| (94) 5066879. | (95) 1851164. | (96) 1841490. | (97) 7666255. | |
| (98) 1340903. | (99) 1184690. | (100) 2559279. | (101) 7760. | |
| (102) 13104. | (103) 13089. | (104) 15793. | (105) 14888. | |
| (106) 19227. | (107) 16940. | (108) 7871. | (109) 17924. | |
| (110) 12686. | (111) 11221. | (112) 10849. | (113) 11918. | |
| (114) 13901. | (115) 7010. | (116) 14559. | (117) 11243. | |

(118) 18884.	(119) 18383.	(120) 16518.	(121) 18744.
(122) 15943.	(123) 15142.	(124) 16634.	(125) 18784.
(126) 13996.	(127) 17865.	(128) 15580.	(129) 16818.
(130) 17777.	(131) 17020.	(132) 14892.	(133) 17069.
(134) 18929.	(135) 12776.	(136) 22166.	(137) 24189.
(138) 19918.	(139) 18511.	(140) 16431.	(141) 154411.
(142) 182596.	(143) 189843.	(144) 170652.	(145) 175541.
(146) 159592.	(147) 145935.	(148) 171903.	(149) 61730.
(150) 173175.	(151) 188855.	(152) 171104.	(153) 158354.
(154) 174052.	(155) 81380.	(156) 90731.	(157) 153019.
(158) 150181.	(159) 158775.	(160) 1767599.	(161) 1393011.
(162) 1269325.	(163) 171390.	(164) 169361.	(165) 130364.
(166) 106875.	(167) 1188362.	(168) 4340105.	(169) 9607728.
(170) 1783344.	(171) 1887426.	(172) 1628417.	(173) 1322045.
(174) 1227873.	(175) 1232600.	(176) 918433.	(177) 950522.
(178) 2923149.	(179) 1747820.	(180) 658490.	(181) 512206.
(182) 1174948.	(183) 1924696.	(184) 1978152.	(185) 1863367.
(186) 2146361.	(187) 1178014.	(188) 1689708.	(189) 796708.
(190) 1350280.	(191) 705986.	(192) 2551213.	(193) 759037.
(194) 658191.	(195) 874414.	(196) 761683.	(197) 587024.
(198) 637592.	(199) 4127024.	(200) 3493190.	(201) 4956.
(202) 578312.	(203) 71820404.	(204) 71.	(205) 5665.
(206) 6432000.	(207) 3391385.	(208) 732.	(209) 2192.
(210) 41015.	(211) 148799.	(212) 1368.	(213) 767.
(214) 3072134.	(215) 7642.	(216) 5252.	(217) 45657.
(218) 1773.	(219) 3968.	(220) 68089.	(221) 14180.
(222) 17628.	(223) 467.	(224) 362.	(225) 4599 sovs.
(226) 35657.	(227) 5597604.	(228) 1008.	(229) 2309.
(230) 640.	(231) 365.	(232) 24224.	(233) 241558.
(234) 1198193187.	(235) 3686.	(236) 115967.	(237) 78.
(238) 21271.	(239) 106379256.	(240) 431.	(241) 52.
(242) 8883.	(243) £338.	(244) 5259024.	(245) 1406361.
(246) 288.	(247) 402.	(248) 68331.	(249) 62378.
(250) 41307.			

SIMPLE SUBTRACTION.

(1) 253152.	(2) 450013.	(3) 61732.	(4) 524046.
(5) 547177.	(6) 4292033.	(7) 5487101.	(8) 419364.
(9) 218688.	(10) 4009.	(11) 817998.	(12) 122817.
(13) 426518.	(14) 1063422.	(15) 139708.	(16) 776998.
(17) 3233267.	(18) 373349.	(19) 1225478.	(20) 7092198.

(21) 1715916.	(22) 2264718.	(23) 928159.	(24) 6337841.
(25) 7943428.	(26) 1233866.	(27) 4195665.	(28) 6248093.
(29) 7139093.	(30) 9647058.	(31) 22301647.	(32) 982693.
(33) 992032.	(34) 1009401.	(35) 899990.	(36) 7065147.
(37) 46926299.	(38) 11803999.	(39) 6621988.	(40) 8514296.
(41) 6779941.	(42) 5432099.	(43) 4823188.	(44) 2177478.
(45) 2312120.	(46) 9007263.	(47) 7065094.	(48) 7326217.
(49) 970309.	(50) 4581446.	(51) 2721350.	(52) 1123828.
(53) 3697717.	(54) 4548379.	(55) 505570.	(56) 4375989.
(57) 4631732.	(58) 8767889.	(59) 844920.	(60) 6760269.
(61) 4198233.	(62) 44639914.	(63) 8939980.	(64) 7973966.
(65) 2681839.	(66) 1104753.	(67) 998998.	(68) 726007.
(69) 8105689.	(70) 4999089.	(71) 21278118.	(72) 4108.
(73) 11197129.	(74) 1997120.	(75) 3835961.	(76) 999009.
(77) 19018689.	(78) 31807923.	(79) 667238.	(80) 2026953.
(81) 35832822.	(82) 1990996.	(83) 40791128.	(84) 35672119.
(85) 1008990.	(86) 34935497.	(87) 953369.	(88) 10670418.
(89) 36363772.	(90) 11004751.	(91) 337200910.	
(92) 173635437.	(93) 10959999.	(94) 34896597.	(95) 4100305.
(96) 75178031.	(97) 28785754.	(98) 17610996.	(99) 9296625.
(100) 1981899.	(101) 2807196.	(102) 1377182.	(103) 8196155.
(104) 33831094.	(105) 9831.	(106) 345409.	(107) 1999999.
(108) 498693.	(109) 1999999.	(110) 4001657.	(111) 11097821.
(112) 26327839.	(113) 914018.	(114) 2027208.	
(115) 14940316.	(116) 52180247.	(117) 7105999.	
(118) 3999099.	(119) 1394997.	(120) 21093099.	
(121) 18507397.	(122) 4874267.	(123) 1105325.	
(124) 1098987.	(125) 1999276.	(126) 23891827.	
(127) 37035798.	(128) 21616867.	(129) 11636327.	
(130) 2805206.	(131) 57007993.	(132) 536646436.	
(133) 101106937.	(134) 687039618.	(135) 237110190.	
(136) 104307004.	(137) 18203208.	(138) 10649684.	
(139) 19116244.	(140) 94098999.	(141) 9859001.	
(142) 9096899.	(143) 98988799.	(144) 229998985.	
(145) 563310869.	(146) 179376920.	(147) 17327752.	
(148) 91895987.	(149) 16894008.	(150) 87024142.	
(151) 291973997.	(152) 33591001.	(153) 98906357.	
(154) 5929811.	(155) 99638436.	(156) 370985875.	
(157) 1005998.	(158) 34074866.	(159) 999990.	
(160) 144095597.	(161) 2643921.	(162) 835679.	
(163) 44851907.	(164) 3683106.	(165) 6964940.	

- | | | |
|------------------------|--------------------|------------------|
| (166) 125397843. | (167) 143412856. | (168) 370298177. |
| (169) 261197629. | (170) 57046850. | (171) 5718128. |
| (172) 434615576. | (173) 155765897. | (174) 47426569. |
| (175) 73803647. | (176) 260858137. | (177) 33013919. |
| (178) 11998822. | (179) 180196990. | (180) 154517569. |
| (181) 2799988. | (182) 864197532. | (183) 2607874. |
| (184) 318814605. | (185) 26105809. | (186) 195670007. |
| (187) 6701739. | (188) 1002975. | (189) 235740951. |
| (190) 36696941. | (191) 32032973. | (192) 903. |
| (193) 324999969. | (194) 63815307. | (195) 784136692. |
| (196) 35898997. | (197) 59427970. | (198) 265697533. |
| (199) 29697048. | (200) 8089394. | (201) 3243. |
| (203) 52866. | (204) 62788. | (205) 18394. |
| (207) 39849. | (208) 27184. | (209) 13338. |
| (211) 10388. | (212) 39038 acres. | (213) 42088. |
| (215) 57 birds. | (216) 382. | (217) 667447. |
| (219) 129167. | (220) 285042. | (221) 413. |
| (223) 426. | (224) 174299. | (225) 6023834. |
| (227) £1489. | (228) 2412506. | (229) 92. |
| (231) 15362. | (232) 12124. | (233) 605483. |
| (235) 326. | (236) 90408. | (237) 828477. |
| (239) 6313602. | (240) 6211544. | (241) 6615079. |
| (242) the former by 1. | (243) 9 years. | (244) 21 years. |
| (245) 1815. | (246) 13316926. | (247) 28177. |
| (249) 44 yards. | (250) 13912. | (248) 5663. |

SIMPLE MULTIPLICATION.

- | | | | |
|-------------------|-------------------|-------------------|-----------------|
| (1) 7443390. | (2) 11165085. | (3) 14886780. | (4) 18608475. |
| (5) 22330170. | (6) 26051865. | (7) 29773560. | (8) 33495255. |
| (9) 17953086. | (10) 26929629. | (11) 35906172. | (12) 44882715. |
| (13) 53859258. | (14) 62835801. | (15) 71812344. | (16) 80788887. |
| (17) 5796090. | (18) 57960900. | (19) 579609000. | (20) 11592180. |
| (21) 28980450. | (22) 347765400. | (23) 5216481000. | |
| (24) 40572630. | (25) 11063268. | (26) 21204597. | (27) 41487255. |
| (28) 61769913. | (29) 82052571. | (30) 919173183. | (31) 2408217. |
| (32) 6754755. | (33) 13274562. | (34) 17758153. | (35) 657232365. |
| (36) 812038860. | (37) 503352855. | (38) 190031925. | |
| (39) 8592982446. | (40) 14316995064. | (41) 45750319830. | |
| (42) 56334868710. | (43) 185386320. | (44) 536711184. | |
| (45) 558530640. | (46) 719962992. | (47) 54893703. | |

(48) 59757702.	(49) 36827421.	(50) 340479930.	(51) 6927168.
(52) 6061272.	(53) 5411850.	(54) 3030636.	(55) 7432274.
(56) 503951745.	(57) 449855230.	(58) 561464882.	
(59) 292121181.	(60) 272760323.	(61) 49417973274.	
(62) 27259794324.	(63) 37700309508.	(64) 2736138750.	
(65) 1800744116.	(66) 6586433199.	(67) 7891509720.	
(68) 3215703300.	(69) 4901774760.	(70) 2539443786.	
(71) 2611796862.	(72) 3075005730.	(73) 12083011416.	
(74) 41818964400.	(75) 47507529912.	(76) 26111642736.	
(77) 441009036.	(78) 594442044.	(79) 501363006.	
(80) 330605050.	(81) 783985730.	(82) 514597768.	
(83) 216069715.	(84) 1270152506.	(85) 580969480.	
(86) 502335250.	(87) 258188125.	(88) 140651984.	
(89) 530978064.	(90) 3368917856.	(91) 252030576.	
(92) 620545872.	(93) 1697853040.	(94) 4284519792.	
(95) 5054548815.	(96) 4261551078.	(97) 5803531209.	
(98) 846106272.	(99) 554943488.	(100) 4956156480.	
(101) 21697603886.	(102) 36785628404.	(103) 23097449298.	
(104) 877319686.	(105) 587323648.	(106) 437617424.	
(107) 257678064.	(108) 156403884.	(109) 250368048.	
(110) 105030716.	(111) 635229420.	(112) 367229800.	
(113) 309801310.	(114) 227904516.	(115) 570175060.	
(116) 248841278.	(117) 7705861100.	(118) 8731761885.	
(119) 6711526493.	(120) 5763612736.	(121) 626654308.	
(122) 705104841.	(123) 295119664.	(124) 552557740.	
(125) 544662027.	(126) 389710881.	(127) 682504389.	
(128) 777866418.	(129) 577572100.	(130) 626770109.	
(131) 421001350.	(132) 327476422.	(133) 280507995.	
(134) 643666500.	(135) 751130820.	(136) 650923425.	
(137) 581189340.	(138) 518363895.	(139) 328446188.	
(140) 339225310.	(141) 268657494.	(142) 202155160.	
(143) 2238435000.	(144) 2816006500.	(145) 6237219500.	
(146) 3875117875.	(147) 1918520839.	(148) 2401417790.	
(149) 1469017243.	(150) 873744393.	(151) 48664576.	
(152) 15085456.	(153) 92313664.	(154) 28376929.	
(155) 51969681.	(156) 99740169.	(157) 39000025.	
(158) 77369616.	(159) 1522756.	(160) 32239684.	
(161) 1953125.	(162) 334255384.	(163) 374805361.	
(164) 341532099.	(165) 627222016.	(166) 29218112.	
(167) 502459875.	(168) 647214625.	(169) 51478848.	
(170) 997002999.	(171) 1879080904.	(172) 95256152263.	

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|-------------------------|-------------------------|----------------------|
| (173) 854744554039. | (174) 706633718643. | (175) 185485563927. |
| (176) 963259373376. | (177) 672221376. | (178) 447697125. |
| (179) 216973458729. | (180) 51853389489. | (181) 211309379856. |
| (182) 949005240561. | (183) 8653650625. | (184) 137552716161. |
| (185) 570268135921. | (186) 679740887296. | (187) 952857108736. |
| (188) 114478037712481. | (189) 4104198146048256. | |
| (190) 9996000599960001. | (191) 33758471264068. | |
| (192) 5759935172223. | (193) 6367923228416. | (194) 2910195338300. |
| (195) 6341789969900. | (196) 4897462869387. | (197) 5686417005464. |
| (198) 3030636904785. | (199) 4696954548467. | (200) 7902881560070. |
| (201) 1175775. | (202) 11757750. | (203) 2351550. |
| (205) 3527325. | (206) 5878875. | (207) 189800500. |
| (208) 47450125. | (209) 28470075. | (210) 237250625. |
| (211) 142350375. | (212) 12266750. | (213) 33120225. |
| (214) 61333750. | (215) 245335000. | (216) 613337500. |
| (217) 57927500. | (218) 69513000. | (219) 34756500. |
| (220) 20853900. | (221) 162197000. | (222) 11769000. |
| (223) 435453000. | (224) 82383000. | (225) 21184200. |
| (226) 24714900. | (227) 22493575. | (228) 32875225. |
| (229) 397963250. | (230) 128040350. | (231) 112467875. |
| (232) 8099448. | (233) 15620364. | (234) 386459376. |
| (235) 46668248. | (236) 40834717. | (237) 40049530. |
| (238) 71613318. | (239) 14750916. | (240) 571954872. |
| (241) 437055366. | (242) 40628133. | (243) 36163503. |
| (244) 10566291. | (245) 22025508. | (246) 32145336. |
| (247) 699434802. | (248) 65013853. | (249) 76444866. |
| (250) 45009594. | (251) 39452854. | (252) 66573144. |
| (253) 132249680. | (254) 33902990. | (255) 40795664. |
| (256) 30596748. | (257) 90163250. | (258) 450816250. |
| (259) 9016325000. | (260) 540979500. | (261) 5860611250. |
| (262) 15322284. | (263) 22983426. | (264) 25820886. |
| (265) 20193257. | (266) 259627590. | (267) 728822500. |
| (268) 413971180. | (269) 114529250. | (270) 35483244. |
| (271) 70550018. | (272) 34483995. | (273) 1461915. |
| (274) 39639600. | (275) 13267800. | (276) 6347250. |
| (277) 13609440. | (278) 249218508. | (279) 368301108. |
| (280) 311446800. | (281) 8715276. | (282) 24339960. |
| (283) 423986400. | (284) 22246200. | (285) 118025. |
| (286) 467379. | (287) 38664990. | (288) 265716764. |
| (289) 40129500. | (290) 244660500. | (291) 2757285. |
| (292) 477044825. | (293) 19033465. | (294) 315867594. |

(295) 35614320.	(296) 115327548.	(297) 735095277.
(298) 872891271.	(299) 1775875.	(300) 1399346879.
(301) 70. (302) 49435.	(303) 23484927.	(304) 82280 yards.
(305) £126. (306) £279.	(307) 11617740.	(308) 372.
(309) 315 miles.	(310) 72 shillings.	(311) 317 tons.
(312) 1207972575.	(313) 3392 yards.	(314) 33103 feet.
(315) 2088 gallons.	(316) 64548.	(317) 38226.
(318) 27463640.	(319) 137926302.	(320) £2652.
(321) 4757.	(322) 26838.	(323) 362880.
(324) 8760 hours.	(325) 1128 hours.	(326) 524697.
(327) 110889.	(328) £30485.	(329) £5628.
(330) £44. (331) 45458609808.	(332) 329770.	(333) 10176 lbs.
(334) 42125. (335) 70008.	(336) 1143.	(337) 2141 lbs.
(338) 8091900. (339) 1120500.	(340) 216 lines.	(341) 118368.
(342) 574145 tons.	(343) 482937340.	(344) 149850 yards.
(345) 1000000. (346) 457370.	(347) 55219286304.	(348) 5676.
(349) 321102. (350) £10.		

SIMPLE DIVISION.

(1) 1458219.	(2) 972146.	(3) 729109—2.	(4) 583287—3.
(5) 486073.	(6) 416634.	(7) 364554—6.	(8) 324048—6.
(9) 37530691.	(10) 25020460—2.	(11) 18765345—2.	
(12) 15012276—2.	(13) 12510230—2.	(14) 10723054—4.	
(15) 9382672—6.	(16) 8340153—5.	(17) 23658464.	
(18) 15772309—1.	(19) 11829232.	(20) 9463385—3.	
(21) 7886154—4.	(22) 6759561—1.	(23) 5914616.	
(24) 5257436—4.	(25) 49937515—1.	(26) 33291677.	
(27) 24968757—3.	(28) 19975006—1.	(29) 16645838—3.	
(30) 14267861—4.	(31) 12484378—7.	(32) 11097225—6.	
(33) 26081923—1.	(34) 17387949.	(35) 13040961—3.	
(36) 10432769—2.	(37) 8693974—3.	(38) 7451978—1.	
(39) 6520480—7.	(40) 5795983.	(41) 15510380—1.	
(42) 10340253—2.	(43) 7755190—1.	(44) 6204152—1.	
(45) 5170126—5.	(46) 4431537—2.	(47) 3877595—1.	
(48) 3446751—2.	(49) 3102076—1.	(50) 41075791—1.	
(51) 27383861.	(52) 20537895—3.	(53) 16430316—3.	
(54) 13691930—3.	(55) 11735940—3.	(56) 10268947—7.	
(57) 9127953—6.	(58) 8215158—3.	(59) 357310—13.	
(60) 238207—3.	(61) 178655—13.	(62) 142924—13.	
(63) 119103—33.	(64) 102088—53.	(65) 89327—53.	
(66) 79402—33.	(67) 244779—12.	(68) 156659—1.	

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| (69) 111899—11. | (70) 48351—45. | (71) 69937—4. |
| (72) 547597—9. | (73) 456331—6. | (74) 342248—12. |
| (75) 586711—10. | (76) 228165—24. | (77) 44018—21. |
| (78) 29956—71. | (79) 25677—35. | (80) 19608—23. |
| (81) 43138—3. | (82) 272088—12. | (83) 105812—12. |
| (84) 57715—75. | (85) 90696—12. | (86) 52906—12. |
| (87) 200355—38. | (88) 127499—14. | (89) 103888—20. |
| (90) 58437—20. | (91) 311664—20. | (92) 111656—47. |
| (93) 59058—13. | (94) 59550—31. | (95) 223313—15. |
| (96) 127607—39. | (97) 73001—26. | (98) 87829—47. |
| (99) 69396—27. | (100) 52047—27. | (101) 200753—19. |
| (102) 247854—15. | (103) 212447. | (104) 202790—7. |
| (105) 46472—75. | (106) 33798—51. | (107) 95386—11. |
| (108) 68132—101. | (109) 72999—59. | (110) 49680—41. |
| (111) 13972—297. | (112) 60511—95. | (113) 48409—60. |
| (114) 47064—115. | (115) 44123—19. | (116) 67235—25. |
| (117) 8215—613. | (118) 6846—445. | (119) 7188—733. |
| (120) 14937—319. | (121) 28755—13. | (122) 2961—494. |
| (123) 11423—116. | (124) 4895—368. | (125) 4997—359. |
| (126) 3454—313. | (127) 60816448—1. | (128) 46506695—10. |
| (129) 41611253—18. | (130) 34374514—3. | (131) 27262545—20. |
| (132) 25503671—24. | (133) 16821570—35. | (134) 14917241—52. |
| (135) 10007769—74. | (136) 9625467—64. | (137) 25029851—26. |
| (138) 10405668—61. | (139) 9547469—20. | (140) 18158912—1. |
| (141) 10768657—11. | (142) 12185585—53. | (143) 8991305—98. |
| (144) 7529304—121. | (145) 4267762—159. | (146) 13043725—38. |
| (147) 605744*—545. | (148) 845835—52. | (149) 680076—121. |
| (150) 509357—364. | (151) 3286032—1. | (152) 132584—69. |
| (153) 60842—451. | (154) 189836—125. | (155) 420644—97. |
| (156) 302951—70. | (157) 148442—103. | (158) 79247—327. |
| (159) 74142—695. | (160) 223608—257. | (161) 98475—494. |
| (162) 75932—601. | (163) 76983—308. | (164) 137223—335. |
| (165) 85239—191. | (166) 110672—177. | (167) 866311—51. |
| (168) 826481—17. | (169) 807908—52. | (170) 419658—75. |
| (171) 269260—133. | (172) 246466—39. | (173) 653770—71. |
| (174) 875388—3. | (175) 521695—96. | (176) 582277—80. |
| (177) 371088—167. | (178) 606950—51. | (179) 899194—469. |
| (180) 825302—383. | (181) 922459—504. | (182) 57752—254. |
| (183) 73954—200. | (184) 50083—445. | (185) 8637—32. |
| (186) 9621—653. | (187) 1721—165. | (188) 22151—637. |
| (189) 56202—42. | (190) 15783—1608. | (191) 6564—2082. |

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| (192) 10004—370. | (193) 7817—7703. | (194) 10001—4155. |
| (195) 12071—1671. | (196) 21516—1275. | (197) 5548—647. |
| (198) 10002—2105. | (199) 739—2423. | (200) 1289—558. |
| (201) 65292—46. | (202) 41816—66. | (203) 3759—280. |
| (204) 7297—220. | (205) 31274—84. | (206) 6859—69. |
| (207) 595—612. | (208) 542—602. | (209) 103—3522. |
| (210) 2737—136. | (211) 80—169. | (212) 251—1544. |
| (213) 29—1499. | (214) 42—6389. | (215) 922—105. |
| (216) 1640—306. | (217) 81—4246. | (218) 3208—106. |
| (219) 368—626. | (220) 417—1330. | (221) 5975—83. |
| (222) 592—200. | (223) 59—1667. | (224) 812—472. |
| (225) 113—5138. | (226) 7572—538. | (227) 386—5562. |
| (228) 775—3662. | (229) 1414—2196. | (230) 130—3362. |
| (231) 2613—8061. | (232) 13917—636. | (233) 7852—391. |
| (234) 53313—456. | (235) 116028—87. | (236) 3677—1062. |
| (237) 8691—843. | (238) 95—29531. | (239) 357—441. |
| (240) 158—58991. | (241) 15691—6. | (242) 7845—131. |
| (243) 3922—381. | (244) 104—11381. | (245) 1743—506. |
| (246) 15303—136. | (247) 4915—334. | (248) 61213—17. |
| (249) 6509—793. | (250) 20347—133. | (251) 72773—34. |
| (252) 7211—772. | (253) 720—5281. | (254) 721—1771. |
| (255) 727—7261. | (256) 188864—21. | (257) 94432—21. |
| (258) 62954—71. | (259) 37772—121. | (260) 9443—121. |
| (261) 39372—108. | (262) 7291—183. | (263) 9374—258. |
| (264) 729—858. | (265) 3028—1108. | (266) 16706—123. |
| (267) 14319—393. | (268) 10159—171. | (269) 9319—571. |
| (270) 637—7813. | (271) 5867—11. | (272) 581—425. |
| (273) 3319—19. | (274) 1366—294. | (275) 691—404. |
| (276) 3—180. | (277) 134—1076. | (278) 137—180. |
| (279) 23—7169. | (280) 23—6939. | (281) 86—1564. |
| (282) 110—4444. | (283) 1091—252. | (284) 98—3184. |
| (285) 766—430. | (286) 1827—85. | (287) 961—360. |
| (288) 2030—85. | (289) 1305—85. | (290) 936—67. |
| (291) 25942—88. | (292) 2640—646. | (293) 22388—154. |
| (294) 13433—81. | (295) 6716—446. | (296) 47328—21. |
| (297) 5921—942. | (298) 392—11325. | (299) 820—4641. |
| (300) 70—35531. | (301) 1010 times. | (302) 449. |
| (303) 11704 times. | | (304) 12885907. |
| (305) 74376 times and 1011 rem. | (306) £804. | (307) £1783. |
| (308) 73298 dozens. | (309) 2880. | (310) 117360. |
| (311) 27027 times. | (312) 5 seconds. | (313) 3245 and 17 rem. |

- (314) 171498 and 22 rem. (315) 430355. (316) 93.
 (317) 195063. (318) 10101 times. (319) 1000 cwt.
 (320) 201 yards. (321) 219 qrs. 15 pecks. (322) 1901, 1901, and 2104.
 (323) 58 tons. (324) 34783. (325) 1908. (326) 24 dozens.
 (327) 56160. (328) 20700. (329) £1859. (330) 27 times.
 (331) 40299. (332) 1013 times. (333) 4780. (334) 66 lbs.
 (335) 38955 feet. (336) 27 gallons. (337) 209 and 584 rem.
 (338) 261 and 8 rem. (339) 6 gross. (340) 894.
 (341) 33 shillings. (342) 18016378. (343) 3016. (344) 100031.
 (345) 40704. (346) £850. (347) 36. (348) 419 and 481.
 (349) 26109. (350) 45.

REDUCTION OF MONEY.

- (1) 260. (2) 396. (3) 353. (4) 2079. (5) 1710.
 (6) 2276. (7) 3271. (8) 4756. (9) 28012. (10) 17669.
 (11) 1211. (12) 1600. (13) 2101. (14) 323. (15) 18277.
 (16) 3738. (17) 4005. (18) 6571. (19) 16981. (20) 9210.
 (21) 8335. (22) 109814. (23) 36807. (24) 106597.
 (25) 88706. (26) 4170. (27) 723. (28) 947. (29) 3196.
 (30) 52233. (31) 295. (32) 679. (33) 1300. (34) 1034.
 (35) 787. (36) 116. (37) 1168. (38) 431. (39) 408.
 (40) 75. (41) 77. (42) 88. (43) 78. (44) 30. (45) 627.
 (46) 67. (47) 26053. (48) 877. (49) 539. (50) 73594.
 (51) £24. 16. 0. (52) £15. 19. 0. (53) £20. 7. 0. (54) 71s. 10d.
 (55) 8s. 5d. (56) £386. 18. 8. (57) £298. 6. 4.
 (58) £127. 12. 0. (59) £8. 6. 4. (60) £226. 10. 2.
 (61) £292. 11. 1. (62) £144. 13. 7. (63) £6. 7. 7.
 (64) £4. 2. 0½. (65) £75. 2. 8¾. (66) £71. 3. 5.
 (67) £41. 19. 11. (68) £18. 0. 2¾. (69) £321. 0. 0½.
 (70) £614. 11. 8¼. (71) 1305 h. cr. 11d. (72) 141 h. sov. 83d.
 (73) 160 cr. 5d. (74) 67 g. 227d. (75) 71 h. g. 91d.
 (76) £73. 6. 5¾. (77) £3. 10. 0¾. (78) £2. 0. 10½.
 (79) 14 h. sov. 306 f. (80) 4 cr. 196 f. (81) 95 g. 242 f.
 (82) 1066560. (83) 283890. (84) 858720. (85) £12. 9. 11.
 (86) 14 h. sov. 280 f. (87) £34. 4. 6. (88) 4496 h. gs.
 (89) 1427 h. crs. (90) 47 gs. 35 sixp. (91) £398. (92) £143.
 (93) 329 h. sov. 2 h. c. (94) £96. 2 f. (95) 62 gs. 4s.
 (96) £17. 39 thr. (97) 36 gs. 62 thr. (98) 19 h. sov. 36 thr.
 (99) 198s. 2 fp. (100) 49 cr. 4 fp. (101) £31. 17 fp.
 (102) 15 gs. 17 fp. (103) 205 h. cr. 1 sixp. (104) 13 sixp. 7 f.

(105) 3240.	(106) 334 gs. 6s.	(107) 93 gs. 17s.
(108) £92. 2. 9.	(109) 1822 fl. 1s.	(110) 960.
(111) 2799 sixp. 2d.	(112) 1261.	(113) 639.
(115) 41.	(116) 180 h. gs. 14 sixp.	(117) £1151. 7 h. cr.
(118) £351. 1. 0.	(119) 4 gs. 188d.	(120) £3193. 1. 0.
(121) £2061. 3 0.	(122) £3788. 8. 0.	(123) £608. 9. 6.
(124) £2028. 12. 0.	(125) £147.	(126) £49.
(128) £227. 7. 6.	(129) £4. 13. 0.	(127) £98. 2. 6.
(131) £7. 17. 4.	(132) £5. 6. 4.	(130) £11. 6. 6.
(134) £69. 2. 0.	(135) £99. 18. 0.	(133) £24. 2. 1.
(137) £6. 12. 4.	(138) £257. 18. 0.	(136) £11. 17. 8.
(140) £160.	(141) £586. 13. 4.	(142) £147. 6. 8.
(144) £499.	(145) £1172. 13. 4.	(143) £315.
(147) £684.	(148) £530. 13. 4.	(146) £2307. 6. 8.
(150) £502. 4. 0.	(149) £579. 3. 0.	(147) £579. 3. 0.
(153) £71. 1. 0½.	(151) £277. 16. 8½.	(152) £55. 3. 7.
(156) £3686. 0. 10.	(154) £1583. 6. 8.	(155) £625.
(159) £65. 15. 5.	(157) £655. 8. 4.	(158) £3. 2. 6.
(162) 3465540 cents.	(160) £6075. 6. 6½.	(161) 4800 dols.
(165) 4473 dols. 1 c.	(163) 629 nobles.	(164) 3426 dols. 80 c.
(168) £468. 15. 0.	(166) 2064.	(167) 2098.
(171) £46. 17. 6.	(169) £11723. 15. 0.	(170) £15000. 9. 4½.
(174) £670. 3. 4.	(172) £20. 1. 3.	(173) £7610. 13. 9.
(177) £5200. 18. 0.	(175) £3210. 3. 4.	(176) £1215. 16. 8.
(180) £2644. 5. 3¾.	(178) £472. 10. 0.	(179) £890. 12. 6.
(183) £6106. 6. 9¾.	(181) £4680. 4. 8½.	(182) £322. 19. 9.
(186) £250.	(184) £7249. 13. 9.	(185) £166. 13. 4.
(189) £6666. 13. 4.	(187) £3333. 6. 8.	(188) £5000.
(192) £20. 16. 8.	(190) £13500. 0. 0.	(191) £395. 16. 8.
(195) £104. 3. 4.	(193) £2083. 6. 8.	(194) £1562. 10. 0.
(198) 2510 francs.	(196) £989. 11. 8.	(197) £1031. 5. 0.
(201) 4094 farthings.	(199) 1521 dols.	(200) 480000 piastres.
(204) 5 guineas.	(202) 630 francs.	(203) £4. 11. 1.
(207) 125 h. sov. 112 h. p.	(205) £6. 6. 4.	(206) £4. 10. 1½.
(211) 6758.	(208) 73.	(209) 559.
(215) 8420.	(212) 126 times.	(210) 96000.
(219) £1300. 8. 10.	(213) 1425.	(211) 13220.
(223) £12. 11. 1.	(216) 132.	(214) 13220.
(226) £20. 19. 4½.	(217) £2. 18. 8.	(215) 8420.
(230) 24 times.	(218) £10. 12. 11.	(216) 132.
(233) 75885.	(219) £1300. 8. 10.	(217) £2. 18. 8.
	(220) 123.	(218) £10. 12. 11.
	(221) 17 hours.	(219) £1300. 8. 10.
	(222) £125000.	(220) 123.
	(223) £12. 11. 1.	(221) 17 hours.
	(224) £3638. 17. 6.	(222) £125000.
	(225) 21 persons.	(223) £12. 11. 1.
	(226) £20. 19. 4½.	(224) £3638. 17. 6.
	(227) £9. 19. 4.	(225) 21 persons.
	(228) £78. 5. 0.	(226) £20. 19. 4½.
	(229) 20.	(227) £9. 19. 4.
	(230) 24 times.	(228) £78. 5. 0.
	(231) £76. 9. 6.	(229) 20.
	(232) £1976. 10. 6.	(230) 24 times.
	(233) 75885.	(231) £76. 9. 6.
	(234) 119 times.	(232) £1976. 10. 6.
	(235) 120 times.	(233) 75885.
	(236) 960.	(234) 119 times.
		(235) 120 times.
		(236) 960.

- (237) 7s. (238) £605. (239) £2. 4. 6. (240) £614. 11. 8.
 (241) 1265. (242) 253 times. (243) £876. 6. 9. (244) 435.
 (245) £20. 13. 7. (246) 16s. 5 $\frac{3}{4}$ d. (247) £3268. 13. 4.
 (248) 560. (249) £1363. 15. 9. (250) £4. 4. 1.

COMPOUND ADDITION (MONEY).

- (1) £66. 5. 11. (2) £67. 3. 11. (3) £49. 7. 5.
 (4) £133. 17. 0. (5) £232. 16. 7. (6) £92. 16. 9.
 (7) £122. 13. 6 $\frac{1}{2}$. (8) £534. 10. 5. (9) £327. 14. 0 $\frac{1}{4}$.
 (10) £72. 6. 2 $\frac{3}{4}$. (11) £1145. 4. 8 $\frac{1}{2}$. (12) £445. 13. 5.
 (13) £808. 8. 10. (14) £616. 7. 0 $\frac{1}{4}$. (15) £1111. 15. 8 $\frac{1}{2}$.
 (16) £1122. 14. 5 $\frac{1}{2}$. (17) £2371. 6. 10 $\frac{3}{4}$. (18) £506. 9. 4 $\frac{3}{4}$.
 (19) £3953. 7. 0 $\frac{1}{4}$. (20) £22850. 15. 4 $\frac{3}{4}$. (21) £9915. 5. 4 $\frac{1}{2}$.
 (22) £775. 15. 1. (23) £19251. 13. 4. (24) £660. 17. 8 $\frac{3}{4}$.
 (25) £1550. 10. 11 $\frac{1}{2}$. (26) £5603. 0. 7. (27) £628. 5. 5 $\frac{3}{4}$.
 (28) £1658. 18. 2 $\frac{3}{4}$. (29) £2487. 15. 3 $\frac{3}{4}$. (30) £1536. 6. 11 $\frac{1}{4}$.
 (31) £3. 8. 6. (32) £3. 17. 11. (33) £2. 16. 7. (34) £3. 9. 6.
 (35) £3. 14. 10. (36) £2. 14. 8. (37) £2. 18. 9.
 (38) £2. 19. 1. (39) £3. 2. 11. (40) £2. 16. 5.
 (41) £3. 11. 2 $\frac{3}{4}$. (42) £4. 9. 1 $\frac{1}{4}$. (43) £6. 11. 4 $\frac{3}{4}$.
 (44) £6. 9. 10. (45) £7. 8. 8 $\frac{3}{4}$. (46) £4. 11. 1.
 (47) £5. 10. 10 $\frac{1}{2}$. (48) £6. 5. 1. (49) £8. 10. 0 $\frac{3}{4}$.
 (50) £6. 6. 7 $\frac{1}{4}$. (51) £12. 10. 10. (52) £11. 19. 11 $\frac{1}{4}$.
 (53) £13. 5. 11 $\frac{3}{4}$. (54) £10. 0. 8 $\frac{3}{4}$. (55) £12. 18. 1 $\frac{3}{4}$.
 (56) £14. 17. 3 $\frac{3}{4}$. (57) £14. 18. 6 $\frac{1}{4}$. (58) £13. 14. 0 $\frac{3}{4}$.
 (59) £12. 12. 7 $\frac{3}{4}$. (60) £7. 17. 0 $\frac{1}{2}$. (61) £15. 0. 8.
 (62) £9. 6. 2 $\frac{1}{2}$. (63) £12. 2. 5 $\frac{1}{4}$. (64) £18. 13. 8 $\frac{1}{4}$.
 (65) £206. 12. 5. (66) £155. 19. 0. (67) £245. 14. 5 $\frac{3}{4}$.
 (68) £516. 9. 7 $\frac{1}{4}$. (69) £446. 10. 0. (70) £440. 10. 5 $\frac{1}{4}$.
 (71) £185. 18. 0. (72) £480. 18. 2 $\frac{1}{4}$. (73) £484. 2. 1.
 (74) £188. 17. 0 $\frac{1}{4}$. (75) £5237. 4. 0 $\frac{1}{4}$. (76) £7464. 18. 8 $\frac{3}{4}$.
 (77) £4891. 12. 0 $\frac{1}{4}$. (78) £5652. 6. 9. (79) £3024. 10. 3 $\frac{1}{4}$.
 (80) £1970. 18. 11 $\frac{1}{2}$. (81) £5268. 14. 4 $\frac{3}{4}$. (82) £2178. 13. 1 $\frac{1}{4}$.
 (83) £2298. 16. 0 $\frac{3}{4}$. (84) £7993. 11. 11 $\frac{3}{4}$. (85) £69302. 2. 1 $\frac{1}{2}$.
 (86) £44399. 6. 8 $\frac{3}{4}$. (87) £41992. 10. 6. (88) £50417. 8. 6 $\frac{1}{4}$.
 (89) £37180. 19. 5 $\frac{1}{2}$. (90) £54816. 12. 5 $\frac{1}{2}$. (91) £76673. 2. 2 $\frac{3}{4}$.
 (92) £20292. 14. 9 $\frac{1}{2}$. (93) £19366. 18. 11. (94) £55544. 19. 9.
 (95) £49860165. 16. 11 $\frac{1}{2}$. (96) £11646340. 9. 7.
 (97) £47466078. 9. 7 $\frac{1}{4}$. (98) £8529883. 6. 4. (99) £907237. 3. 3 $\frac{3}{4}$.
 (100) £4850186. 1. 11 $\frac{1}{2}$. (101) £236. 13. 1. (102) £115. 3. 9 $\frac{1}{4}$.

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|-----------------------------------|------------------------------------|-----------------------------------|
| (103) £31. 19. 6 $\frac{3}{4}$. | (104) 130701. 1. 6 $\frac{1}{2}$. | (105) £67. 1. 2 $\frac{3}{4}$. |
| (106) £106. 19. 0. | (107) £16890. 8. 6. | (108) £233. 2. 2 $\frac{1}{2}$. |
| (109) £3. 11. 6 $\frac{1}{2}$. | (110) £27. 11. 6 $\frac{1}{2}$. | (111) £64. 10. 10 $\frac{1}{4}$. |
| (112) £436. 11. 3 $\frac{3}{4}$. | (113) £8939. 17. 2. | (114) £1182. 16. 0. |
| (115) £43. 1. 9 $\frac{3}{4}$. | (116) £28602. 16. 9. | (117) £10. 4. 9. |
| (118) £143. 3. 2. | (119) £10. 18. 8 $\frac{3}{4}$. | (120) £19. 17. 11. |
| (121) £162. 1. 10 $\frac{1}{4}$. | (122) £19. 6. 7 $\frac{3}{4}$. | (123) £13. 15. 11. |
| (124) 5 times. | (125) £3225. 11. 1 $\frac{3}{4}$. | (126) £36. 16. 3. |
| (127) £40. 11. 4 $\frac{1}{4}$. | (128) £3. 6. 6. | (129) £25. 17. 5 $\frac{1}{2}$. |
| (130) £14. 14. 2 $\frac{3}{4}$. | (131) £1. 14. 3 $\frac{1}{2}$. | (132) £11. 10. 9 $\frac{3}{4}$. |
| (133) £35. 2. 3 $\frac{1}{4}$. | (134) £150. 12. 3. | (135) £4. 13. 6. |
| (136) £3. 3. 8 $\frac{1}{4}$. | (137) £29. 15. 1. | (138) £146. 1. 6 yearly. |
| (139) £63. 2. 8 $\frac{1}{2}$. | (140) £17. 17. 6. | (141) £41. 13. 0. |
| (142) £1153. 11. 6. | (143) £25. 14. 1. | (144) £127. 8. 2 $\frac{1}{4}$. |
| (145) £932. 13. 0. | (146) £56. 15. 7 $\frac{1}{4}$. | (147) £1707. 8. 8. |
| (148) £5. 8. 0. | (149) £27. 0. 3 $\frac{1}{4}$. | (150) £51. 5. 7 $\frac{3}{4}$. |

COMPOUND SUBTRACTION (MONEY).

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|-----------------------------------|-----------------------------------|-----------------------------------|----------------|
| (1) £4. 5. 2. | (2) £86. 1. 4. | (3) £46. 2. 7. | (4) £23. 2. 4. |
| (5) £27. 5. 3. | (6) £14. 3. 11. | (7) £5. 1. 10. | (8) £4. 4. 10. |
| (9) £5. 0. 11. | (10) £2. 5. 7. | (11) £67. 19. 10. | |
| (12) £42. 17. 9. | (13) £72. 18. 5. | (14) £42. 19. 4. | |
| (15) £59. 17. 9. | (16) £1. 19. 9 $\frac{1}{4}$. | (17) £1. 18. 8 $\frac{1}{4}$. | |
| (18) £2. 3. 4 $\frac{3}{4}$. | (19) £12. 17. 9. | (20) £25. 2. 9 $\frac{1}{4}$. | |
| (21) £67. 15. 9 $\frac{3}{4}$. | (22) £35. 13. 10 $\frac{3}{4}$. | (23) £58. 1. 7 $\frac{1}{2}$. | |
| (24) £93. 17. 4 $\frac{3}{4}$. | (25) £215. 11. 9 $\frac{1}{2}$. | (26) £58. 11. 2 $\frac{1}{2}$. | |
| (27) £82. 19. 2 $\frac{3}{4}$. | (28) £300. 19. 11 $\frac{1}{2}$. | (29) £88. 2. 6 $\frac{3}{4}$. | |
| (30) £41. 6. 10 $\frac{1}{2}$. | (31) £18. 18. 8 $\frac{3}{4}$. | (32) £4. 4. 6 $\frac{1}{2}$. | |
| (33) £250. 5. 9 $\frac{1}{2}$. | (34) £79. 18. 11. | (35) £10. 7. 9 $\frac{1}{4}$. | |
| (36) £60. 18. 7 $\frac{1}{2}$. | (37) £1031. 15. 8 $\frac{1}{2}$. | (38) £283. 10. 7 $\frac{3}{4}$. | |
| (39) £890. 11. 6 $\frac{3}{4}$. | (40) £125. 3. 11. | (41) £328. 10. 9 $\frac{3}{4}$. | |
| (42) £234. 13. 7 $\frac{1}{4}$. | (43) £374. 12. 5 $\frac{1}{2}$. | (44) £6. 10. 11 $\frac{3}{4}$. | |
| (45) £25. 13. 3 $\frac{1}{2}$. | (46) £472. 17. 8 $\frac{1}{2}$. | (47) £30. 9. 7 $\frac{1}{4}$. | |
| (48) £1. 13. 6 $\frac{3}{4}$. | (49) £214. 12. 8 $\frac{1}{4}$. | (50) £999. 1. 9 $\frac{1}{4}$. | |
| (51) £566. 6. 9 $\frac{1}{2}$. | (52) £592. 17. 11. | (53) £70. 2. 2 $\frac{3}{4}$. | |
| (54) £505. 9. 9 $\frac{3}{4}$. | (55) £6612. 15. 1 $\frac{3}{4}$. | (56) £296. 12. 10 $\frac{1}{2}$. | |
| (57) £213. 6. 8 $\frac{1}{2}$. | (58) £99. 8. 1 $\frac{1}{4}$. | (59) £46. 15. 0 $\frac{1}{4}$. | |
| (60) £1902. 12. 5 $\frac{3}{4}$. | (61) £37. 17. 11. | (62) £877. 16. 5 $\frac{1}{4}$. | |
| (63) 19s. 11 $\frac{1}{2}$ d. | (64) £677. 12. 11. | (65) £99. 6. 11 $\frac{3}{4}$. | |
| (66) £531. 16. 11 $\frac{1}{4}$. | (67) £944. 19. 11 $\frac{1}{2}$. | (68) £591. 0. 1 $\frac{1}{4}$. | |

- (69) £527. 16. 6 $\frac{3}{4}$. (70) £539. 13. 10 $\frac{3}{4}$. (71) £9. 18. 1 $\frac{3}{4}$.
 (72) £129. 10. 6. (73) £1816. 6. 10 $\frac{3}{4}$. (74) £673. 19. 10.
 (75) £41. 18. 3 $\frac{3}{4}$. (76) £1707. 16. 7. (77) £2157. 9. 10 $\frac{1}{2}$.
 (78) £310. 6. 10 $\frac{3}{4}$. (79) £282. 5. 4 $\frac{3}{4}$. (80) £799. 13. 8 $\frac{3}{4}$.
 (81) £81. 8. 4 $\frac{1}{2}$. (82) £1684. 7. 9 $\frac{3}{4}$. (83) £278. 14. 10.
 (84) £1002. 18. 10 $\frac{1}{4}$. (85) £950. 2. 5 $\frac{3}{4}$. (86) £291. 18. 10 $\frac{3}{4}$.
 (87) £326. 17. 5 $\frac{1}{2}$. (88) £426. 1. 8 $\frac{3}{4}$. (89) £82. 19. 6 $\frac{3}{4}$.
 (90) £295. 4. 9 $\frac{1}{2}$. (91) £213. 16. 10 $\frac{1}{4}$. (92) £566. 19. 10 $\frac{3}{4}$.
 (93) £1124. 13. 11 $\frac{3}{4}$. (94) £164. 4. 9 $\frac{1}{2}$. (95) £71. 0. 6 $\frac{3}{4}$.
 (96) £575. 6. 8. (97) £2264. 14. 2 $\frac{3}{4}$. (98) £8712. 17. 0 $\frac{3}{4}$.
 (99) £159. 9. 6 $\frac{1}{2}$. (100) £924. 12. 8 $\frac{1}{2}$. (101) £8462. 1. 1 $\frac{3}{4}$.
 (102) £910. 12. 11 $\frac{3}{4}$. (103) £676. 14. 9 $\frac{3}{4}$. (104) £90. 18. 4 $\frac{1}{2}$.
 (105) £7937. 3. 11. (106) £725. 11. 6. (107) £299. 16. 10 $\frac{3}{4}$.
 (108) £1788. 17. 8 $\frac{3}{4}$. (109) £1691. 13. 9 $\frac{3}{4}$. (110) £904. 12. 0 $\frac{1}{2}$.
 (111) £9079. 12. 10. (112) £12705. 14. 6 $\frac{3}{4}$. (113) £41001. 9. 10 $\frac{1}{2}$.
 (114) £45114. 15. 3 $\frac{3}{4}$. (115) £186421. 8. 6 $\frac{1}{2}$.
 (116) £233588. 16. 10 $\frac{1}{2}$. (117) £88966. 3. 9. (118) £22187. 7. 8 $\frac{3}{4}$.
 (119) £722888. 9. 1 $\frac{1}{2}$. (120) £117018. 18. 6 $\frac{3}{4}$.
 (121) £34889. 19. 3 $\frac{1}{4}$. (122) £91736. 6. 5 $\frac{3}{4}$. (123) £179947. 3. 11.
 (124) £858264. 7. 11. (125) £642719. 19. 10.
 (126) £585127. 18. 11 $\frac{3}{4}$. (127) £233387. 12. 6.
 (128) £118304. 18. 10. (129) £200286. 16. 4 $\frac{3}{4}$.
 (130) £78904. 17. 5 $\frac{1}{2}$. (131) £889988. 14. 7.
 (132) £231946. 12. 2 $\frac{3}{4}$. (133) £170636. 4. 11.
 (134) £39093. 7. 8 $\frac{1}{2}$. (135) £31824. 6. 2 $\frac{3}{4}$.
 (136) £327035. 16. 8 $\frac{1}{2}$. (137) £778200. 18. 9.
 (138) £91734. 13. 5 $\frac{3}{4}$. (139) £651901. 17. 6 $\frac{3}{4}$.
 (140) £216494. 0. 8. (141) £91881. 5. 0 $\frac{1}{2}$. (142) £110119. 18. 7 $\frac{1}{2}$.
 (143) £192316. 9. 6 $\frac{1}{2}$. (144) £826975. 9. 10 $\frac{3}{4}$.
 (145) £110949. 16. 10 $\frac{1}{2}$. (146) £880647. 12. 8 $\frac{3}{4}$.
 (147) £211094. 7. 11. (148) £1039863. 19. 6.
 (149) £115951. 12. 6. (150) £1227436. 15. 9 $\frac{3}{4}$. (151) 19s. 0 $\frac{1}{2}$ d.
 (152) £98. 13. 6 $\frac{1}{2}$. (153) £3. 4. 3 $\frac{1}{2}$. (154) £45. 14. 9 $\frac{3}{4}$.
 (155) £10. 17. 0 $\frac{3}{4}$. (156) The latter by 1s. 7 $\frac{1}{4}$ d. (157) £17. 18. 4.
 (158) £3. 12. 11 $\frac{1}{4}$. (159) £95. 15. 1 $\frac{3}{4}$. (160) £451. 18. 2.
 (161) £567. 1. 4. (162) £62. 7. 6. (163) £27. 3. 0.
 (164) £42. 6. 0 $\frac{1}{2}$. (165) £20. 11. 3 $\frac{1}{4}$. (166) 11d.
 (167) £10. 4. 9. (168) 5s. 8 $\frac{3}{4}$ d. (169) £8. 15. 6 $\frac{1}{2}$.
 (170) 191 twopences. (171) 19s. 5 $\frac{1}{4}$ d. (172) 2468 farthings.
 (173) £3813. 6. 8. (174) £16. 4. 2 $\frac{1}{2}$. (175) £7. 0. 8 $\frac{1}{2}$.
 (176) £21. 7. 3. (177) £20. 4. 6. (178) 12s. 2 $\frac{1}{2}$ d.

(179) £1. 5. 3.	(180) £2757987. 18. 0 $\frac{3}{4}$.	(181) £175. 6. 4 $\frac{3}{4}$.
(182) 14s. 11d.	(183) £14. 2. 3.	(184) 318 times.
(185) £12. 1. 4.	(186) £19. 3. 3.	(187) £15. 5. 11.
(188) £18. 17. 9.	(189) £7. 10. 3.	(190) £13. 14. 1 $\frac{3}{4}$.
(191) £10. 9. 2.	(192) 5 $\frac{1}{2}$ d.	(193) £670. 16. 8.
(194) £3. 13. 1 $\frac{1}{2}$.	(195) £7715. 0. 0.	(196) £154. 11. 9.
(197) £47. 0. 8 $\frac{1}{2}$.	(198) £7. 3. 8.	(199) £168. 7. 6.
(200) A owes to B 17s. 6d.		

COMPOUND MULTIPLICATION (MONEY).

(1) £4. 7. 6.	(2) £22. 8. 6.	(3) £14. 1. 8.	(4) £44. 2. 11.
(5) £11. 17. 0.	(6) £26. 7. 4.	(7) £70. 14. 0.	(8) £50. 4. 3.
(9) £66. 17. 6.	(10) £52. 12. 4.	(11) £47. 18. 0.	
(12) £19. 8. 7 $\frac{1}{2}$.	(13) £36. 17. 2 $\frac{1}{4}$.	(14) £43. 4. 9 $\frac{1}{2}$.	
(15) £82. 3. 9 $\frac{3}{4}$.	(16) £95. 2. 3 $\frac{3}{4}$.	(17) £13. 6. 11.	
(18) £79. 10. 2.	(19) £91. 2. 1 $\frac{1}{2}$.	(20) £143. 16. 6.	
(21) £56. 16. 3.	(22) £79. 2. 3.	(23) £54. 5. 7.	
(24) £139. 13. 8.	(25) £147. 11. 6 $\frac{3}{4}$.	(26) £503. 7. 3.	
(27) £212. 18. 4.	(28) £244. 6. 5 $\frac{1}{2}$.	(29) £157. 0. 11 $\frac{1}{2}$.	
(30) £31. 11. 6.	(31) £30. 9. 4.	(32) £75. 1. 10 $\frac{1}{2}$.	
(33) £335. 2. 0.	(34) £167. 1. 4.	(35) £280. 10. 0.	
(36) £206. 12. 6.	(37) £890. 12. 6.	(38) £1302. 18. 0.	
(39) £241. 8. 8 $\frac{1}{4}$.	(40) £658. 18. 1 $\frac{1}{2}$.	(41) £437. 12. 7 $\frac{1}{2}$.	
(42) £1194. 0. 0.	(43) £1118. 15. 6.	(44) £101. 11. 10 $\frac{1}{4}$.	
(45) £89. 18. 3 $\frac{3}{4}$.	(46) £810. 17. 3 $\frac{1}{2}$.	(47) £511. 9. 5 $\frac{1}{2}$.	
(48) £586. 15. 6 $\frac{3}{4}$.	(49) £4198. 4. 8 $\frac{1}{2}$.	(50) £1366. 15. 1 $\frac{1}{4}$.	
(51) £1384. 6. 2 $\frac{1}{2}$.	(52) £3291. 14. 3 $\frac{1}{4}$.	(53) £1988. 12. 10 $\frac{1}{2}$.	
(54) £1842. 7. 4 $\frac{1}{2}$.	(55) £8368. 14. 0 $\frac{1}{2}$.	(56) £2177. 5. 11 $\frac{1}{4}$.	
(57) £3018. 3. 4.	(58) £1924. 9. 8 $\frac{3}{4}$.	(59) £358. 9. 8.	
(60) £678. 10. 0.	(61) £1605. 5. 2 $\frac{1}{2}$.	(62) £793. 1. 1.	
(63) £2174. 18. 5 $\frac{1}{4}$.	(64) £5032. 1. 6.	(65) £906. 17. 1.	
(66) £383. 18. 2 $\frac{1}{4}$.	(67) £560. 18. 3 $\frac{1}{2}$.	(68) £704. 8. 4.	
(69) £1841. 0. 0.	(70) £2265. 1. 9.	(71) £3101. 1. 10 $\frac{1}{2}$.	
(72) £5489. 0. 11 $\frac{1}{4}$.	(73) £4830. 2. 7 $\frac{1}{2}$.	(74) £9678. 16. 1 $\frac{3}{4}$.	
(75) £13802. 4. 4 $\frac{1}{2}$.	(76) £774. 19. 1 $\frac{1}{2}$.	(77) £3137. 16. 7 $\frac{1}{4}$.	
(78) £1235. 0. 9.	(79) £4642. 13. 3.	(80) £4318. 4. 1 $\frac{1}{4}$.	
(81) £683. 12. 3 $\frac{1}{2}$.	(82) £2369. 10. 8 $\frac{1}{4}$.	(83) £2365. 3. 11 $\frac{1}{2}$.	
(84) £1171. 13. 4 $\frac{1}{2}$.	(85) £1287. 6. 11.	(86) £2412. 5. 8 $\frac{1}{4}$.	
(87) £3296. 5. 0 $\frac{1}{2}$.	(88) £7715. 6. 11 $\frac{1}{2}$.	(89) £335. 16. 5 $\frac{1}{4}$.	
(90) £308. 0. 7.	(91) £654. 14. 9 $\frac{1}{2}$.	(92) £688. 2. 1 $\frac{1}{2}$.	

- (93) £940. 17. 7 $\frac{1}{2}$. (94) £8217. 10. 4. (95) £5760. 2. 8 $\frac{1}{2}$.
 (96) £7427. 5. 9. (97) £3431. 15. 8. (98) £14063. 4. 5 $\frac{1}{2}$.
 (99) £995. 19. 5 $\frac{1}{4}$. (100) £1798. 0. 6. (101) £1412. 15. 6.
 (102) £4349. 6. 0. (103) £963. 11. 5 $\frac{3}{4}$. (104) £783. 1. 6.
 (105) £5344. 12. 6. (106) £2635. 12. 0. (107) £389. 15. 11 $\frac{1}{4}$.
 (108) £18283. 17. 7 $\frac{1}{2}$. (109) £3216. 9. 3. (110) £7022. 8. 2 $\frac{1}{2}$.
 (111) £41878. 19. 0 $\frac{1}{4}$. (112) £33726. 17. 5. (113) £14279. 15. 0 $\frac{1}{2}$.
 (114) £33309. 13. 5 $\frac{1}{4}$. (115) £42393. 5. 11 $\frac{1}{2}$. (116) £4742. 0. 6 $\frac{1}{4}$.
 (117) £16222. 7. 8. (118) £68938. 3. 9. (119) £37097. 13. 7 $\frac{1}{2}$.
 (120) £57393. 1. 6 $\frac{1}{2}$. (121) £73056. 6. 10. (122) £6668. 6. 2.
 (123) £34657. 18. 0. (124) £22728. 7. 7 $\frac{1}{4}$. (125) £37572. 8. 6.
 (126) £44451. 9. 2. (127) £51321. 6. 8. (128) £9392. 8. 10 $\frac{3}{4}$.
 (129) £55373. 0. 4 $\frac{1}{2}$. (130) £58245. 5. 10. (131) £146003. 14. 3 $\frac{1}{2}$.
 (132) £145318. 18. 1. (133) £682126. 11. 0. (134) £191217. 17. 0.
 (135) £689246. 8. 1 $\frac{1}{2}$. (136) £490697. 9. 10.
 (137) £176375. 15. 1 $\frac{1}{4}$. (138) £78978. 16. 7 $\frac{1}{2}$.
 (139) £81446. 10. 0. (140) £5450. 13. 8 $\frac{1}{2}$. (141) £4293. 16. 9.
 (142) £7985. 6. 3. (143) £6601. 16. 9. (144) £24206. 17. 0 $\frac{1}{2}$.
 (145) £18385. 1. 6 $\frac{3}{4}$. (146) £23925. 17. 3 $\frac{3}{4}$. (147) £6779. 9. 7.
 (148) £48981. 12. 5 $\frac{1}{2}$. (149) £46492. 0. 10. (150) £90208. 11. 4 $\frac{1}{4}$.
 (151) £331244. 6. 4. (152) £137487. 0. 4. (153) £56258. 1. 7.
 (154) £15944. 5. 9. (155) £14305. 1. 9 $\frac{3}{4}$. (156) £14162. 13. 7 $\frac{1}{2}$.
 (157) £12419. 1. 5 $\frac{1}{4}$. (158) £129951. 11. 7 $\frac{1}{2}$. (159) £226887. 1. 8.
 (160) £24849. 4. 0. (161) £133429. 6. 8. (162) £550806. 9. 6.
 (163) £4288. 3. 9 $\frac{3}{4}$. (164) £65401. 16. 8 $\frac{1}{2}$. (165) £141465. 3. 6.
 (166) £36132. 0. 8 $\frac{3}{4}$. (167) £108093. 18. 7 $\frac{3}{4}$.
 (168) £197933. 17. 1. (169) £257826. 6. 4 $\frac{1}{2}$.
 (170) £194060. 15. 6. (171) £312555. 9. 3 $\frac{3}{4}$. (172) £257560. 19. 2.
 (173) £36618. 8. 5 $\frac{1}{4}$. (174) £784480. 13. 11 $\frac{1}{2}$. (175) £675679. 1. 0.
 (176) £1118708. 13. 9. (177) £403280. 18. 9.
 (178) £503441. 19. 0 $\frac{1}{2}$. (179) £397349. 0. 0. (180) £129433. 6. 0.
 (181) £501282. 8. 9. (182) £245498. 5. 2 $\frac{1}{4}$.
 (183) £1011704. 18. 11 $\frac{1}{4}$. (184) £5806900. 19. 11 $\frac{1}{4}$.
 (185) £3401624. 7. 0. (186) £456001. 7. 7. (187) £306253. 12. 7.
 (188) £610477. 12. 0. (189) £7309378. 3. 8. (190) £5112822. 3. 9.
 (191) £1047191. 15. 11. (192) £704482. 3. 4.
 (193) £3540278. 0. 9. (194) £4673989. 10. 3.
 (195) £2114930. 19. 7. (196) £6270019. 10. 11.
 (197) £2796671. 7. 1. (198) £12140231. 6. 10 $\frac{1}{2}$.
 (199) £26600902. 13. 4. (200) £721506087. 16. 11 $\frac{1}{4}$.
 (201) £7500. (202) 4s. 8d. (203) £5. 5. 0. (204) £39. 16. 3.

(205) £45. 10. 2½.	(206) £23. 6. 8.	(207) £2. 12. 6.
(208) £46. 0. 1½.	(209) £235. 14. 2½.	(210) £41. 18. 6.
(211) £1. 17. 2.	(212) £69. 18. 3.	(213) £56. 15. 0.
(214) £6. 8. 7¾.	(215) £70. 2. 10½.	(216) £20. 13. 0.
(217) £76. 13. 4.	(218) £41. 8. 1½.	(219) £879. 15. 0.
(220) £197. 12. 4.	(221) £687. 4. 6.	(222) £2. 10. 6.
(224) £73. 13. 8½.	(225) £129. 5. 0.	(226) £2. 6. 1.
(227) £98. 3. 4.	(228) £1468. 15. 0.	(229) £1494. 19. 4.
(230) £1. 10. 3.	(231) £558. 0. 0.	(232) £157. 9. 0.
(233) £8. 3. 4.	(234) £64. 3. 4.	(235) £1. 0. 4.
(236) £1303. 1. 9.	(237) 204 times.	(238) £127. 14. 6.
(239) £53. 8. 4½.	(240) £336. 0. 0.	(241) £2. 15. 11¾.
(242) £35. 12. 0.	(243) £4. 19. 9.	(244) £2. 1. 8¼.
(245) £4. 13. 0.	(246) £3. 0. 0.	(247) £4. 3. 1½.
(248) £9. 4. 10½.	(249) £31. 16. 0.	(250) £87. 11. 0.
(251) £10. 12. 11.	(252) £12. 18. 6½.	(253) £8. 12. 11½.
(254) £325. 10. 0.	(255) £11. 15. 7½.	(256) £255. 6. 8.
(257) £14149. 0. 0.	(258) £198. 18. 0.	(259) £4. 7. 5½.
(260) £142. 10. 0.	(261) £1. 5. 10½.	(262) £66. 5. 3.
(263) £1237. 10. 0.	(264) £40. 0. 7½.	(265) £146. 4. 2.
(266) £120. 7. 8.	(267) 7s. 0d.	(268) £224. 14. 0.
(269) £35. 3. 9½.	(270) 5s. 7½d.	(271) £1185. 11. 2.
(272) £59. 7. 6.	(273) £57. 2. 0.	(274) £197. 3. 4¾.
(275) £3. 8. 0.	(276) £14. 13. 3.	(277) £125. 0. 0.
(278) £61. 14. 4.	(279) £1. 15. 0.	(280) £574. 13. 4.
(281) £1. 7. 9½.	(282) £2. 16. 3½.	(283) £34. 18. 3.
(284) £45. 3. 10½.	(285) £45. 15. 9½.	(286) £12. 13. 9.
(287) £39. 6. 1½.	(288) £6. 4. 3.	(289) £2. 9. 9.
(290) £307. 1. 8.	(291) 10 times.	(292) £7014. 16. 10½.
(293) £3256. 0. 0.	(294) A. £38; B. £9. 10. 0.	
(295) £844. 1. 6.	(296) £4. 10. 6.	(297) £160. 18. 6¼.
(298) £1. 9. 3.	(299) £108. 4. 11.	(300) £53613. 11. 5½.

COMPOUND DIVISION (MONEY).

(1) £2. 15. 3.	(2) £1. 9. 3.	(3) £2. 1. 8½.	(4) £1. 11. 3.
(5) £1. 6. 5.	(6) £2. 2. 1.	(7) £4. 2. 1.	(8) £7. 0. 3.
(9) £10. 5. 4½.	(10) £5. 17. 2.	(11) £4. 14. 10¼.	
(12) £3. 2. 3—1 d. rem.	(13) £4. 19. 5¼—2 f. rem.		
(14) £4. 10. 7¾—3 f. rem.	(15) £8. 14. 4—1 d. rem.		
(16) £1. 6. 4½—6 f. rem.	(17) £14. 16. 9¾.		

- (18) £6. 12. $2\frac{3}{4}$ —1 f. rem. (19) £5. 0. 7—2 f. rem.
 (20) £3. 10. 2—1 d. rem. (21) £6. 9. $5\frac{1}{2}$ —4 f. rem.
 (22) £19. 13. 9—1 d. rem. (23) £26. 6. $5\frac{1}{4}$.
 (24) £6. 11. $0\frac{1}{4}$ —7 f. rem. (25) £136. 8. $9\frac{1}{4}$.
 (26) £46. 10. $11\frac{1}{2}$ —2 f. rem. (27) £125. 9. $4\frac{1}{2}$.
 (28) £39. 18. 6—1 d. rem. (29) £51. 16. $7\frac{1}{4}$ —2 f. rem.
 (30) £17. 1. $10\frac{3}{4}$ —3 f. rem. (31) £25. 1. $3\frac{3}{4}$.
 (32) £17. 7. 11—2 d. rem. (33) £150. 6. $3\frac{1}{4}$.
 (34) £39. 4. 6—2 f. rem. (35) £39. 17. 11—2 f. rem.
 (36) £15. 3. $6\frac{3}{4}$. (37) £28. 2. $9\frac{1}{4}$. (38) £56. 2. $1\frac{1}{4}$.
 (39) £13. 18. $10\frac{1}{4}$ —4 f. rem. (40) £23. 6. $2\frac{1}{4}$. (41) £381. 19. $8\frac{1}{2}$.
 (42) £169. 4. 10. (43) £273. 3. $4\frac{1}{2}$. (44) £177. 7. $6\frac{3}{4}$.
 (45) £836. 19. 11. (46) £1005. 5. $1\frac{1}{4}$ —1 f. rem.
 (47) £199. 17. $2\frac{1}{4}$ —4 f. rem. (48) £1002. 19. $3\frac{1}{2}$ —2 f. rem.
 (49) £20105. 8. $4\frac{1}{4}$. (50) £2440. 11. $9\frac{3}{4}$. (51) £22526. 13. $1\frac{1}{2}$.
 (52) £16421. 2. $8\frac{3}{4}$ —1 f. rem. (53) £1260. 12. 11.
 (54) £1376. 19. $2\frac{3}{4}$. (55) £625. 9. $1\frac{3}{4}$. (56) £813. 11. 1.
 (57) £45155. 16. $9\frac{1}{2}$. (58) £29069. 19. 10. (59) £2326. 3. 7.
 (60) £11720. 15. $6\frac{3}{4}$. (61) £16000. 12. 9.
 (62) £8287. 13. $11\frac{1}{2}$ —2 f. rem. (63) £1121. 4. $5\frac{1}{2}$.
 (64) £10035. 4. $2\frac{1}{4}$ —6 f. rem. (65) £29. 13. $4\frac{1}{2}$. (66) £16. 19. $5\frac{3}{4}$ —7 rem.
 (67) £75. 16. $5\frac{1}{4}$. (68) £100. 1. 4. (69) £69. 7. $1\frac{1}{2}$ —6 f. rem.
 (70) £75. 4. $5\frac{1}{4}$ —8 f. rem. (71) £15. 0. $11\frac{1}{2}$ —8 f. rem.
 (72) £9. 16. $9\frac{1}{4}$. (73) £8. 14. $7\frac{1}{4}$. (74) £27. 19. $3\frac{1}{2}$.
 (75) £10. 12. 11. (76) £9. 16. $0\frac{3}{4}$. (77) £11. 11. $11\frac{1}{4}$.
 (78) £100. 0. $5\frac{1}{4}$. (79) £3. 19. $11\frac{3}{4}$. (80) £12. 1. $6\frac{1}{2}$.
 (81) £2. 9. $9\frac{3}{4}$. (82) £7. 15. $10\frac{1}{2}$. (83) £5. 19. $11\frac{3}{4}$.
 (84) £115. 16. $8\frac{1}{4}$. (85) £92. 17. $11\frac{1}{2}$. (86) £3. 17. $10\frac{1}{2}$.
 (87) £96. 14. $4\frac{1}{2}$. (88) £11. 15. $3\frac{1}{4}$. (89) £90. 14. $6\frac{1}{2}$.
 (90) £130. 16. $7\frac{3}{4}$. (91) £19. 18. $2\frac{1}{4}$. (92) £70. 13. $6\frac{1}{4}$.
 (93) £116. 18. $11\frac{3}{4}$. (94) £73. 16. 8. (95) £100. 0. $9\frac{1}{4}$.
 (96) £11. 10. $8\frac{3}{4}$. (97) £16. 13. $7\frac{1}{2}$. (98) 19s. $10\frac{3}{4}d$.
 (99) £1. 15. $8\frac{1}{4}$. (100) £6. 13. $8\frac{3}{4}$. (101) £301. 1. $0\frac{3}{4}$.
 (102) £191. 11. $5\frac{1}{2}$. (103) £716. 0. $0\frac{1}{2}$. (104) £39. 15. $9\frac{1}{4}$.
 (105) £100. 2. $1\frac{1}{4}$. (106) £73. 0. 6. (107) £18. 12. $9\frac{1}{4}$.
 (108) £1. 0. $11\frac{1}{4}$. (109) £209. 6. $0\frac{3}{4}$. (110) £7. 8. 5—16 d. rem.
 (111) £3. 10. $5\frac{1}{2}$. (112) £1. 19. $11\frac{3}{4}$. (113) £77. 17. $0\frac{1}{4}$.
 (114) £5. 11. $7\frac{1}{4}$. (115) 3s. $11\frac{1}{4}d$.—104 f. rem. (116) £1. 7. $6\frac{1}{2}$.
 (117) £9. 0. $9\frac{1}{2}$. (118) £2. 13. $10\frac{1}{2}$ —73 f. rem. (119) £11. 5. $1\frac{1}{2}$.
 (120) £7. 13. $6\frac{3}{4}$. (121) £17. 4. $4\frac{1}{2}$. (122) £4. 4. 4.
 (123) £101. 11. $9\frac{1}{2}$. (124) 1s. $5\frac{1}{4}d$. (125) £19. 16. $4\frac{1}{4}$.

- (126) £13. 13. 8½. (127) £18. 10. 11. (128) £7. 12. 11.
 (129) £8. 3. 4. (130) £506. 19. 10¼. (131) £11. 17. 9.
 (132) £113. 0. 1¼. (133) £79. 15. 6½. (134) £98. 12. 10¾.
 (135) £171. 4. 10¾—3 f. rem. (136) £305. 5. 3—2 f. rem.
 (137) £84. 11. 9¾—17 f. rem. (138) £78. 17. 9—50 f. rem.
 (139) £98. 17. 9—26 f. rem. (140) £54. 13. 10¼. 83 f. rem.
 (141) £82. 14. 9¾—41 f. rem. (142) £164. 1. 7—24 f. rem.
 (143) £28. 7. 9¼—195 f. rem. (144) £16. 17. 10½—554 f. rem.
 (145) £8. 1. 9—502 f. rem. (146) £11. 12. 4½—340 f. rem.
 (147) £23. 13. 1½. (148) £17. 7. 2. (149) £7. 4. 11.
 (150) £17. 5. 5¾. (151) £19. 14. 6½. (152) £49. 7. 7¼.
 (153) £35. 12. 1¾. (154) £18. 15. 8. (155) £3. 1. 2¾.
 (156) £3. 16. 7. (157) £3. 7. 4½. (158) £5. 17. 9½.
 (159) £9. 5. 11¼. (160) £31. 19. 9¾. (161) £5. 4. 10½.
 (162) £8. 11. 5¾. (163) £5. 14. 10. (164) £1. 19. 10½.
 (165) £61. 5. 1. (166) £323. 11. 6¾. (167) £102. 4. 1½.
 (168) £14. 3. 4¼. (169) £10. 2. 4. (170) £1. 2. 1.
 (171) £63. 4. 9¾. (172) £28. 7. 4½. (173) £1. 0. 1½.
 (174) £15. 5. 7. (175) £27. 6. 8½. (176) £35. 5. 2.
 (177) £27. 7. 7¾. (178) £15. 7. 10¾. (179) £1. 13. 2¼.
 (180) £3824. 13. 1. (181) £368. 0. 5¾. (182) £33. 7. 9½.
 (183) £30. 4. 4¼. (184) £33. 12. 3. (185) £25. 13. 2¾.
 (186) £426. 14. 3¾. (187) £514. 4. 4½. (188) £240. 1. 9¾.
 (189) £189. 13. 0¼. (190) £3. 8. 2. (191) £6. 7. 9¼.
 (192) 2s. 7¼d. (193) 7s. 11½d. (194) 5s. 7½d.
 (195) £128. 18. 4½. (196) £2. 8. 1½. (197) £10. 11. 8¼.
 (198) £6. 16. 11½. (199) £12. 1. 5¾. (200) £20. 12. 2.
 (201) 12 times. (202) £1. 3. 10. (203) £6. 0. 3.
 (204) £1. 18. 10½. (205) 5s. 1d. (206) £1. 2. 9¾.
 (207) £2. 8. 5½ nearly. (208) 108 lbs. (209) £3. 14. 5¾.
 (210) £3. 4. 5. (211) 3½d. (212) £3. 10. 2¾. (213) £1. 6. 6.
 (214) 17 ounces. (215) £1. 9. 1. (216) 1s. 1¼d. and 1s. 4¾d.
 (217) 21 pairs. (218) 6½d. (219) £4. 4. 4½. (220) 9s. 2½d.
 (221) 2s. 9¼d. (222) 3s. (223) £2. 8. 9 and £2. 16. 3.
 (224) £13. 16. 1½. (225) £1. 5. 7⅙.
 (226) £4. 2. 0 a man; £1. 7. 4 a woman. (227) 19 times.
 (228) £8. 5. 7½. (229) £4. 12. 7½. (230) 3s. 3d. (231) 60.
 (232) £1. 19. 0. (233) £2. 15. 11¾. (234) £1. 8. 8¼.
 (235) 4s. 2½d. (236) 1s. 6¾d. (237) 4s. 3½d.
 (238) 240000 roubles. (239) £50000. (240) 240 times.
 (241) 20 lbs. (242) 25 pairs. (243) 24.

- (244) £1. 14. 9 and £3. 16. 9. (245) 2s. 3½*d.* (246) 3s. 10½*d.*
 (247) £111. 15. 3½. (248) £8. 0. 3 a man; £4. 0. 1½ a woman;
 £2. 0. 0¾ a child. (249) 4s. (250) 23 lbs. (251) 4s. 1¼*d.*
 (252) 37 shillings. (253) 14s. 3½*d.* (254) 720 gallons.
 (255) A. £10. 12. 6; B. £5. 3. 9; C. £5. 3. 9. (256) 5*d.*
 (257) £1. 1. 0. (258) 34. (259) 482 times.
 (260) A. 16s. 8*d.*; B. £1. 13. 4; C. £2. 10. 0. (261) 5*d.*
 (262) £6. 1. 6¾. (263) 108 yards. (264) 10s. 6½*d.*
 (265) £2. 1. 1. (266) 15s. (267) £100. 12. 6.
 (268) £2. 1. 8½ nearly. (269) 30. (270) 5*d.* (271) 8s.
 (272) 1½*d.* (273) 7*d.* (274) 84. (275) £1. 11. 5½.
 (276) 1s. 9*d.* (277) 50. (278) 9*d.* (279) £2. 5. 9¼.
 (280) 34. (281) 1½*d.* (282) 132. (283) £3. 17. 6½.
 (284) 9s. 10*d.* (285) 120 yards. (286) £6. 3. 8. (287) 1¼*d.*
 (288) £2. 10. 1¼. (289) £3. 8. 6. (290) 10s. 10½*d.* and 13s. 1½*d.*
 (291) £62. 2. 3. (292) 9. (293) 1800. (294) £184. 5. 4.
 (295) 145 yards. (296) 25 times and £3. 0. 10 rem.
 (297) £224241. 1. 4½ nearly. (298) 4s. 4¼*d.* (299) 71 times.
 (300) 15.

COMPOUND REDUCTION (WEIGHTS AND MEASURES).

- (1) 1500. (2) 3193. (3) 26516. (4) 21623. (5) 15952.
 (6) 5390064. (7) 2531. (8) 278547½. (9) 109006236.
 (10) 21995. (11) 10359333. (12) 21324. (13) 497.
 (14) 157026. (15) 8778959. (16) 63988461. (17) 477852.
 (18) 1539½. (19) 53628. (20) 162612065. (21) 6592½.
 (22) 5281665. (23) 1314972. (24) 478463. (25) 681495.
 (26) 25485. (27) 155120. (28) 53695. (29) 2648574.
 (30) 11900. (31) 1254. (32) 18373. (33) 86323¼.
 (34) 4636269¼. (35) 174716. (36) 4490502188. (37) 82211796.
 (38) 687364709. (39) 1607535. (40) 448409. (41) 38103¾.
 (42) 532314¼. (43) 1036970. (44) 550726. (45) 26358.
 (46) 2801938. (47) 4980. (48) 165. (49) 18345.
 (50) 266310. (51) 1705050. (52) 18363. (53) 20076.
 (54) 186048. (55) 40709. (56) 5604. (57) 21732.
 (58) 18110¾. (59) 19057812. (60) 11518441. (61) 192585.
 (62) 201599. (63) 750. (64) 412. (65) 237. (66) 8708.
 (67) 3374. (68) 6103. (69) 236. (70) 746. (71) 3120.
 (72) 2454. (73) 36880. (74) 4749. (75) 111. (76) 3206.

COMPOUND REDUCTION (WEIGHTS AND MEASURES). 319

- (77) 8926. (78) 42879. (79) 405. (80) 134784.
 (81) 4810752. (82) 5650. (83) 5213376. (84) 449333.
 (85) 4843782. (86) 1025717. (87) 956448. (88) 5166288.
 (89) 897 $\frac{3}{4}$. (90) 5260464. (91) 1332. (92) 666. (93) 223.
 (94) 3791 $\frac{1}{4}$. (95) 1067 $\frac{1}{2}$. (96) 5654 $\frac{1}{4}$. (97) 1395 $\frac{1}{4}$.
 (98) 73129 $\frac{1}{4}$. (99) 27028 $\frac{1}{2}$. (100) 768. (101) 4688.
 (102) 1180. (103) 9518 $\frac{3}{4}$. (104) 855. (105) 324.
 (106) 3803. (107) 22493. (108) 101688. (109) 423360.
 (110) 653777. (111) 442872. (112) 63723. (113) 25860.
 (114) 558258. (115) 97902. (116) 34403. (117) 442.
 (118) 1724. (119) 2808. (120) 44120. (121) 595738.
 (122) 68670. (123) 112590. (124) 8670. (125) 169335.
 (126) 18178795. (127) 474. (128) 51590.
 (129) 12 cwt. 14 lbs. 3 oz. (130) 37 lbs. 14 oz. 2 drs.
 (131) 31 cwt. 2 qrs. 15 lbs. 9 oz. 11 drs. (132) 33 cwt. 2 lbs. 8 oz.
 (133) 1 ton 8 cwt. 1 qr. 5 lbs. (134) 63 qrs. 5 lbs.
 (135) 13 tons 9 cwt. 8 lbs. (136) 31 tons 3 cwt. 3 qrs. 13 lbs.
 (137) 12 tons 8 cwt. 1 qr. 12 lbs. 10 oz. 5 drs.
 (138) 252 tons 16 cwt. 2 qrs. 4 lbs. 5 oz.
 (139) 16 tons 12 cwt. 1 qr. 3 lbs. (140) 86 cwt. 1 qr. 27 lbs.
 (141) 47 tons 14 cwt. (142) 9 tons 7 cwt. (143) 5 st. 12 lbs. 4 oz.
 (144) 17 tons 9 $\frac{1}{2}$ cwt. (145) 27 tons 18 cwt. 4 lbs.
 (146) 1171 lbs. 14 oz. 2 drs. (147) 219 yds. 1 ft. 10 in.
 (148) 1188 p. 1 ft. (149) 1 m. 878 yds. 2 ft.
 (150) 2 fur. 87 yds. 2 ft. 4 in. (151) 1 m. 2 fur. 134 yds.
 (152) 50 p. 2 yds. 2 ft. 4 in. (153) 5 m. 3 fur. 207 yds. 1 ft.
 (154) 15 m. 6 fur. 57 yds. 2 ft. 4 in. (155) 359 fur. 14 p. 4 yds.
 (156) 2 m. 1 fur. 176 yds. (157) 244 p. 5 yds.
 (158) 12 m. 3 fur. 31 p. (159) 5 h. m. 2 fur. 65 yds. 1 ft.
 (160) 45 fur. 142 yds. (161) 171 yds. 2 $\frac{1}{2}$ in. (162) 13 sq. ft. 74 in.
 (163) 5 sq. yds. 4 ft. 35 in. (164) 3 p. 4 sq. yds. 1 ft. 83 in.
 (165) 55 sq. yds. 4 ft. 104 in. (166) 2 roods. (167) 1 acre.
 (168) 1 ac. 2 r. 15 p. 2 $\frac{1}{4}$ yds. 64 in. (169) 19 ac. 1 p. 25 $\frac{3}{4}$ yds.
 (170) 1 ac. 2 r. 21 p. 20 $\frac{3}{4}$ yds. (171) 54 r. 9 p. 11 $\frac{3}{4}$ yds. 1 ft.
 (172) 3 sq. m. 559 ac. 1 r. 14 p. 6 $\frac{1}{2}$ yds. (173) 80 ac. 3 r. 25 p. 24 $\frac{3}{4}$ yds.
 (174) 5 r. 17 p. 10 yds. 3 $\frac{3}{4}$ ft. (175) 2 p. 22 yds. 80 in.
 (176) 133 p. 0 $\frac{3}{4}$ ft. (177) 181 ac. 3 r. 7 p. 25 yds. 0 $\frac{1}{4}$ ft.
 (178) 8 hrs. 40 m. 16 s. (179) 470 wks. 1 d. 19 h.
 (180) 2 dys. 4 h. 51 m. 56 s. (181) 25 yrs. 92 dys.
 (182) 60 h. 36 m. 50 s. (183) 19 y. 153 dys. 1 h.
 (184) 1 h. 59 m. 18 s. (185) 24 dys. 10 h. 9 m.

- (186) 4 h. 43 m. 25 s. (187) 20 yrs. 158 d. 10 h.
 (188) 548 wks. 1 d. 18 h. (189) 135 yrs. 1 wk.
 (190) 2 yrs. 241 dys. 14 h. 16 m. (191) 301 wks. 6 d. 3 h.
 (192) 22 wks. 6 d. 22 h. 49 m. 18 s. (193) 15 y. 26 d. 2 h. 26 m.
 (194) 115232 gals. 2 qts. (195) 4712 bus. 1 pk. 1 gal.
 (196) 75 lds. 2 qrs. (197) 576 pks. 1 qt. (198) 22 qrs.
 (199) 12477 bus. (200) 1247 qrs. 4 bus. 1 pk.
 (201) 428 lds. 3 qrs. 6 bus. 3 pks. (202) 23 qrs. 1 pk. 1 gal. 3 qts.
 (203) 54 lds. 2 qrs. 5 bus. 2 pks. (204) 96 lds. 4 qrs. 4 bus.
 (205) 137 qrs. 7 bus. 2 pks. (206) 113 bus. 3 qts.
 (207) 5848 qts. (208) 473 pks. 1 gal. 2 qts.
 (209) 48 qrs. 1 pk. 1 gal. (210) 22 c. ft. 1147 in.
 (211) 1493 c. yds. 2 ft. (212) 1 c. yd. 1 ft. 1616 in.
 (213) 1 c. yd. 15 ft. 634 in. (214) 5 c. ft. 381 in. (215) 138 c. yds.
 (216) 1 c. yd. 19 ft. 731 in. (217) 38 c. yds. 15 ft. 1152 in.
 (218) 48 yds. 2 ft. 8 in. (219) 35 qrs. 1 r. $0\frac{3}{4}$ in.
 (220) 618 yds. 3 qrs. (221) 22 yds. 1 n. $1\frac{3}{4}$ in.
 (222) 351 E. ells 1 n. (223) 8 E. ells 1 n. $0\frac{3}{4}$ in.
 (224) 1800 E. ells 1 qr. (225) 257 nls. $0\frac{3}{4}$ in.
 (226) 2 lbs. 3 oz. 1 dwt. 18 grs. (227) 1 lb. 3 oz. 6 grs.
 (228) 5 lbs. 9 oz. 16 dwts. (229) 584 lbs. 4 oz.
 (230) 24 oz. 2 dwts. 23 grs. (231) 12 lbs. 10 oz. 1 dwt. 12 grs.
 (232) 3 lbs. 3 oz. 11 dwts. 16 grs. (233) 10 lbs. 3 oz. 5 dwts. 3 grs.
 (234) 29 lbs. 7 oz. 13 dwts. (235) 260 lbs. 1 oz.
 (236) 2 lbs. 11 oz. 3 drs. 1 sc. (237) 5 lbs. 6 drs. 2 sc. 6 grs.
 (238) 1 lb. 6 oz. 4 drs. 2 sc. (239) 65 oz. 1 dr. 2 sc. 13 grs.
 (240) 10 oz. 5 drs. 1 sc. 16 grs. (241) 22 lbs. 3 oz. 4 drs.
 (242) 12 lbs. 2 oz. 3 drs. 2 sc. (243) 10 lbs. Av. 1933 grs.
 (244) 1170 lbs. 7 oz. 7 dwts. 22 grs. (245) 97 lbs. Av. 2120 grs.
 (246) 69 oz. 5 dwts. 10 grs. (247) 577 lbs. Av. 1629 grs.
 (248) 41 reams 1 q. 2 sh. (249) 227 quires 23 sh. (250) 550 dozens.
 (251) 558 cwts. 4 lbs. (252) 173 lbs. 7 oz. 6 dwt. 16 grs.
 (253) 173 lbs. 7 oz. 2 drs. 2 sc. (254) 206 ac. 2 r. 17 p. $25\frac{3}{4}$ yds.
 (255) 114 yrs. 56 dys. 16 hrs. (256) 189 m. 3 fur. 6 p. 1 ft.
 (257) 6250 loads. (258) 21 c. yds. 11 ft. 1216 in.
 (259) 22222 E. ells 1 qr. 1 in. (260) 242 tons 11 cwt. 13 lbs. 1 oz.
 (261) 24147 lbs. 9 oz. 7 dwts. 8 grs. (262) 24147 lbs. 9 oz. 2 drs. 2 sc. 16 gr.
 (263) 2195 m. 2 fur. 4 yds. 2 ft. 8 in. (264) 22 ac. 27 p. 26 yds. 6 ft. 68 in.
 (265) 4 y. 149 d. 20 h. 26 m. 56 s. (266) 54332 lds. 2 qrs. 4 bus. 1 pk.
 (267) 2981 c. yds. 5 ft. 1040 in. (268) 3090915 E. ells. 4 qr. 2 n. $0\frac{1}{2}$ in.
 (269) 2269 tons 9 cwt. 3 qrs. 6 lbs. 3 oz. 15 drs.

COMPOUND REDUCTION (WEIGHTS AND MEASURES). 321

- (270) 225940 lbs. 4 oz. 7 dwts. 23 grs. (271) 225940 lbs. 4 oz. 3 drs. 11 grs.
 (272) 20540 m. 10 p. 3 yds. 1 ft. 11 in. (273) 207 ac. 1 r. 36 p. 3 ft. 95 in.
 (274) 41 yrs. 97 dys. 16 h. 35 m. 11 s.
 (275) 20334632 qrs. 7 bus. 3 pks. 1 gal.
 (276) 27893 c. yds. 23 ft. 959 in.
 (277) 1245 tons 1 cwt. 1 qr. 2 lbs. 15 oz. 8 dr. (278) 123953 lbs. 5 dwts.
 (279) 123953 lbs. 2 drs. (280) 11268 m. 3 f. 26 p. 1 ft.
 (281) 113 ac. 3 r. 11 p. 19 yds. 5 ft. 12 in. (282) 22 yrs. 233 dys. 12 h. 50 m.
 (283) 89246175 bushels. (284) 15302 c. yds. 22 ft. 1272 in.
 (285) 11535 tons 2 cwt. 2 qrs. 8 lbs. 11 oz.
 (286) 71774 lbs. 1 oz. 12 dwts. 11 grs.
 (287) 71774 lbs. 1 oz. 4 drs. 2 sc. 19 grs.
 (288) 6524 m. 7 fur. 14 p. 4 yds. 1 ft. 11 in.
 (289) 65 ac. 3 r. 25 p. 9 yds. 8 ft. 23 in.
 (290) 13 yrs. 39 dys. 22 h. 36 m. 59 s. (291) 322983 lds. 3 qrs. 1 pk. 3 qts.
 (292) 8861 c. yds. 203 in. (293) 1012 tons 5 cwt. 18 lbs. 4 oz. 10 drs.
 (294) 100775 lbs. 11 oz. 1 dwt. 18 grs. (295) 100775 lbs. 11 oz. 2 sc. 2 grs.
 (296) 9161 m. 3 fur. 23 p. 1 yd. 1 ft. (297) 92 ac. 2 r. 6 p. 11 yds. 4 ft. 66 in.
 (298) 18 yrs. 148 dys. 9 h. 28 m. 42 s.
 (299) 226745 lds. 4 qrs. 1 bus. 1 gal. 1 qt.
 (300) 12441 c. yds. 12 ft. 1290 in. (301) 216 lbs.
 (302) 16 cwt. 3 qrs. 12 lbs. 7 oz. (303) 2 lbs. 2 oz. 9 dwts.
 (304) 2319 lbs. (305) 220 grs. (306) 2 m. 533 yds. 2 ft.
 (307) 112 yds. 9 in. (308) 13 cwt. 2 qrs. 18 lbs.
 (309) 6705310 drams. (310) 5 m. 867 yds. 1 ft. (311) 46656 cub. in.
 (312) 4 ac. 3 r. 33 p. 11 $\frac{3}{4}$ yds. (313) 272 $\frac{1}{4}$ yds. (314) 6405 sec.
 (315) 47790". (316) 20 bus. 1 pk. 2 qts. 1 pt.
 (317) 41 dys. 9 hrs. 20 min. (318) 900 st.; £112. 10. 0.
 (319) 31556929 sec. (320) 432. (321) 1444 hhds. 24 gals.
 (322) 33 sq. yds. 3 ft. (323) 15 p. 1 sq. yd. 3 $\frac{1}{2}$ ft.
 (324) 17 ac. 1 r. 29 p. 18 $\frac{1}{2}$ yds. (325) 8 times. (326) 2020032.
 (327) 54 hours. (328) 99 qrs. 2 bus. (329) 876 hrs.
 (330) 5 lbs. 3 oz. 14 dwts. 19 grs. (331) 497 tons 5 cwt. 1 qr. 20 $\frac{3}{4}$ lbs.
 (332) 56 $\frac{1}{4}$ miles. (333) 117 sq. m. 120 ac. (334) 147 yards.
 (335) 1 ton. (336) 403 lbs. (337) 224 times.
 (338) £173. 12. 0. (339) £585. 18. 0. (340) 344 bushels.
 (341) 288 lbs. (342) 745 lbs. (343) £63. (344) £905. 12. 6.
 (345) £369. 18. 1 $\frac{1}{2}$. (346) 47 tons 5 cwt. 1 qr. 17 lbs.
 (347) £708. 19. 8 $\frac{1}{4}$. (348) 7 lbs. Av. 6627 grs. (349) 206 yds. 1 qr.
 (350) £6. 12. 0. (351) £86. 2. 4 $\frac{1}{2}$. (352) 19 times.
 (353) 19 ac. 2 r. 7 p. 28 $\frac{1}{2}$ yds. (354) £18. 10. 1 $\frac{1}{4}$. (355) £26. 5. 0.

- (356) 330 p. $17\frac{1}{2}$ yds. (357) 2 lbs. 5 oz. 3 dwts. 8 grs.
 (358) £10. 6. 8. (359) £21. 13. $9\frac{3}{4}$. (360) £80. 10. 8.
 (361) £209. 14. $8\frac{1}{4}$. (362) £5. 14. 9. (363) £30. 8. $5\frac{1}{2}$.
 (364) £1750. (365) £3. 9. 3. (366) £2. 11. 8.
 (367) 1636 lbs. Av. 1968 grs. (368) $164283\frac{3}{4}$ sq. ft.
 (369) 23 dys. 3 h. 30 m. 9 s. (370) £15. 11. 3. (371) 1646 days.
 (372) £16049. 3. 9. (373) 4 tons 18 cwt. 1 qr. 17 lbs. (374) 56 times.
 (375) 12876 tons 4 cwt. 2 qrs. $12\frac{1}{4}$ lbs. (376) 4 lbs. 1 oz. 4 dwts. 9 grs.
 (377) 130 sq. m. 271 ac. 11 p. $27\frac{1}{4}$ yds. (378) 35 yds.
 (379) 4 lbs. Av. 298 grs. (380) 17 m. 1 fur. 77 yds. (381) 45140 drams.
 (382) 406 sq. p. 8 yds. $7\frac{1}{2}$ ft. (383) 4 tons 5 cwt. 16 lbs.
 (384) 228 st. 3 lbs. (385) 2 m. 3 fur. 86 yds. $8\frac{1}{2}$ in.
 (386) $1150\frac{3}{4}$ in. (387) 4 wks. 6 d. 20 h. 41 m. 3 s. (388) 54450 sq. yds.
 (389) 437733 sq. in. (390) 8 lbs. 1 oz. 10 dwts. 20 grs.
 (391) 56 yrs. 242 d. 8 h. (392) 29 tons 18 cwt. 3 qrs. 14 lbs.
 (393) 9 days. (394) 10 ells 2 qrs. 2 n. $1\frac{1}{2}$ in.
 (395) 14 cwt. 2 qrs. 16 lbs. (396) 11 tons 3 cwt. 24 lbs.
 (397) 3 cwt. 2 qrs. $26\frac{1}{2}$ lbs. (398) 1371 yds. 1 ft.
 (399) 51 ac. 2 r. 24 p. 14 yds. (400) 16 lbs. 4 oz. 17 dwts. 12 grs.

COMPOUND ADDITION (WEIGHTS AND MEASURES).

- (1) 165 tons 11 cwt. 3 qrs. (2) 488 cwt. 20 lbs.
 (3) 271 qrs. 10 lbs. 12 oz. (4) 265 lbs. 3 oz. 7 drs.
 (5) 384 cwts. 19 lbs. (6) 637 tons 18 cwt. 2 qrs. 24 lbs.
 (7) 1045 cwts. 21 lbs. 11 oz. (8) 860 tons 7 cwt. 3 qrs. 5 lbs.
 (9) 988 cwts. 23 lbs. 5 oz. (10) 434 qrs. 20 lbs. 2 oz. 7 drs.
 (11) 1395 lbs. 5 oz. 8 dwts. (12) 10047 lbs. 1 oz. 2 dwts.
 (13) 2636 lbs. 2 oz. 10 dwts. (14) 13 lbs. 9 oz. 16 dwts. 6 grs.
 (15) 897 lbs. 5 oz. 2 dwts. (16) 1379 lbs. 6 oz. 19 dwts.
 (17) 122 lbs. 4 oz. 4 dwts. 4 grs. (18) 15 lbs. 5 oz. 8 dwts. 8 grs.
 (19) 1371 lbs. 7 oz. 4 dwts. (20) 15 lbs. 1 oz. 18 dwts. 7 grs.
 (21) 856 lbs. 1 dr. (22) 15 lbs. 3 oz. 2 drs. 1 sc.
 (23) 3 lbs. 5 oz. 4 drs. 2 sc. 18 grs. (24) 600 lbs. 7 drs.
 (25) 954 lbs. 4 oz. 1 dr. (26) 5 lbs. 2 oz. 3 drs. 2 sc. 13 grs.
 (27) 5 lbs. 5 oz. 1 dr. 2 sc. 15 grs. (28) 32 lbs. 4 oz. 4 drs. 1 sc.
 (29) 928 lbs. 2 oz. (30) 3 lbs. 9 oz. 2 drs. 1 sc. 5 grs.
 (31) 86 m. 38 p. (32) 10 m. 1 fur. 33 p. 5 yds.
 (33) 34 m. 6 fur. 34 p. $0\frac{1}{2}$ yd. (34) 1 m. 2 fur. 39 p. 2 yds. 1 ft.
 (35) 447 yds. 2 ft. 7 in. (36) 23440 yds. 1 ft. 6 in.

- (37) 618 m. 2 fur. 4 p. (38) 53 m. 5 fur. 26 p. 4 yds.
 (39) 559 p. 1 yd. $0\frac{1}{2}$ ft. (40) 113 m. 6 fur. 3 p.
 (41) 2325 yds. 1 qr. 2 in. (42) 16797 yds. 2 qr. 2 n.
 (43) 89 yds. 3 qrs. $1\frac{1}{4}$ in. (44) 410 yds. 3 qrs. 1 n. $0\frac{1}{2}$ in.
 (45) 366 yds. 3 qrs. 3 n. $0\frac{1}{4}$ in. (46) 93 yds. 1 qr. 1 n. $0\frac{3}{4}$ in.
 (47) 2685 yds. 1 qr. 2 nls. (48) 4396 yds. 1 qr. 2 nls.
 (49) 323 yds. 1 qr. (50) 166 yds. 1 n. $1\frac{3}{4}$ in.
 (51) 2328 ac. 1 r. 3 p. $22\frac{1}{2}$ yds. (52) 43 ac. 2 r. 7 p. 14 yds. $8\frac{1}{4}$ ft.
 (53) 4 ac. 1 r. 15 p. 14 yds. 3 ft. 129 in. (54) 892 ac. 1 r. 24 p. $22\frac{1}{4}$ yds.
 (55) 11624 ac. 2 r. 26 p. (56) 952 ac. 8 p. $15\frac{3}{4}$ yds.
 (57) 3579 yds. 4 ft. 51 in. (58) 109 p. 19 yds. $5\frac{1}{4}$ ft.
 (59) 2976 ac. 3 r. 39 p. (60) 96 ac. 1 r. 28 p. $1\frac{1}{4}$ yds.
 (61) 1841 lds. 4 qrs. 2 bus. (62) 199 qrs. 7 bus. 1 pk.
 (63) 155 bus. $0\frac{1}{2}$ gal. (64) 119 pks. (65) 199 gals. 1 pt.
 (66) 436 lds. 1 qr. 7 bus. (67) 1009 qrs. 4 bus. 3 pks.
 (68) 418 qrs. 5 bus. 1 pk. (69) 92 qts. 1 pt. (70) 2762 lds. 4 qrs. 4 bus.
 (71) 101 c. yds. 19 ft. 574 in. (72) 844 c. yds. 21 ft. 69 in.
 (73) 152 c. yds. 1 ft. 1581 in. (74) 131 c. yds. 184 in.
 (75) 791 c. yds. 16 ft. 1624 in. (76) 86 c. yds. 9 ft. 567 in.
 (77) 211 c. yds. 11 ft. 1699 in. (78) 195 c. yds. 22 ft. 895 in.
 (79) 82 c. yds. 3 ft. 1161 in. (80) 540 c. yds. 11 ft. 1087 in.
 (81) 76 yrs. 26 wks. 6 dys. (82) 339 yrs. 28 wks. 1 dy.
 (83) 146 dys. 20 h. 45 m. (84) 227 dys. 19 h. (85) 56 hrs. 54 m. 50 s.
 (86) 143 yrs. 63 dys. 12 h. (87) 92 dys. 5 h. 29 m. (88) 80 wks. 10 h.
 (89) 70 dys. 23 h. 4 m. (90) 112 h. 7 m. 51 s. (91) 263 tons.
 (92) 9 tons 4 cwt. 3 qr. 23 lbs. (93) 66 m. 4 fur. 4 yds.
 (94) 8 m. 7 fur. 38 p. 2 yds. (95) 91 sq. m. 622 ac. 1 r.
 (96) 188 qrs. 1 bus. 3 pks. (97) 121 yds. 1 ft. 9 in.
 (98) 242 sq. yds. 3 ft. 30 in. (99) 107 yrs. 213 d. 18 h.
 (100) 94 c. yds. 18 ft. 160 in. (101) 15 yds. 2 ft. 11 in.
 (102) 15 tons 17 cwt. 2 qrs. 14 lbs. (103) 436 tons 10 cwt. 1 qr.
 (104) 68 ac. 22 p. $6\frac{1}{2}$ yds. (105) 77 yds. 2 qrs. 3 n. $0\frac{1}{4}$ in.
 (106) 80 m. 2 fur. 5 p. 4 yds. (107) 4 tons 17 cwt. 3 qrs. 14 lbs.
 (108) 13 lbs. 1 oz. 15 dwts. (109) 108 ac. 2 r. 5 p.
 (110) 47 c. yds. 8 ft. 1275 in. (111) 10 m. 124 yds. 2 ft.
 (112) 889 m. 4 fur. 22 p. 1 ft. (113) 2 ac. 1712 yds.
 (114) 140324 grains. (115) 17093 ac. 2 r. $10\frac{1}{2}$ p.
 (116) 24 qrs. 3 bus. 2 pks. (117) $197^{\circ} 27' 58''$.
 (118) 128 dys. 6 h. 17 m. 27 sec. (119) 498 c. yds. 6 ft. 12 in.
 (120) 147 gallons. (121) 131 m. 4 fur. 55 yds.
 (122) 237 tons 8 cwt. 1 qr. (123) 170 tons 9 cwt.

- (124) 1694 m. 560 yds. (125) 3954 gals. 3 qts. (126) 23 yds. 3 in.
 (127) 116 m. 2 fur. 7 p. 5 yds. 1 ft. (128) 77 tons 1 cwt. 1 qr.
 (129) 338 yds. 1 qr. 1 n. (130) 22 tons 6 cwt. 1 qr. 22 lbs. 6 oz. 5 drs.
 (131) 48 m. 5 fur. 86 yds. (132) 17 cwt. 3 qrs. 16 lbs.
 (133) 86 qrs. 2 pks. (134) 12 ac. 8 p. 22 yds. 11 in.
 (135) 53° 38' 46". (136) 273 lbs. Av. 6090 grs.
 (137) 3266 c. yds. 14 ft. 958 in. (138) £478. 19. 6. (139) 10 times.
 (140) £2. 3. 4. (141) 12 m. 109 yds. (142) 606 gallons.
 (143) £592. 10. 0. (144) 6s. 9d. (145) £108. 15. 10.
 (146) 196 ac. 3 r. 36 p.; £4858. 14. 4. (147) 3 tons 1 cwt. 1 qr. 18 lbs.
 (148) 589 miles. (149) 7 ac. 20 p. 13 yds. 92 in.
 (150) 26 lds. 4 qrs. 7 bus. 1 pk.

COMPOUND SUBTRACTION (WEIGHTS AND MEASURES).

- (1) 10 cwt. 2 qrs. 22 lbs. (2) 11 tons 19 cwt. 1 qr.
 (3) 4 qrs. 23 lbs. 14 oz. (4) 12 lbs. 11 oz. 7 drs.
 (5) 4 tons 14 cwt. 2 qrs. 16 lbs. (6) 5 tons 12 cwt. 2 qrs. 14 lbs.
 (7) 16 cwt. 1 qr. 24 lbs. 14 oz. (8) 11 qrs. 14 lbs. 15 oz. 5 drs.
 (9) 10 tons 15 cwt. 2 qrs. 16 lbs. (10) 99 cwt. 3 qrs. 27 lbs. 14 oz.
 (11) 6 cwt. 3 qrs. 25 lbs. 9 oz. (12) 51 qrs. 21 lbs. 7 oz. 15 drs.
 (13) 182 tons 16 cwt. 11 oz. (14) 3 tons 6 cwt. 20 lbs. 10 oz.
 (15) 3 tons 16 cwt. 1 qr. 4 lbs. 2 oz. (16) 19 tons 4 cwt. 2 qrs. 17 lbs. 8 oz.
 (17) 1 qr. 10 lbs. 12 oz. 3 drs. (18) 7 cwt. 2 qrs. 25 lbs. 12 oz. 12 drs.
 (19) 31 cwt. 20 lbs. 9 oz. 5 drs. (20) 38 cwt. 3 qrs. 26 lbs. 14 drs.
 (21) 663 tons 2 cwt. 3 qrs. 5 lbs. 12 oz.
 (22) 85 tons 14 cwt. 3 qrs. 12 lbs. 14 oz.
 (23) 15 tons 18 cwts. 3 qrs. 27 lbs. 11 oz. (24) 81 tons 26 lbs. 9 oz. 15 drs.
 (25) 1 lb. 9 oz. 3 dwts. 4 grs. (26) 1 oz. 17 dwts. 13 grs.
 (27) 8 lbs. 5 oz. 18 dwts. 21 grs. (28) 6 lbs. 10 oz. 12 dwts. 20 grs.
 (29) 29 lbs. 11 dwts. 14 grs. (30) 10 oz. 17 dwts. 20 grs.
 (31) 17 lbs. 5 oz. 9 dwts. 20 grs. (32) 156 lbs. 6 oz. 1 dwt. 8 grs.
 (33) 25 lbs. 9 oz. 12 dwts. 17 grs. (34) 7 lbs. 9 oz. 3 dwts. 11 grs.
 (35) 19 lbs. 4 oz. 4 dwts. 11 grs. (36) 78 lbs. 7 oz. 17 dwts. 18 grs.
 (37) 5 lbs. 8 oz. 8 dwts. 12 grs. (38) 6 lbs. 10 oz. 11 grs.
 (39) 10 lbs. 10 oz. 18 dwts. 20 grs. (40) 7 lbs. 10 oz. 5 dwts. 9 grs.
 (41) 8 lbs. 11 oz. 7 drs. (42) 8 oz. 3 drs. 2 sc. (43) 80 lbs. 11 oz. 2 sc.
 (44) 1 lb. 5 oz. 1 sc. (45) 10 oz. 5 drs. 1 sc. 18 grs.
 (46) 5 oz. 5 drs. 1 sc. 6 grs. (47) 6 oz. 7 drs. 19 grs.
 (48) 95 oz. 5 drs. 1 sc. 16 grs. (49) 992 oz. 4 drs. 2 grs.

COMPOUND SUBTRACTION (WEIGHTS AND MEASURES). 325

- (50) 11 oz. 6 drs. 1 sc. 15 grs. (51) 20 lbs. 11 oz. 5 drs. 2 sc.
 (52) 2 lbs. 4 oz. 5 drs. 2 sc. (53) 87 m. 3 fur. 16 p.
 (54) 96 m. 1 fur. 27 p. (55) 34 p. $4\frac{1}{2}$ yards. (56) 6 fur. 38 p. $5\frac{1}{4}$ yds.
 (57) 23 yds. 0 ft. 9 in. (58) 70 yds. 1 ft. 6 in.
 (59) 5 yds. 2 ft. 8 in. (60) 2 ft. 9 in.
 (61) 2 m. 4 fur. 26 p. $1\frac{1}{2}$ yds. (62) 13 m. 4 fur. 1 p. $1\frac{1}{2}$ yds.
 (63) 75 m. 6 fur. 38 p. $4\frac{1}{2}$ yds. (64) 888 m. 4 fur. 22 p. 2 yds.
 (65) 11 fur. 33 p. 4 yds. $0\frac{1}{2}$ ft. (66) 1 fur. 12 p. 4 yds. $0\frac{1}{2}$ ft.
 (67) 19 fur. 21 p. 5 yds. $0\frac{1}{2}$ ft. (68) 688 fur. 29 p. 4 yds. $2\frac{1}{2}$ ft.
 (69) 6 fur. $4\frac{1}{2}$ yds. (70) 87 p. 4 yds. 2 ft. 4 in.
 (71) 13 p. 5 yds. 2 ft. 9 in. (72) 13 p. 4 yds. 1 ft. 3 in.
 (73) 62 m. 7 fur. 39 p. $4\frac{1}{2}$ yds. (74) 1 fur. 27 p. 5 yds. 2 ft.
 (75) 91 fur. 38 p. 1 yd. 2 ft. (76) 3 p. 3 yds. 8 in. (77) 27 ac. 3 r. 21 p.
 (78) 29 ac. 1 r. 29 p. (79) 1905 ac. 3 r. $6\frac{1}{2}$ p. (80) 1 ac. $33\frac{1}{4}$ p.
 (81) 5 sq. yds. 4 ft. 42 in. (82) 33 sq. yds. 4 ft. 69 in.
 (83) 54 sq. yds. 2 ft. 23 in. (84) 95 sq. yds. 3 ft. 98 in.
 (85) 6 p. 7 ft. 61 in. (86) 13 p. 28 sq. yds. 8 ft. 31 in.
 (87) 1 p. 17 sq. yds. 8 ft. 29 in. (88) 26 p. 26 sq. yds. 5 ft. 73 in.
 (89) 913 ac. 3 r. 39 p. $21\frac{1}{4}$ yds. (90) 191 ac. 1 r. 33 p. $28\frac{3}{4}$ yds.
 (91) 83 ac. 3 r. 3 p. $27\frac{1}{4}$ yds. (92) 129 ac. 1 r. 32 p. $22\frac{1}{4}$ yds.
 (93) 20 r. 23 p. 30 yds. $1\frac{1}{4}$ ft. (94) 1 r. 37 p. 30 yds. $3\frac{1}{2}$ ft.
 (95) 2 r. 37 p. 17 yds. $1\frac{1}{4}$ ft. (96) 47 r. 34 p. 27 yds. $0\frac{1}{4}$ ft.
 (97) 123 sq. m. 550 ac. 2 r. 39 p. (98) 57 sq. m. 627 ac. 1 r. 27 p.
 (99) 37 sq. m. 630 ac. 2 r. 37 p. (100) 35 ac. 1 r. 4 p. $12\frac{1}{4}$ yds.
 (101) 29 sq. yds. 8 ft. 53 in. (102) 1 p. 17 sq. yds. 20 in.
 (103) 33 p. 1 sq. yd. 7 ft. 85 in. (104) 8 ac. 2 r. 10 p. 13 yds.
 (105) 12 yrs. 9 m. 1 wk. (106) 34 yrs. 7 m. 3 wks.
 (107) 11 m. 2 wks. 6 dys. (108) 102 m. 2 wks. 5 dys.
 (109) 68 wks. 0 dys. 8 h. (110) 4 wks. 5 dys. 23 h.
 (111) 328 wks. 5 dys. 19 h. (112) 72 dys. 11 h. 39 m.
 (113) 26 dys. 13 h. 52 m. (114) 3 h. 59 m. 56 s.
 (115) 73 h. 28 m. 54 s. (116) 81 h. 4 m. 48 s. (117) 40 wks. 6 dys.
 (118) 77 yrs. 10 wks. 5 dys. (119) 5 yrs. 281 dys. 11 hrs.
 (120) 97 yrs. 345 dys. 16 hrs. (121) 5 wks. 4 dys. 7 h. 38 m.
 (122) 54 wks. 4 dys. 19 h. 30 m. (123) 96 wks. 3 dys. 20 h. 27 m.
 (124) 89 wks. 3 dys. 23 h. 16 m. (125) 10 dys. 10 h. 42 m. 45 s.
 (126) 8 dys. 19 h. 48 m. 43 s. (127) 12 yrs. 35 wks. 5 dys. 22 h.
 (128) 82 yrs. 363 dys. 8 h. 26 m. (129) 72 lds. 2 qrs. 5 bus.
 (130) 36 lds. 1 qr. 4 bus. (131) 8 lds. 3 qrs. 7 bus.
 (132) 1003 lds. 3 qrs. 4 bus. (133) 66 qrs. 6 bus. 1 pk.
 (134) 53 qrs. 5 bus. 3 pks. (135) 227 qrs. 5 bus. 3 pks.

- (136) 49 qrs. 7 bus. 3 pks. (137) 6 gals. 2 qts. 1 pt.
 (138) 15 gals. 3 qts. 1 pt. (139) 125 gals. 3 qts. 1 pt. (140) 14 gals. 3 qts.
 (141) 4 lds. 1 qr. 3 bus. 2 pks. (142) 1141 lds. 3 qrs. 1 bus. 2 pks.
 (143) 11 lds. 4 qrs. 7 bus. 3 pks. (144) 133 lds. 2 qrs. 0 bus. 3 pks.
 (145) 1073 bus. 2 pks. 1 gal. 3 qts. (146) 3 bus. 2 pks. 0 gal. 2 qts.
 (147) 10 pks. 1 gal. 1 qt. 1 pt. (148) 8 pks. 1 gal. 2 qts. 1 pt.
 (149) 18 gals. 3 qts. 1 pt. (150) 908 gals. 3 qts. 1 pt.
 (151) 700 lds. 5 bus. 2 pks. (152) 29 qrs. 3 bus. 3 pks. 1 gal.
 (153) 7 c. yds. 13 ft. 1589 in. (154) 82 c. yds. 22 ft. 1123 in.
 (155) 118 c. yds. 13 ft. 1568 in. (156) 877 c. yds. 11 ft. 1630 in.
 (157) 254 c. yds. 9 ft. 1123 in. (158) 8918 c. yds. 26 ft. 1707 in.
 (159) 21 c. yds. 19 ft. 1628 in. (160) 496 c. yds. 5 ft. 1657 in.
 (161) 628 c. yds. 10 ft. 1544 in. (162) 85 c. yds. 13 ft. 1037 in.
 (163) 366 c. yds. 8 ft. 1710 in. (164) 1890 c. yds. 22 ft. 439 in.
 (165) 8 yds. 0 qrs. 3 nls. (166) 3 qrs. 1 n. $0\frac{1}{4}$ in.
 (167) 74 yds. 3 qrs. $3\frac{1}{2}$ nls. (168) 128 qrs. 3 nls. 1 in.
 (169) 27 E. ells. 2 qrs. 2 n. (170) 1092 E. ells. 4 qrs. 1 n.
 (171) 12 yds. 1 qr. 1 n. (172) 364 yds. 1 qr. 3 nls.
 (173) 28 yds. 3 qrs. 3 n. $0\frac{3}{4}$ in. (174) 15 yds. 1 qr. 2 n. 2 in.
 (175) 13 yds. 2 qrs. 2 n. $0\frac{1}{2}$ in. (176) 398 yds. 3 qrs. 2 n. $1\frac{1}{2}$ n.
 (177) 123 tons 13 cwt. 2 qrs. 25 lbs. (178) 55 cwt. 105 lbs. 11 oz. 14 drs.
 (179) 1 cwt. 106 lbs. 8 oz. 9 drs. (180) 58 tons 2 qrs. 14 lbs.
 (181) 1183 ac. 4063 yds. 7 ft. 50 in. (182) 1 ac. 1747 yds. 5 ft. 134 in.
 (183) 12 m. 1612 yds. 2 ft. 6 in. (184) 1030 yds. 1 ft. 11 in.
 (185) 29 m. 4 fur. 29 yds. 1 ft. (186) 107 m. 5 fur. 120 yds. 2 ft.
 (187) 42 ac. 2989 yds. 4 ft. $3\frac{1}{4}$ in. (188) 12 ac. 2 r. 6 p. $22\frac{1}{4}$ yds.
 (189) 153 qrs. 4 bus. 3 pks. (190) 14 gals. 1 qt. 1 pt.
 (191) 52 bus. 3 pks. 1 gal. (192) 16 p. 5 yds. 2 ft.
 (193) 563 sq. yds. 7 ft. 143 in. (194) 625 c. yds. 12 ft. 1534 in.
 (195) 94 sq. yds. 7 ft. 118 in. (196) 8895 c. yds. 6 ft. 1379 in.
 (197) 13 yds. 1 ft. 10 in. (198) 14 yds. 2 qrs. 2 nls.
 (199) 1 qr. 1 nl. $0\frac{3}{4}$ in. (200) 2 yrs. 262 dys. 13 hrs.
 (201) 13 cwt. 1 qr. 3 lbs. 15 oz. (202) 14 yds. 2 nls. $1\frac{1}{4}$ in.
 (203) 193 lds. 4 bus. 2 pks. (204) 4 hrs. 53 min.
 (205) 18 min. $54\frac{1}{2}$ sec. (206) 1 ac. 3 r. 39 p. $5\frac{1}{4}$ yds.
 (207) 2085 ac. 12 p. $28\frac{3}{4}$ yds. (208) 2 tons 11 cwt. 2 qrs. 4 lbs. 4 oz.
 (209) $2611\frac{1}{2}$ miles. (210) 14 yds. 1 ft. 6 in. (211) 5 hrs. 50 min.
 (212) 12 cwt. 1 qr. 6 lbs. (213) 2747 yards. (214) 72 times.
 (215) 4s. $0\frac{3}{4}d.$ (216) $5d.$ (217) 3 minutes. (218) 4 ac. 2 r. 25 p.
 (219) £200422. 16. 4. (220) 16 cwt. 2 qrs. 15 lbs. 8 oz.
 (221) 19 ac. 1 r. 35 p. $29\frac{1}{4}$ yds. (222) 2 cwt. 2 qrs. $9\frac{1}{2}$ lbs.

COMPOUND MULTIPLICATION (WEIGHTS AND MEASURES). 327

- (223) 2 lbs. 6 oz. 6 dwts. 22 grs. (224) 3 ac. 3 r. 36 p. 5 yds. 2 ft. 48 in.
 (225) 4 cwt. 27 lbs. (226) 1 m. 3 fur. 11 p. $4\frac{1}{4}$ yds.
 (227) 2 m. 4 fur. 4 p. 1 yd. 1 ft. (228) 10 tons 19 cwt. 13 lbs.
 (229) 9 c. yds. 11 ft. 1648 in. (230) £1. 14. 6.
 (231) 2 cwt. 1 qr. 24 lbs. 14 oz.; and the value £55. 7. 6. (232) £5. 5. 0.
 (233) 4 ac. 2 r. 28 p. $15\frac{3}{4}$ yds. (234) £1. 19. 0.
 (235) 2 hrs. 17 m. 45 sec. (236) 9 oz. 14 dwts. 13 grs.
 (237) 9 oz. 5 grs. (238) £5. 17. 9. (239) 9 m. 4 fur. 103 yds.
 (240) 2 ac. 3 r. 1 p. $13\frac{3}{4}$ yds. (241) 88 c. yds. 10 ft.
 (242) 26 gals. $0\frac{1}{2}$ pt. (243) 33 wks. 6 dys. 10 h. 30 m.
 (244) 5 yds. 1 qr. 2 n. $0\frac{1}{4}$ in. (245) 99 cwt. 1 qr. 21 lbs. 8 oz.
 (246) £389. 7. 6. (247) 9 lbs. 1 oz. 7 dwts. 12 grs.
 (248) 7 ac. 3 r. 18 p. 11 yds. $1\frac{1}{4}$ ft. (249) 130 qrs. 6 bus. 3 pks.
 (250) 16 tons 12 cwt. 2 qrs. 2 lbs.

COMPOUND MULTIPLICATION (WEIGHTS AND MEASURES).

- (1) 6 tons 11 cwt. 3 qrs. 11 lbs. (2) 13 tons 3 cwt. 2 qrs. 22 lbs.
 (3) 19 tons 15 cwt. 2 qrs. 5 lbs. (4) 26 tons 7 cwt. 1 qr. 16 lbs.
 (5) 32 tons 19 cwt. 0 qrs. 27 lbs. (6) 39 tons 11 cwt. 0 qrs. 10 lbs.
 (7) 35 cwt. 2 qrs. 15 lbs. 0 oz. 2 drs. (8) 59 cwt. 1 qr. 15 lbs. 10 oz. 14 drs.
 (9) 83 cwt. 0 qrs. 16 lbs. 5 oz. 10 drs. (10) 106 cwt. 3 qrs. 17 lbs. 0 oz. 6 drs.
 (11) 130 cwt. 2 qrs. 17 lbs. 11 oz. 2 drs. (12) 10 lbs. 7 oz. 2 dwts. 18 grs.
 (13) 21 lbs. 2 oz. 5 dwts. 12 grs. (14) 31 lbs. 9 oz. 8 dwts. 6 grs.
 (15) 42 lbs. 4 oz. 11 dwts. 0 grs. (16) 52 lbs. 11 oz. 13 dwts. 18 grs.
 (17) 63 lbs. 6 oz. 16 dwts. 12 grs. (18) 48 lbs. 11 oz. 7 drs. 1 sc. 13 grs.
 (19) 81 lbs. 7 oz. 7 drs. 0 sc. 15 grs. (20) 114 lbs. 3 oz. 6 drs. 2 sc. 17 grs.
 (21) 146 lbs. 11 oz. 6 drs. 1 sc. 19 grs. (22) 179 lbs. 7 oz. 6 drs. 1 sc. 1 gr.
 (23) 63 yds. 2 ft. 9 in. (24) 127 yds. 2 ft. 6 in.
 (25) 191 yds. 2 ft. 3 in. (26) 255 yds. 2 ft. 0 in.
 (27) 319 yds. 1 ft. 9 in. (28) 383 yds. 1 ft. 6 in.
 (29) 16 m. 2 fur. 3 p. $0\frac{1}{2}$ yds. (30) 27 m. 0 fur. 31 p. $4\frac{1}{2}$ yds.
 (31) 37 m. 7 fur. 20 p. 3 yds. (32) 48 m. 6 fur. 9 p. $1\frac{1}{2}$ yds.
 (33) 59 m. 4 fur. 38 p. (34) 43 ac. 3 r. $3\frac{1}{2}$ p.
 (35) 87 ac. 2 r. 7 p. (36) 131 ac. 1 r. $10\frac{1}{2}$ p. (37) 175 ac. 0 r. 14 p.
 (38) 218 ac. 3 r. $17\frac{1}{2}$ p. (39) 262 ac. 2 r. 21 p.
 (40) 22 ac. 2 r. 16 p. 4 yds. $0\frac{3}{4}$ ft. (41) 37 ac. 2 r. 26 p. 26 yds. $8\frac{3}{4}$ ft.
 (42) 52 ac. 2 r. 37 p. 19 yds. $5\frac{1}{2}$ ft. (43) 67 ac. 3 r. 8 p. 12 yds. $2\frac{1}{4}$ ft.
 (44) 82 ac. 3 r. 19 p. 4 yds. 8 ft. (45) 15 ac. 0 r. 10 p. 22 yds. 8 ft.
 (46) 47 yds. 2 qrs. 3 n. $1\frac{1}{4}$ in. (47) 71 yds. 2 qrs. 1 n. $0\frac{3}{4}$ in.
 (48) 95 yds. 1 qr. 3 n. $0\frac{1}{4}$ in. (49) 119 yds. 1 qr. 0 n. $1\frac{1}{2}$ in.

- (50) 143 yds. 0 qr. 2 n. $1\frac{1}{2}$ in. (51) 39 yrs. 30 $\frac{1}{2}$ dys. 17 hrs.
 (52) 66 yrs. 151 dys. 4 hrs. 20 min. (53) 92 yrs. 357 dys. 15 hrs. 40 min.
 (54) 119 yrs. 199 dys. 3 hrs. (55) 146 yrs. 40 dys. 14 hrs. 20 min.
 (56) 725 lds. 4 qrs. 2 bus. 1 pk. (57) 829 lds. 2 qrs. 6 bus.
 (58) 933 lds. 1 qr. 1 bus. 3 pks. (59) 622 lds. 0 qrs. 6 bus. 2 pks.
 (60) 414 lds. 3 qrs. 7 bus. (61) 185 tons 7 cwt. 2 qrs. 14 lbs.
 (62) 211 tons 17 cwt. 1 qr. 4 lbs. (63) 198 tons 12 cwt. 1 qr. 23 lbs.
 (64) 238 tons 6 cwt. 3 qrs. 22 lbs. (65) 155 m. 0 fur. 32 p. 3 yds.
 (66) 162 m. 3 fur. 36 p. (67) 147 m. 5 fur. 29 p. $0\frac{1}{2}$ yds.
 (68) 227 c. yds. 17 ft. 1248 in. (69) 265 c. yds. 16 ft. 304 in.
 (70) 256 c. yds. 3 ft. 108 in. (71) 284 c. yds. 15 ft. 696 in.
 (72) 633 yds. 1 ft. 6 in. (73) 563 yds. 0 ft. 4 in.
 (74) 580 yds. 2 ft. $1\frac{1}{2}$ in. (75) 703 yds. 2 ft. 8 in.
 (76) 338 lbs. 3 oz. 14 dwts. 18 grs. (77) 362 lbs. 5 oz. 14 dwts. 9 grs.
 (78) 386 lbs. 7 oz. 14 dwts. (79) 402 lbs. 9 oz. 0 dwts. 10 grs.
 (80) 2259 yds. 1 qr. 2 n. (81) 2343 yds. 0 qrs. 0 nls. 2 in.
 (82) 2510 yds. 1 qr. 2 nls. $1\frac{1}{2}$ in. (83) 2635 yds. 3 qrs. 3 nls.
 (84) 4734 ac. 3 r. 8 p. (85) 4882 ac. 3 r. 2 p. (86) 5178 ac. 2 r. 30 p.
 (87) 5326 ac. 2 r. 24 p. (88) 1449 ac. 1 r. 11 p. $28\frac{1}{2}$ yds.
 (89) 1565 ac. 1 r. 3 p. 9 yds. (90) 1623 ac. 0 r. 38 p. $29\frac{1}{2}$ yds.
 (91) 884 lbs. 3 oz. 0 drs. 1 sc. 19 grs.
 (92) 1010 lbs. 6 oz. 7 drs. 1 sc. 16 grs.
 (93) 1033 lbs. 6 oz. 4 drs. 1 sc. 10 grs.
 (94) 1102 lbs. 5 oz. 3 drs. 0 sc. 12 grs.
 (95) 10295 cwt. 0 qrs. 13 lbs. (96) 11439 cwt. 0 qrs. 2 lbs.
 (97) 11231 cwt. 0 qrs. 4 lbs. (98) 12478 cwt. 3 qrs. 20 lbs.
 (99) 887 cwts. 1 qr. 14 lbs. 6 oz. (100) 968 cwts. 0 qrs. 5 lbs. 8 oz.
 (101) 1056 cwts. 0 qrs. 6 lbs. (102) 1320 cwts. 0 qrs. 7 lbs. 8 oz.
 (103) 6263 yrs. 163 dys. 8 hrs. (104) 7516 yrs. 50 dys.
 (105) 7046 yrs. 138 dys. 3 hrs. (106) 6012 yrs. 332 dys.
 (107) 15468 tons 5 cwt. 70 lbs. (108) 11048 tons 15 cwt. 50 lbs.
 (109) 37713 tons 2 cwt. 96 lbs. (110) 47141 tons 8 cwt. 64 lbs.
 (111) 13260 p. 3 yds. 1 ft. (112) 13923 p. 3 yds. 1 ft. 6 in.
 (113) 4351 p. 0 yds. 2 ft. 3 in. (114) 57 lbs. 3 oz. 14 drs.
 (115) 43 lbs. 12 oz. 6 drs. (116) 63 lbs. 15 oz. 10 drs.
 (117) 97 lbs. 10 oz. 6 drs. (118) 413 yds. 1 ft. 1 in.
 (119) 557 yds. 0 ft. 5 in. (120) 664 yds. 2 ft. 11 in.
 (121) 540 c. yds. 18 ft. 1218 in. (122) 619 c. yds. 22 ft. 174 in.
 (123) 606 c. yds. 17 ft. 60 in. (124) 1200 c. yds. 2 ft. 6 in.
 (125) 4789 sq. yds. 1 ft. 97 in. (126) 9695 sq. yds. 1 ft. 91 in.
 (127) 13900 sq. yds. 2 ft. 127 in. (128) 6891 sq. yds. 6 ft. 115 in.

COMPOUND MULTIPLICATION (WEIGHTS AND MEASURES). 329

- (129) 924 lbs. 4 oz. 15 dwts. 9 grs. (130) 735 lbs. 6 oz. 10 dwts. 2 grs.
 (131) 785 lbs. 2 oz. 17 dwts. 19 grs. (132) 1103 lbs. 3 oz. 15 dwts. 3 grs.
 (133) 1954 yrs. 6 m. (134) 2030 yrs. 10 m. 2 wks.
 (135) 4626 yrs. 7 m. 2 wks. (136) 74088 yds. 0 ft. $4\frac{1}{2}$ in.
 (137) 26378 yds. 0 ft. $4\frac{1}{2}$ in. (138) 25001 yds. 2 ft. $7\frac{1}{2}$ in.
 (139) 33718 yds. 0 ft. $4\frac{1}{2}$ in. (140) 32932 m. 3 fur. 34 p.
 (141) 26031 m. 7 fur. 38 p. $1\frac{1}{2}$ yds. (142) 31691 m. 0 fur. 39 p. $3\frac{1}{2}$ yds.
 (143) 27346 m. 2 fur. 39 p. 2 yds. (144) 2614 wks. 4 d. 15 h. 15 m.
 (145) 1937 wks. 4 d. 7 h. 50 m. (146) 834 wks. 1 d. 0 h. 55 m.
 (147) 1193 wks. 1 d. 16 h. 55 m. (148) 969 lbs. 11 oz. 1 dr. 0 sc. 14 grs.
 (149) 841 lbs. 2 oz. 4 drs. 1 sc. 3 grs.
 (150) 438 lbs. 1 oz. 7 drs. 0 sc. 13 grs.
 (151) 953 lbs. 0 oz. 2 drs. 1 sc. 17 grs. (152) 1733 cwt. 3 qrs. 19 lbs. 8 oz.
 (153) 463 cwt. 1 qr. 25 lbs. 8 oz. (154) 1860 cwt. 3 qrs. 24 lbs. 8 oz.
 (155) 1691 cwt. 2 qrs. 8 lbs. 8 oz. (156) 1066 sq. yds. 4 ft. 142 in.
 (157) 2503 sq. yds. 8 ft. 53 in. (158) 2263 sq. yds. 7 ft. 1 in.
 (159) 2560 sq. yds. 3 ft. 133 in. (160) 3728 ac. 1 r. 13 p. $25\frac{1}{4}$ yds.
 (161) 11630 ac. 2 r. 5 p. $12\frac{3}{4}$ yds. (162) 5475 ac. 1 r. 1 p. 25 yds.
 (163) 1254 ac. 2 r. 0 p. $15\frac{1}{4}$ yds. (164) 12676 yds. 3 qrs. 2 n. 1 in.
 (165) 5791 yds. 2 qrs. 1 n. $0\frac{1}{4}$ in. (166) 12390 yds. 0 qrs. 0 n. $0\frac{1}{2}$ in.
 (167) 8194 yds. 1 qr. 0 n. $0\frac{1}{2}$ in. (168) 16196 qrs. 5 bus. 0 pk. 1 gal.
 (169) 22055 qrs. (170) 60651 qrs. 2 bus.
 (171) 57706 qrs. 3 bus. 1 pk. (172) 153574 gals. 3 qts.
 (173) 140716 gals. (174) 114188 gals. 3 qts. 1 pt.
 (175) 26930 tons 17 cwt. 1 qr. 2 lbs. 13 oz. 8 drs.
 (176) 21140 tons 10 cwt. 2 qrs. 2 lbs. 3 oz.
 (177) 25098 tons 12 cwt. 3 qrs. 25 lbs. 9 oz. 8 drs.
 (178) 16491 lbs. 2 oz. 18 dwts. 23 grs. (179) 1425 lbs. 11 oz. 8 dwts. 8 grs.
 (180) 103344 lbs. 7 oz. 15 dwts. 15 grs.
 (181) 275592 lbs. 5 oz. 5 drs. 1 sc.
 (182) 7820 lbs. 7 oz. 6 drs. 1 sc. 18 grs.
 (183) 153059 lbs. 7 oz. 5 drs. 0 sc. 1 gr.
 (184) 1407 m. 2 fur. 17 p. 3 yds. 6 in.
 (185) 20189 m. 7 fur. 23 p. 3 yds. 1 ft. 6 in.
 (186) 337 m. 7 fur. 5 p. 3 yds. 1 ft.
 (187) 2772 ac. 1 r. 35 p. 11 yds. 5 ft. 36 in.
 (188) 55552 ac. 0 r. 17 p. 3 yds. 4 ft. 124 in.
 (189) 64447 ac. 0 r. 18 p. 29 yds. 3 ft. 34 in.
 (190) 136374 c. yds. 9 ft. 1470 in. (191) 172049 c. yds. 23 ft. 736 in.
 (192) 1764578 c. yds. 18 ft. 1129 in.
 (193) 90752 lds. 3 qrs. 0 bus. 0 pk. 1 gal.

- (194) 125317 lds. 0 qrs. 0 bus. 2 pks.
 (195) 93366 lds. 3 qrs. 0 bus. 1 pk. 1 gal.
 (196) 87 yrs. 223 dys. 21 hrs. 55 m.
 (197) 2174 yrs. 71 dys. 23 hrs. 27 m. 30 s.
 (198) 20116 yrs. 186 dys. 18 hrs. 42 m. 30 s.
 (199) 268440 yds. 0 qrs. 2 n. 0 $\frac{3}{4}$ in. (200) 427330 yds. 3 qrs. 2 n. 1 $\frac{3}{4}$ in.
 (201) 2 ft. 3'. (202) 11 ft. 1' 4". (203) 21 ft. 1'. (204) 38 ft. 11' 5".
 (205) 48 ft. 11' 6". (206) 78 ft. 0' 4" (207) 108 ft. 4' 0".
 (208) 54 ft. 2' 9". (209) 380 ft. 3' 0". (210) 269 ft. 5' 9".
 (211) 74 ft. 4' 6". (212) 82 ft. 2' 0". (213) 280 ft. 3' 9".
 (214) 254 ft. 8' 3". (215) 26 ft. 8' 10 $\frac{1}{2}$ ". (216) 22 ft. 6' 9".
 (217) 110 ft. 0' 10 $\frac{3}{4}$ ". (218) 5 sq. yds. 5 ft. 5'. (219) 28 sq. yds. 4 ft.
 (220) 96 sq. yds. 8 ft. 1'. (221) 53 sq. yds. 2 ft. 9'.
 (222) 30 sq. yds. 2 ft. 2'. (223) 42 sq. yds. 1 ft. 5'.
 (224) 6 sq. yds. 2 ft. 10'. (225) 40 sq. yds. 6 ft. 8' 4".
 (226) 13 sq. yds. 6 ft. 7' 6". (227) 23 sq. yds. 5 ft. 6'.
 (228) 11 sq. yds. 8 ft. 6' 4" 6". (229) 13 sq. yds. 8 ft. 10' 8".
 (230) 24 sq. yds. 6 ft. 7' 2". (231) 4 sq. yds. 2 ft. 1' 1" 6".
 (232) 4 sq. yds. 3 ft. 7'. (233) 5 sq. yds. 6 ft. 8' 10".
 (234) 8 c. ft. 4'. (235) 15 c. ft. (236) 20 c. yds.
 (237) 6 c. yds. 11 ft. 4'. (238) 8 c. yds. 17 ft. 9'.
 (239) 6 c. yds. 3 ft. 4' 6". (240) 5 c. yds. 5 ft. 7' 6".
 (241) 31 c. yds. 4 ft. 6'. (242) 13 c. yds. 3 ft. 4' 6".
 (243) 4 c. yds. 18 ft. 6' 9". (244) 5 c. yds. 13 ft. 6'.
 (245) 12 c. yds. 3 ft. 3'. (246) 1 c. yd. 2 ft. 3'.
 (247) 16 c. ft. 3'. (248) 1 c. yd. 26 ft. 6' 1". (249) 8 c. yds. 15 ft. 11'.
 (250) 6 c. yds. 15 ft. 3' 1" 6". (251) 1 qr. 1 nl. (252) 177 tons 12 cwt.
 (253) 25 lbs. 4 oz. 6 dwts. 5 grs. (254) 62 lbs. 6 oz. 4 drs. 15 grs.
 (255) 2 tons 8 cwt. 3 qrs. 5 lbs. 8 oz. (256) 252 m. 5 fur. 162 yds.
 (257) 38 ac. 2 r. 20 p. 25 $\frac{1}{4}$ yds. (258) 51 qrs. 3 pks.
 (259) 230 bar. 24 gals. 3 pts. (260) 4 c. yds. 12 ft. 237 in.
 (261) 783 yrs. 355 dys. (262) 31 tons 2 cwt. 1 qr. 4 lbs.
 (263) 20 times. (264) 135 p. 3 yds. 2 ft. 7 $\frac{1}{2}$ in. (265) 854 half-pints.
 (266) 198 yrs. 206 dys. (267) 11 cwt. 3 qrs. 10 lbs. 675 grs.
 (268) 58 yrs. 120 dys. 5 hrs. (269) 3 tons 2 cwt. 1 qr. 7 lbs.
 (270) 40 sq. ft. 6'. (271) £5. 10. 3. (272) 30 dys. 4 $\frac{1}{2}$ hrs.
 (273) 45 ac. 32 p. (274) 66 cwt. 20 lbs. (275) 101 $\frac{1}{4}$ miles.
 (276) 200 miles. (277) 44810 tons 5 cwt. 1 qr. 12 lbs.
 (278) 1 hr. 12 m. 48 s. (279) 5 m. 1 fur. 146 yds. 2 ft.
 (280) 136 yds. 4 in. (281) 7 sq. yds. (282) 25 c. ft. 1152 in.
 (283) 2028 miles. (284) 2 c. yds. 3 ft.

COMPOUND DIVISION (WEIGHTS AND MEASURES). 331

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| (235) 19 cwt. 1 qr. 13 lbs. 15 oz. | (286) 197 yds. 2 ft. 4 in. |
| (237) 113° 53' 10". (288) 750 sq. ft. | (289) 758 ft. 4 in. |
| (290) 6 tons 13 cwt. 3 qrs. | (291) 19 yrs. 304 dys. 21 h. 30 m. |
| (292) 534 ac. 3 r. 20 p. 20½ yds. | (293) 167 tons 8 cwt. 24 lbs. |
| (294) 36830357 tons 2 cwt. 3 qrs. 12 lbs. | (295) 28927 gals. 2 qts. |
| (296) 10 tons 4 cwt. 1 lb. (297) 471¾ sq. ft. | (298) 51 sq. yds. 6½ sq. ft. |
| (299) 26 lbs. 4 dwts. (300) 47 qrs. 4 bus. 1 pk. | |

COMPOUND DIVISION (WEIGHTS AND MEASURES).

- (1) 56 tons 6 cwt. 3 qrs. 20 lbs. 4 oz.
- (2) 37 tons 11 cwt. 1 qr. 4 lbs. 2 oz. — 2.
- (3) 28 tons 3 cwt. 1 qr. 24 lbs. 2 oz. (4) 22 tons 10 cwt. 3 qrs. 2 lbs. 8 oz.
- (5) 18 tons 15 cwt. 2 qrs. 16 lbs. 1 oz. — 2.
- (6) 16 tons 1 cwt. 3 qrs. 25 lbs. 12 oz. — 4.
- (7) 14 tons 1 cwt. 2 qrs. 26 lbs. 1 oz.
- (8) 12 tons 10 cwt. 1 qr. 20 lbs. 0 oz. — 8.
- (9) 11 tons 5 cwt. 1 qr. 15 lbs. 4 oz.
- (10) 10 tons 4 cwt. 3 qrs. 16 lbs. 6 oz. — 6.
- (11) 9 tons 7 cwt. 3 qrs. 8 lbs. 0 oz. — 8.
- (12) 7 lbs. 6 oz. 16 dwts. 21 grs. (13) 5 lbs. 0 oz. 11 dwts. 6 grs.
- (14) 3 lbs. 9 oz. 8 dwts. 10 grs. — 2. (15) 3 lbs. 0 oz. 6 dwts. 18 grs.
- (16) 2 lbs. 6 oz. 5 dwts. 15 grs. (17) 2 lbs. 1 oz. 19 dwts. 2 grs. — 4.
- (18) 1 lb. 10 oz. 14 dwts. 5 grs. — 2. (19) 1 lb. 8 oz. 3 dwts. 18 grs.
- (20) 1 lb. 6 oz. 3 dwts. 9 grs. (21) 1 lb. 4 oz. 10 dwts. 8 grs. — 2.
- (22) 1 lb. 3 oz. 2 dwts. 19 grs. — 6.
- (23) 51 lbs. 9 oz. 1 dr. 2 sc. 17 grs. — 1.
- (24) 34 lbs. 6 oz. 1 dr. 0 sc. 18 grs. — 1.
- (25) 25 lbs. 10 oz. 4 drs. 2 sc. 18 grs. — 3.
- (26) 20 lbs. 8 oz. 3 drs. 2 sc. 19 grs.
- (27) 17 lbs. 3 oz. 0 drs. 1 sc. 19 grs. — 1.
- (28) 14 lbs. 9 oz. 3 drs. 2 sc. 19 grs. — 2.
- (29) 12 lbs. 11 oz. 2 drs. 1 sc. 9 grs. — 3.
- (30) 11 lbs. 6 oz. 0 drs. 1 sc. 6 grs. — 1.
- (31) 10 lbs. 4 oz. 1 dr. 2 sc. 19 grs. — 5.
- (32) 9 lbs. 4 oz. 7 drs. 1 sc. 17 grs. — 8.
- (33) 8 lbs. 7 oz. 4 drs. 0 sc. 19 grs. — 7.
- (34) 508 m. 5 fur. 38 p. 1 yd. 2 ft. 9 in.
- (35) 339 m. 1 fur. 12 p. 1 yd. 0 ft. 10 in.
- (36) 254 m. 2 fur. 39 p. 0 yd. 2 ft. 10 in. — 2.
- (37) 203 m. 3 fur. 39 p. 1 yd. 2 ft. 7 in. — 1.
- (38) 169 m. 4 fur. 26 p. 0 yd. 1 ft. 11 in.

- (39) 145 m. 2 fur. 33 p. 4 yds. 1 ft. 5 in. — 1.
 (40) 127 m. 1 fur. 19 p. 3 yds. 0 ft. 8 in. — 2.
 (41) 113 m. 0 fur. 17 p. 2 yds. 0 ft. 9 in. — 3.
 (42) 101 m. 5 fur. 39 p. 3 yds. 2 ft. 0 in. — 6.
 (43) 92 m. 3 fur. 39 p. 3 yds. 2 ft. 6 in. — 6.
 (44) 84 m. 6 fur. 13 p. 0 yds. 0 ft. 11 in. — 6.
 (45) 37 ac. 3 r. 35 p. 24 yds. 8 ft. 95 in. — 1.
 (46) 25 ac. 1 r. 10 p. 16 yds. 5 ft. 111 in. — 2.
 (47) 18 ac. 3 r. 37 p. 27 yds. 5 ft. 65 in. — 3.
 (48) 15 ac. 0 r. 30 p. 9 yds. 8 ft. 124 in. — 3.
 (49) 12 ac. 2 r. 25 p. 8 yds. 2 ft. 127 in. — 5.
 (50) 10 ac. 3 r. 15 p. 28 yds. 6 ft. 94 in. — 1.
 (51) 9 ac. 1 r. 38 p. 28 yds. 8 ft. 50 in. — 7.
 (52) 8 ac. 1 r. 30 p. 5 yds. 4 ft. 133 in. — 2.
 (53) 7 ac. 2 r. 15 p. 4 yds. 8 ft. 134 in. — 3.
 (54) 6 ac. 3 r. 24 p. 21 yds. 0 ft. 50 in. — 1.
 (55) 6 ac. 1 r. 12 p. 19 yds. 2 ft. 81 in. — 11.
 (56) 153 yrs. 96 dys. 21 hrs. 0 min. 1 sec. — 1.
 (57) 102 yrs. 64 dys. 14 hrs. 0 min. 1 sec.
 (58) 76 yrs. 230 dys. 22 hrs. 30 min. 0 sec. — 3.
 (59) 61 yrs. 111 dys. 18 hrs. 0 min. 0 sec. — 3.
 (60) 51 yrs. 32 dys. 7 hrs. 0 min. 0 sec. — 3.
 (61) 43 yrs. 288 dys. 9 hrs. 25 min. 43 sec. — 2.
 (62) 38 yrs. 115 dys. 11 hrs. 15 min. 0 sec. — 3.
 (63) 34 yrs. 21 dys. 12 hrs. 40 min. 0 sec. — 3.
 (64) 30 yrs. 238 dys. 9 hrs. 0 min. 0 sec. — 3.
 (65) 27 yrs. 316 dys. 6 hrs. 0 min. 0 sec. — 3.
 (66) 25 yrs. 198 dys. 15 hrs. 30 min. 0 sec. — 3.
 (67) 18 lds. 4 qrs. 1 bus. 3 pks. — 1.
 (68) 12 lds. 2 qrs. 6 bus. 2 pks. — 1.
 (69) 9 lds. 2 qrs. 0 bus. 3 pks. — 3. (70) 7 lds. 2 qrs. 5 bus. 2 pks. — 1.
 (71) 6 lds. 1 qr. 3 bus. 1 pk. — 1. (72) 5 lds. 1 qr. 7 bus. 1 pk. — 4.
 (73) 4 lds. 3 qrs. 4 bus. 1 pk. — 7. (74) 4 lds. 0 qrs. 7 bus. 2 pks. — 1.
 (75) 3 lds. 3 qrs. 6 bus. 3 pks. — 1. (76) 3 lds. 2 qrs. 1 bus. 0 pks. — 3.
 (77) 3 lds. 0 qrs. 5 bus. 2 pks. — 7. (78) 155 gals. 1 qt. 0 pts. — 1.
 (79) 103 gals. 2 qts. 0 pts. — 1. (80) 77 gals. 2 qts. 1 pt. — 1.
 (81) 62 gals. 0 qts. 1 pt. (82) 51 gals. 3 qts. 0 pts. — 1.
 (83) 44 gals. 1 qt. 1 pt. (84) 38 gals. 3 qts. 0 pt. — 5.
 (85) 34 gals. 2 qts. 0 pts. — 1. (86) 31 gals. 0 qts. 0 pts. — 5.
 (87) 28 gals. 0 qts. 1 pt. — 10. (88) 25 gals. 3 qts. 1 pt. — 1.
 (89) 256 c. yds. 10 ft. 923 in. — 1. (90) 170 c. yds. 25 ft. 39 in. — 2.

- (91) 123 c. yds. 5 ft. 461 in. — 3. (92) 102 c. yds. 15 ft. 23 in. — 4.
 (93) 85 c. yds. 12 ft. 883 in. — 5. (94) 73 c. yds. 6 ft. 1481 in. — 1.
 (95) 64 c. yds. 2 ft. 1094 in. — 7. (96) 56 c. yds. 26 ft. 589 in. — 2.
 (97) 51 c. yds. 7 ft. 875 in. — 9. (98) 46 c. yds. 16 ft. 1110 in. — 5.
 (99) 42 c. yds. 19 ft. 1305 in. — 11.
 (100) 106 yds. 3 qrs. 3 nls. 1 in. — $1\frac{1}{4}$.
 (101) 71 yds. 1 qr. 1 nl. 0 in. — 1. (102) 53 yds. 1 qr. 3 nls. 1 in. — $3\frac{3}{4}$.
 (103) 42 yds. 3 qrs. 0 nls. 1 in. — $2\frac{3}{4}$.
 (104) 35 yds. 2 qrs. 2 nls. 1 in. — $1\frac{3}{4}$.
 (105) 30 yds. 2 qrs. 1 nl. 0 in. — 1.
 (106) 26 yds. 2 qrs. 3 nls. 2 in. — $0\frac{3}{4}$.
 (107) 23 yds. 3 qrs. 0 nls. 0 in. — $7\frac{3}{4}$.
 (108) 21 yds. 1 qr. 2 nls. 0 in. — $7\frac{3}{4}$.
 (109) 19 yds. 1 qr. 3 nls. 0 in. — $5\frac{1}{2}$.
 (110) 17 yds. 3 qrs. 1 nl. 0 in. — $7\frac{3}{4}$.
 (111) 3 qrs. 1 lb. 4 oz. — 4. (112) 3 qrs. 25 lbs. 10 oz. — 2.
 (113) 3 qrs. 11 lbs. 15 oz. (114) 18 yds. 1 ft. 11 in.
 (115) 15 yds. 2 ft. 11 in. — 1. (116) 13 yds. 2 ft. 11 in. — 2.
 (117) 6 ac. 1 r. 23 p. 14 yds. — $4\frac{1}{2}$. (118) 3 ac. 2 r. 8 p. 18 yds. — $3\frac{1}{4}$.
 (119) 4 ac. 2 r. 11 p. 2 yds. (120) 5 ac. 1 r. 12 p. 27 yds. — $3\frac{1}{4}$.
 (121) 2 yds. 0 ft. 1 in. — 6. (122) 1 yd. 1 ft. 2 in. — 1.
 (123) 1 yd. 0 ft. 8 in. — 1. (124) 2 ft. 6 in. — 21.
 (125) 10 in. — 21. (126) 2 tons 3 cwt. 1 qr. 11 lbs. — 9.
 (127) 2 tons 1 cwt. 3 qrs. 5 lbs. — 43.
 (128) 1 ton 12 cwts. 2 qrs. 1 lb. — 27.
 (129) 3 tons 13 cwts. 0 qrs. 17 lbs. — 3.
 (130) 1 ton 3 cwts. 1 qr. 17 lbs. — 79.
 (131) 21 ac. 3 r. 1075 yds. — 110. (132) 30 ac. 0 r. 1025 yds. — 50.
 (133) 35 ac. 3 r. 274 yds. — 26. (134) 82 ac. 3 r. 565 yds. — 25.
 (135) 45 ac. 1 r. 328 yds. — 18. (136) 5 c. yds. 1 ft. 1552 in. — 24.
 (137) 3 c. yds. 1 ft. 240 in. — 24. (138) 16 ft. 1460 in. — 8.
 (139) 1 c. yd. 26 ft. 411 in. — 114. (140) 4 c. yds. 6 ft. 1718 in. — 54.
 (141) 80 yds. 3 qrs. 0 nls. 0 in. — $30\frac{1}{4}$.
 (142) 24 yds. 0 qrs. 0 nls. 1 in. — $17\frac{1}{4}$.
 (143) 20 yds. 0 qrs. 3 nls. 0 in. — $30\frac{1}{4}$.
 (144) 107 yds. 2 qrs. 3 nls. 0 in. — 10.
 (145) 19 yds. 1 qr. 2 nls. 0 in. — $57\frac{1}{4}$.
 (146) 6 qrs. 4 bus. 3 pks. 1 gal. — 143.
 (147) 4 qrs. 0 bus. 3 pks. 1 gal. — 197.
 (148) 3 qrs. 1 bus. 3 pks. 1 gal. — 206.
 (149) 18 qrs. 4 bus. 1 pk. 0 gals. — 47.

- (150) 11 qrs. 1 bus. 3 pks. 1 gal. — 26.
 (151) 18 tons 8 cwt. 3 qrs. 18 lbs. — 9.
 (152) 6 tons 17 cwt. 1 qr. 21 lbs. — 8.
 (153) 5 tons 13 cwt. 0 qrs. 6 lbs. — 7.
 (154) 12 tons 1 cwt. 2 qrs. 22 lbs. — 21.
 (155) 4 tons 4 cwt. 1 qr. 22 lbs. — 37.
 (156) 28 lds. 4 qrs. 0 bus. 3 pks. — 7.
 (157) 3 lds. 1 qr. 0 bus. 0 pks. — 46.
 (158) 6 lds. 2 qrs. 2 bus. 1 pk. — 36.
 (159) 2 lds. 3 qrs. 2 bus. 1 pk. — 25.
 (160) 2 lds. 3 qrs. 0 bus. 3 pks. — 33.
 (161) 10 yrs. 53 dys. 21 hrs. — 32. (162) 9 yrs. 158 dys. 7 hrs. — 76.
 (163) 8 yrs. 342 dys. 22 hrs. — 137. (164) 3 yrs. 132 dys. 23 hrs. — 419.
 (165) 2 yrs. 350 dys. 18 hrs. — 545.
 (166) 1 lb. 2 oz. 10 dwts. 22 grs. — 254.
 (167) 1 lb. 7 oz. 2 dwts. 6 grs. — 108.
 (168) 10 lbs. 1 oz. 4 dwts. 9 grs. — 69.
 (169) 3 lbs. 8 oz. 17 dwts. 0 grs. — 204.
 (170) 1 lb. 11 oz. 12 dwts. 22 grs. — 454.
 (171) 12 c. yds. 8 ft. 1267 in. — 457.
 (172) 10 c. yds. 11 ft. 1296 in. — 310.
 (173) 40 c. yds. 26 ft. 1041 in. — 73.
 (174) 28 c. yds. 3 ft. 864 in. — 310. (175) 11 c. yds. 7 ft. 307 in. — 583.
 (176) 4 ac. 1 r. 16 p. 26 yds. — 47 $\frac{3}{4}$.
 (177) 4 ac. 0 r. 33 p. 14 yds. — 169.
 (178) 5 ac. 1 r. 33 p. 27 yds. — 505. (179) 3 ac. 0 r. 2 p. 15 yds. — 18.
 (180) 3 ac. 0 r. 2 p. 0 yds. — 408 $\frac{1}{4}$.
 (181) 7 tons 13 cwt. 0 qrs. 10 lbs. 5 oz. 14 drs. — 971.
 (182) 5 tons 7 cwt. 0 qrs. 8 lbs. 9 oz. 6 drs. — 2189.
 (183) 4 tons 12 cwt. 2 qrs. 13 lbs. 3 oz. 2 drs. — 3351.
 (184) 4 dwts. 3 grs. — 6447. (185) 2 oz. 11 dwts. 7 grs. — 628.
 (186) 734 ac. 2 r. 21 p. 6 yds. 1 ft. 137 in. — 74.
 (187) 11 ac. 3 r. 37 p. 22 yds. 6 ft. 105 in. — 8076.
 (188) 374 ac. 1 r. 23 p. 2 yds. 8 ft. 109 in. — 242.
 (189) 97 c. yds. 3 ft. 1466 in. — 775.
 (190) 105 c. yds. 16 ft. 770 in. — 255.
 (191) 6 fur. 5 p. 5 yds. 0 ft. 5 in. — 4301.
 (192) 7 fur. 3 p. 0 yds. 0 ft. 10 in. — 4549.
 (193) 22 dys. 7 hrs. 7 m. 7 sec. — 6397.
 (194) 160 dys. 23 hrs. 22 m. 58 sec. — 289.
 (195) 9 lds. 4 qrs. 2 bus. 2 pks. — 2180.

- (196) 170 lbs. 2 qrs. 6 bus. 3 pks. — 317.
 (197) 21 yds. 1 qr. 0 nls. 2 in. — $450\frac{1}{2}$.
 (198) 9 yds. 1 qr. 2 nls. 0 in. — 2436.
 (199) 9 oz. 4 drs. 1 sc. 14 grs. — 137.
 (200) 2 oz. 0 drs. 1 sc. 3 grs. — 2050. (201) 17 yds. 2 ft.
 (202) 55 times. (203) 2 ft. 4 in. (204) 70 loads.
 (205) $8\frac{1}{2}$ pieces. (206) 18 times. (207) 111 posts.
 (208) 1 ton 14 cwt. 9 lbs. 8 oz. (209) 1 cwt. 2 qrs. 1 lb. $5\frac{1}{8}$ oz.
 (210) 90 ac. 3 r. 30 p. (211) 5 lbs. 3 oz. 13 dwts. 12 grs.
 (212) 117 times. (213) 3 bus. 2 pks. (214) 12 yrs. 7 mths.
 (215) £3. 8. $6\frac{1}{2}$. (216) 30 tons 1 cwt. 1 qr. 1 lb.
 (217) 1 fur. $124\frac{3}{8}$ yds. (218) 7s. 6d. (219) 12 days.
 (220) 19 lbs. 8 oz. (221) 1 bus. 1 gal. (222) 1 ac. 30 p.
 (223) 54914. (224) 1 ac. 2 r. 35 p. (225) 25 yards.
 (226) 12 boards. (227) 3 yds. 5 in. (228) 3 r. 35 p.
 (229) 2 qrs. $5\frac{1}{2}$ lbs. (230) 5 lbs. 4 oz. (231) 24.
 (232) 1 ac. 3 r. 30 p. (233) 5 cwt. 3 qrs. $26\frac{1}{2}$ lbs. (234) 600 times.
 (235) 1 ld. 4 bus. 2 pks. 2 qts. (236) 120 times. (237) £12. 11. 5.
 (238) 19602 times. (239) 24. (240) 19 ft.
 (241) 3 tons 6 cwt. 2 qrs. 20 lbs. (242) $2\frac{3}{4}$ d. (243) £4. 13. 4.
 (244) 100 times. (245) 21228 links. (246) 5 ac. 1 r. 35 p.
 (247) 4 c. ft. 1584 in. (248) 28000. (249) 368.
 (250) 2 qrs. 18 lbs. 2 oz. 15 drs.

GREATEST COMMON MEASURE.

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|------------|-----------|------------|-----------|-------------|------------|
| (1) 6. | (2) 60. | (3) 113. | (4) 2. | (5) 256. | (6) 31. |
| (7) 1. | (8) 999. | (9) 37. | (10) 413. | (11) 10. | (12) 317. |
| (13) 1. | (14) 1. | (15) 73. | (16) 901. | (17) 6. | (18) 59. |
| (19) 25. | (20) 608. | (21) 703. | | (22) 839. | (23) 17. |
| (24) 19. | (25) 23. | (26) 1. | (27) 11. | (28) 5. | (29) 101. |
| (30) 53. | (31) 12. | (32) 8. | (33) 292. | (34) 10111. | |
| (35) 97. | (36) 1. | (37) 2. | (38) 107. | (39) 213. | (40) 1. |
| (41) 990. | (42) 93. | (43) 1050. | | (44) 44. | (45) 31. |
| (46) 1103. | (47) 319. | (48) 909. | | (49) 51. | (50) 7013. |

LEAST COMMON MULTIPLE.

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|-----------|-----------|-----------|-----------|-----------|
| (1) 12. | (2) 112. | (3) 51. | (4) 168. | (5) 60. |
| (6) 42. | (7) 30. | (8) 56. | (9) 105. | (10) 63. |
| (11) 112. | (12) 288. | (13) 153. | (14) 300. | (15) 240. |
| (16) 374. | (17) 120. | (18) 452. | (19) 531. | (20) 120. |

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|-------------|------------|--------------|-------------|-------------|
| (21) 315. | (22) 5016. | (23) 1240. | (24) 2652. | (25) 9196. |
| (26) 57960. | (27) 1140. | (28) 504. | (29) 2520. | (30) 3465. |
| (31) 600. | (32) 96. | (33) 13300. | (34) 1482. | (35) 600. |
| (36) 35154. | (37) 2025. | (38) 171360. | (39) 1260. | (40) 720. |
| (41) 90. | (42) 180. | (43) 120. | (44) 55440. | (45) 240. |
| (46) 495. | (47) 999. | (48) 16575. | (49) 5880. | (50) 55029. |

VULGAR FRACTIONS.

Ex. I.

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|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| (1) $\frac{3}{2}$. | (2) $\frac{15}{3}$. | (3) $\frac{35}{5}$. | (4) $\frac{48}{10}$. | (5) $\frac{98}{7}$. |
| (6) $\frac{153}{9}$. | (7) $\frac{195}{15}$. | (8) $\frac{92}{4}$. | (9) $\frac{72}{8}$. | (10) $\frac{45}{3}$. |
| (11) $\frac{260}{10}$. | (12) $\frac{1053}{9}$. | (13) $\frac{266}{7}$. | (14) $\frac{561}{11}$. | (15) $\frac{1314}{18}$. |
| (16) $\frac{5418}{63}$. | (17) $\frac{6816}{71}$. | (18) $\frac{2625}{25}$. | (19) $\frac{1704}{24}$. | (20) $\frac{1102}{19}$. |

Ex. II.

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|------------------------------|-----------------------------|------------------------------|-----------------------------|--------------------------|
| (1) $\frac{3}{2}$. | (2) $\frac{7}{4}$. | (3) $\frac{5}{2}$. | (4) $\frac{29}{4}$. | (5) $\frac{35}{4}$. |
| (6) $\frac{46}{5}$. | (7) $\frac{24}{7}$. | (8) $\frac{49}{5}$. | (9) $\frac{101}{9}$. | (10) $\frac{43}{8}$. |
| (11) $\frac{83}{9}$. | (12) $\frac{226}{15}$. | (13) $\frac{847}{8}$. | (14) $\frac{167}{13}$. | (15) $\frac{1253}{16}$. |
| (16) $\frac{11720}{13}$. | (17) $\frac{677}{6}$. | (18) $\frac{1180}{13}$. | (19) $\frac{1158}{17}$. | (20) $\frac{169}{10}$. |
| (21) $\frac{439}{6}$. | (22) $\frac{2127}{23}$. | (23) $\frac{116}{7}$. | (24) $\frac{169}{10}$. | |
| (25) $\frac{220}{19}$. | (26) $\frac{2554}{15}$. | (27) $\frac{2027}{21}$. | (28) $\frac{651248}{807}$. | |
| (29) $\frac{13562}{71}$. | (30) $\frac{1559}{40}$. | (31) $\frac{10505}{102}$. | | |
| (32) $\frac{13189}{137}$. | (33) $\frac{1955}{38}$. | (34) $\frac{7020}{11}$. | | |
| (35) $\frac{98266}{109}$. | (36) $\frac{193973}{449}$. | (37) $\frac{5539}{40}$. | | |
| (38) $\frac{1972}{28}$. | (39) $\frac{1551}{16}$. | (40) $\frac{754577}{1076}$. | | |
| (41) $\frac{29254}{212}$. | (42) $\frac{41999}{60}$. | (43) $\frac{1700}{125}$. | | |
| (44) $\frac{15450}{133}$. | (45) $\frac{14447}{182}$. | (46) $\frac{50921}{117}$. | | |
| (47) $\frac{990264}{110}$. | (48) $\frac{65592}{89}$. | (49) $\frac{3851}{17}$. | | |
| (50) $\frac{1544664}{512}$. | | | | |

Ex. III.

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| (1) 4; 10. | (2) $6\frac{1}{3}$; $6\frac{2}{5}$. | (3) $2\frac{2}{3}$; $16\frac{2}{5}$. | (4) $3\frac{1}{8}$; 15. |
| (5) $5\frac{1}{2}$; $11\frac{4}{7}$. | (6) $2\frac{1}{7}$; $4\frac{2}{3}$. | (7) $3\frac{2}{5}$; $4\frac{3}{7}$. | (8) 3; 20. |
| (9) $12\frac{2}{5}$; $8\frac{1}{2}$. | (10) $15\frac{6}{8}$; $6\frac{1}{15}$. | (11) $9\frac{0}{18}$; $7\frac{11}{15}$. | (12) $64\frac{6}{11}$; $13\frac{4}{13}$. |
| (13) $3\frac{9}{10}$; $7\frac{4}{12}$. | (14) $55\frac{5}{13}$; $60\frac{1}{15}$. | (15) $9\frac{8}{8}$; 303. | (16) $70\frac{6}{7}$; $60\frac{1}{15}$. |
| (17) $14\frac{3}{10}$; $64\frac{15}{7}$. | (18) $5\frac{9}{10}$; $21\frac{8}{13}$. | (19) $20\frac{3}{14}$; $24\frac{1}{11}$. | |
| (20) $61\frac{24}{17}$; $82\frac{5}{13}$. | (21) $53\frac{23}{33}$; $7\frac{94}{103}$. | (22) $41\frac{12}{103}$; $38\frac{9}{19}$. | |
| (23) 191; $16\frac{9}{13}$. | (24) $65\frac{5}{17}$; $16\frac{5}{11}$. | (25) $3\frac{8}{108}$; $77\frac{14}{11}$. | |

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| (26) $7; 8\frac{4}{11}$. | (27) $8\frac{1}{11}; 15\frac{5}{11}$. | (28) $27; 10\frac{1}{2}$. |
| (29) $202\frac{8}{11}; 7\frac{4}{11}$. | (30) $57\frac{3}{11}; 203\frac{5}{11}$. | (31) $34\frac{10}{11}; 11$. |
| (32) $88\frac{10}{11}; 13\frac{1}{11}$. | (33) $2\frac{10}{11}; 7\frac{6}{11}$. | (34) $69\frac{2}{11}; 14\frac{2}{11}$. |
| (35) $200\frac{10}{11}; 5\frac{1}{11}$. | (36) $83\frac{7}{11}; 25\frac{7}{11}$. | (37) $507\frac{10}{11}; 461\frac{3}{11}$. |
| (38) $53\frac{10}{11}; 48\frac{10}{11}$. | (39) $12\frac{10}{11}; 14\frac{6}{11}$. | (40) $27\frac{5}{11}; 61\frac{10}{11}$. |
| (41) $108\frac{7}{11}; 236\frac{7}{11}$. | (42) $70\frac{4}{11}; 80\frac{4}{11}$. | (43) $102\frac{3}{11}; 227\frac{1}{11}$. |
| (44) $195\frac{1}{11}; 247\frac{1}{11}$. | (45) $643; 234\frac{2}{11}$. | (46) $1924\frac{9}{11}; 1163\frac{4}{11}$. |
| (47) $16\frac{10}{11}; 20\frac{7}{11}$. | (48) $30\frac{1}{11}; 9\frac{2}{11}$. | (49) $88\frac{1}{11}; 11\frac{7}{11}$. |
| (50) $12\frac{10}{11}; 112\frac{10}{11}$. | | |

Ex. IV.

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|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| (1) $\frac{2}{3}; \frac{3}{4}$. | (2) $\frac{1}{2}; \frac{1}{3}$. | (3) $\frac{2}{3}; \frac{1}{4}$. | (4) $\frac{3}{5}; \frac{1}{6}$. |
| (5) $\frac{2}{3}; \frac{2}{5}$. | (6) $\frac{1}{2}; \frac{1}{5}$. | (7) $\frac{1}{2}; \frac{1}{3}$. | (8) $\frac{2}{3}; \frac{1}{5}$. |
| (9) $\frac{1}{2}; \frac{1}{10}$. | (10) $\frac{1}{2}; \frac{1}{10}$. | (11) $\frac{1}{2}; \frac{1}{10}$. | (12) $\frac{2}{3}; \frac{1}{5}$. |
| (13) $\frac{2}{3}; \frac{1}{10}$. | (14) $\frac{1}{2}; \frac{1}{3}$. | (15) $\frac{2}{3}; \frac{1}{10}$. | (16) $\frac{2}{3}; \frac{1}{5}$. |
| (17) $\frac{2}{3}; \frac{1}{10}$. | (18) $\frac{1}{2}; \frac{1}{3}$. | (19) $\frac{1}{2}; \frac{1}{3}$. | (20) $\frac{2}{3}; \frac{5}{6}$. |
| (21) $\frac{2}{3}; \frac{1}{5}$. | (22) $\frac{1}{2}; \frac{1}{10}$. | (23) $\frac{1}{2}; \frac{1}{10}$. | (24) $\frac{2}{3}; \frac{1}{5}$. |
| (25) $\frac{1}{2}; \frac{1}{10}$. | (26) $\frac{1}{2}; \frac{1}{10}$. | (27) $\frac{1}{2}; \frac{1}{10}$. | (28) $\frac{2}{3}; \frac{1}{5}$. |
| (29) $\frac{1}{2}; \frac{1}{10}$. | (30) $\frac{1}{2}; \frac{1}{10}$. | (31) $\frac{1}{2}; \frac{1}{10}$. | (32) $\frac{2}{3}; \frac{1}{5}$. |
| (33) $\frac{1}{2}; \frac{1}{10}$. | (34) $\frac{1}{2}; \frac{1}{10}$. | (35) $\frac{1}{2}; \frac{1}{10}$. | (36) $\frac{1}{2}; \frac{1}{10}$. |
| (37) $\frac{2}{3}; \frac{1}{10}$. | (38) $\frac{2}{3}; \frac{1}{10}$. | (39) $\frac{2}{3}; \frac{1}{10}$. | (40) $\frac{2}{3}; \frac{1}{10}$. |
| (41) $\frac{1}{2}; \frac{1}{10}$. | (42) $\frac{2}{3}; \frac{1}{10}$. | (43) $\frac{1}{2}; \frac{1}{10}$. | (44) $\frac{2}{3}; \frac{1}{10}$. |
| (45) $\frac{2}{3}; \frac{1}{10}$. | (46) $\frac{1}{2}; \frac{1}{10}$. | (47) $\frac{1}{2}; \frac{1}{10}$. | (48) $\frac{2}{3}; \frac{1}{10}$. |
| (49) $\frac{1}{2}; \frac{1}{10}$. | (50) $\frac{1}{2}; \frac{1}{10}$. | | |

Ex. V.

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|---|--|-------------------------------|
| (1) $\frac{6, 4, 3}{12}$. | (2) $\frac{6, 3, 2}{18}$. | (c) $\frac{16, 18, 15}{24}$. |
| (4) $\frac{20, 15, 16}{100}$. | (5) $\frac{12, 6, 3}{23}$. | |
| (6) $\frac{6, 4, 24, 21}{66}$. | (7) $\frac{6, 8, 9, 5}{12}$. | |
| (8) $\frac{30, 16, 14, 33}{36}$. | (9) $\frac{110, 33, 135, 66}{165}$. | |
| (10) $\frac{6, 9, 20, 14}{24}$. | (11) $\frac{78, 52, 45, 61}{117}$. | |
| (12) $\frac{72, 50, 63, 6}{90}$. | (13) $\frac{45, 110, 112, 69}{120}$. | |
| (14) $\frac{378, 385, 300, 350}{420}$. | (15) $\frac{600, 385, 891, 1080}{1485}$. | |
| (16) $\frac{22, 25, 20, 27}{30}$. | (17) $\frac{2240, 904, 2147, 678}{2260}$. | |

- (18) $\frac{48, 49, 20, 22}{56}$.
- (20) $\frac{54, 108, 81, 40}{144}$.
- (22) $\frac{600, 560, 525, 400}{1680}$.
- (24) $\frac{1040, 936, 585, 540}{1440}$.
- (26) $\frac{24, 30, 37, 221}{222}$.
- (28) $\frac{675, 680, 468, 660}{720}$.
- (30) $\frac{216, 66, 104, 183}{240}$.
- (32) $\frac{400, 630, 93, 690}{720}$.
- (34) $\frac{882, 1155, 360, 900}{1260}$.
- (36) $\frac{171, 126, 131, 140, 60}{180}$.
- (38) $\frac{218025, 218880, 219640, 220320, 220932}{232560}$.
- (39) $\frac{32, 14, 27, 30, 39}{48}$.
- (41) $\frac{504, 510, 434, 168, 476}{714}$.
- (42) $\frac{108, 555, 481, 630, 886}{999}$.
- (43) $\frac{58905, 55440, 52360, 47124, 44880}{171360}$.
- (44) $\frac{992, 276, 220, 899}{1240}$.
- (46) $\frac{205, 110, 480, 78}{510}$.
- (48) $\frac{7425, 3000, 4675, 9570, 2244}{36300}$.
- (49) $\frac{57, 32, 84, 80, 72}{96}$.
- (50) $\frac{2079, 1925, 2205, 2970, 1320, 1155}{3465}$.
- (19) $\frac{12, 45, 28, 21}{63}$.
- (21) $\frac{585, 520, 468, 390}{720}$.
- (23) $\frac{44, 25, 70, 110}{385}$.
- (25) $\frac{105, 28, 432, 468}{504}$.
- (27) $\frac{150, 175, 96, 55}{200}$.
- (29) $\frac{12, 21, 20, 14}{24}$.
- (31) $\frac{34, 108, 92, 39}{138}$.
- (33) $\frac{108, 132, 84, 102}{180}$.
- (35) $\frac{30, 40, 45, 48, 50}{60}$.
- (37) $\frac{3520, 1782, 1620, 1815, 3600}{3960}$.
- (40) $\frac{1008, 651, 819, 728, 708}{1092}$.
- (45) $\frac{18, 72, 93, 116}{204}$.
- (47) $\frac{2100, 2160, 2205, 2240, 2268, 2310}{2520}$.

Ex. VI.

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|--------------------------|-------------------------|--------------------------|---------------------------|
| (1) $\frac{1}{8}$. | (2) $\frac{3}{8}$. | (3) $\frac{4}{9}$. | (4) $\frac{1}{4}$. |
| (5) $\frac{1}{12}$. | (6) $\frac{1}{10}$. | (7) $\frac{81}{175}$. | (8) $\frac{56}{175}$. |
| (9) $\frac{6}{49}$. | (10) $\frac{61}{231}$. | (11) 2. | (12) $3\frac{1}{21}$. |
| (13) $1\frac{9}{10}$. | (14) $6\frac{3}{4}$. | (15) $27\frac{3}{10}$. | (16) $2295\frac{15}{2}$. |
| (17) $3\frac{1}{2}$. | (18) $\frac{1}{6}$. | (19) $1\frac{3}{4}$. | (20) $74\frac{2}{3}$. |
| (21) $316\frac{3}{8}$. | (22) 2. | (23) 5. | (24) $41\frac{6}{11}$. |
| (25) $4\frac{71}{210}$. | (26) $71\frac{3}{10}$. | (27) $\frac{1}{4}$. | (28) $\frac{1}{6}$. |
| (29) $4\frac{2}{7}$. | (30) $2\frac{7}{24}$. | (31) $1\frac{2}{3}$. | (32) $\frac{5}{18}$. |
| (33) $1244\frac{1}{3}$. | (34) 12. | (35) $5\frac{5}{12}$. | (36) $5\frac{1}{4}$. |
| (37) $4\frac{1}{2}$. | (38) $4\frac{1}{2}$. | (39) $\frac{1}{11}$. | (40) 9. |
| (41) $2\frac{1}{4}$. | (42) $\frac{1}{4}$. | (43) $3\frac{1}{11}$. | (44) $4\frac{1}{2}$. |
| (45) $\frac{1}{4}$. | (46) $7\frac{1}{4}$. | (47) $2438\frac{1}{2}$. | (48) $28\frac{1}{2}$. |
| (49) $1\frac{2}{27}$. | (50) $\frac{5}{6}$. | | |

Ex. VII.

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|-----------------------------|----------------------------|--------------------------|---------------------------|
| (1) $1\frac{1}{2}$. | (2) $\frac{29}{10}$. | (3) $\frac{5}{14}$. | (4) $\frac{7}{10}$. |
| (5) $\frac{3}{8}$. | (6) 1. | (7) $1\frac{1}{2}$. | (8) $2\frac{3}{7}$. |
| (9) $2\frac{3}{8}$. | (10) $1\frac{4}{8}$. | (11) $1\frac{3}{8}$. | (12) $\frac{25}{88}$. |
| (13) 2. | (14) $2\frac{31}{64}$. | (15) $1\frac{4}{7}$. | (16) $1\frac{2}{3}$. |
| (17) $2\frac{3}{11}$. | (18) $2\frac{29}{105}$. | (19) $2\frac{61}{55}$. | (20) $1\frac{19}{100}$. |
| (21) $2\frac{65}{74}$. | (22) $1\frac{9}{24}$. | (23) $1\frac{11}{12}$. | (24) $3\frac{3}{11}$. |
| (25) $2\frac{6}{8}$. | (26) $1\frac{7}{8}$. | (27) $3\frac{1}{20}$. | (28) $3\frac{22}{50}$. |
| (29) $31\frac{217}{1080}$. | (30) $14\frac{1}{10}$. | (31) $8\frac{2}{11}$. | (32) $16\frac{4}{16}$. |
| (33) $19\frac{13}{35}$. | (34) $10\frac{24}{35}$. | (35) $20\frac{5}{12}$. | (36) $39\frac{3}{10}$. |
| (37) $42\frac{38}{8}$. | (38) $23\frac{2}{5}$. | (39) $30\frac{34}{85}$. | (40) $28\frac{59}{108}$. |
| (41) $19\frac{7}{10}$. | (42) $10\frac{505}{772}$. | (43) $1\frac{1}{4}$. | (44) $6\frac{79}{108}$. |
| (45) $14\frac{1}{4}$. | (46) 27. | (47) $34\frac{1}{8}$. | (48) $13\frac{5}{8}$. |
| (49) $29\frac{5}{8}$. | (50) 13. | | |

Ex. VIII.

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|--------------------------|-------------------------|--------------------------|--------------------------|
| (1) $\frac{1}{6}$. | (2) $\frac{2}{35}$. | (3) $1\frac{1}{2}$. | (4) $1\frac{10}{21}$. |
| (5) $\frac{33}{66}$. | (6) $\frac{59}{110}$. | (7) $\frac{1}{2}$. | (8) $\frac{29}{64}$. |
| (9) $\frac{284}{515}$. | (10) $\frac{1}{8}$. | (11) $\frac{16}{8}$. | (12) $7\frac{29}{8}$. |
| (13) $1\frac{25}{63}$. | (14) $\frac{10}{11}$. | (15) $\frac{7}{8}$. | (16) $12\frac{2}{35}$. |
| (17) $5\frac{7}{8}$. | (18) $\frac{59}{60}$. | (19) $\frac{53}{60}$. | (20) $2\frac{2}{57}$. |
| (21) $101\frac{3}{10}$. | (22) $5\frac{3}{10}$. | (23) $2\frac{67}{12}$. | (24) $11\frac{1}{7}$. |
| (25) $\frac{23}{124}$. | (26) $\frac{33}{30}$. | (27) $\frac{173}{230}$. | (28) $\frac{49}{230}$. |
| (29) $1\frac{3}{33}$. | (30) $2\frac{41}{50}$. | (31) $1\frac{49}{72}$. | (32) $\frac{33}{30}$. |
| (33) 0. | (34) $\frac{6}{8}$. | (35) $\frac{3}{7}$. | (36) $2\frac{49}{132}$. |
| (37) $\frac{1}{20}$. | (38) $1\frac{7}{2}$. | (39) $\frac{29}{60}$. | (40) $4\frac{3}{8}$. |

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|---------------------------|--------------------------|--------------------------|-------------------------|
| 41) $\frac{2}{3}$. | (42) $5\frac{2}{3}$. | (43) $1\frac{61}{113}$. | (44) $\frac{50}{105}$. |
| (45) $1\frac{421}{440}$. | (46) $3\frac{7}{8}$. | (47) $5\frac{1}{8}$. | (48) $2\frac{5}{28}$. |
| (49) $\frac{93}{128}$. | (50) $11\frac{39}{48}$. | | |

Ex. IX.

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|---------------------------|-------------------------|-------------------------|-------------------------|
| (1) $\frac{2}{3}$ | (2) $2\frac{1}{2}$. | (3) $\frac{4}{5}$. | (4) $\frac{1}{4}$. |
| (5) $\frac{7}{10}$ | (6) $\frac{5}{8}$. | (7) $\frac{49}{102}$. | (8) $1\frac{1}{2}$. |
| (9) $\frac{6}{7}$. | (10) $19\frac{7}{2}$. | (11) 33. | (12) $\frac{4}{5}$. |
| (13) $\frac{8}{9}$. | (14) $21\frac{3}{8}$. | (15) 21. | (16) $\frac{27}{100}$. |
| (17) $\frac{5}{21}$. | (18) $21\frac{1}{4}$. | (19) 12. | (20) $\frac{6}{7}$. |
| (21) $1\frac{1}{3}$. | (22) $\frac{55}{100}$. | (23) 1200. | (24) 14. |
| (25) $6\frac{6}{10}$. | (26) $\frac{1}{6}$. | (27) $5\frac{5}{8}$. | (28) $\frac{9}{36}$. |
| (29) 40. | (30) $13\frac{7}{8}$. | (31) $11\frac{7}{10}$. | (32) $1\frac{1}{2}$. |
| (33) $6\frac{3}{10}$. | (34) $34\frac{1}{2}$. | (35) $\frac{1}{2}$. | (36) $3\frac{1}{3}$. |
| (37) $16\frac{10}{100}$. | (38) $1\frac{10}{10}$. | (39) $26\frac{1}{4}$. | (40) $\frac{1}{108}$. |
| (41) 13. | (42) $\frac{5}{8}$. | (43) $15\frac{1}{2}$. | (44) $4\frac{4}{10}$. |
| (45) $5\frac{3}{3}$. | (46) 72. | (47) $3\frac{9}{102}$. | (48) $4\frac{2}{3}$. |
| (49) $5\frac{1}{10}$. | (50) $93\frac{2}{3}$. | | |

Ex. X.

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|-----------------------------|----------------------------|-------------------------|--------------------------|
| (1) $2\frac{1}{4}$. | (2) $2\frac{1}{7}$. | (3) $\frac{5}{6}$. | (4) $\frac{3}{8}$. |
| (5) $1\frac{1}{4}$. | (6) $1\frac{1}{10}$. | (7) $\frac{1}{8}$. | (8) $11\frac{7}{8}$. |
| (9) $\frac{7}{8}$. | (10) $\frac{45}{66}$. | (11) $\frac{24}{35}$. | (12) $\frac{1}{5}$. |
| (13) $193\frac{1}{3}$. | (14) $33\frac{2}{3}$. | (15) $1\frac{22}{33}$. | (16) $1\frac{1}{6}$. |
| (17) 14. | (18) $30\frac{1}{6}$. | (19) $\frac{1}{6}$. | (20) $\frac{5}{7}$. |
| (21) $\frac{2}{5}$. | (22) $5\frac{7}{8}$. | (23) $\frac{48}{100}$. | (24) $\frac{64}{100}$. |
| (25) $\frac{20}{378}$. | (26) $\frac{510}{1000}$. | (27) $\frac{337}{40}$. | (28) $21\frac{7}{10}$. |
| (29) $273\frac{1}{3}$. | (30) $1\frac{6347}{666}$. | (31) $62\frac{6}{10}$. | (32) $3\frac{53}{100}$. |
| (33) $21\frac{313}{1081}$. | (34) $1\frac{9}{101}$. | (35) $33\frac{9}{35}$. | (36) $30\frac{1}{4}$. |
| (37) 18. | (38) $\frac{4}{5}$. | (39) $13\frac{1}{2}$. | (40) $1\frac{1}{2}$. |
| (41) $\frac{100}{337}$. | (42) $1\frac{7}{10}$. | (43) $46\frac{7}{11}$. | (44) $1\frac{2}{3}$. |
| (45) $12\frac{5}{100}$. | (46) $20\frac{3}{10}$. | (47) $\frac{7}{32}$. | (48) $\frac{7}{8}$. |
| (49) $14\frac{7}{4}$. | (50) $11\frac{1}{4}$. | | |

Ex. XI.

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|------------------------------|---------------------------|--------------------------|--------------------------|
| (1) $2\frac{1}{3}$. | (2) $1\frac{400}{1320}$. | (3) $41\frac{5}{8}$. | (4) $6\frac{25}{1078}$. |
| (5) $12\frac{542}{1007}$. | (6) $\frac{304}{2040}$. | (7) $\frac{2}{5}$. | (8) $10\frac{7}{8}$. |
| (9) $1\frac{1}{5}$. | (10) $11\frac{1}{2}$. | (11) $2787\frac{5}{6}$. | (12) $\frac{1}{10}$. |
| (13) $14\frac{3443}{4088}$. | (14) 0. | (15) $81\frac{1}{4}$. | (16) $39\frac{9}{100}$. |
| (17) $\frac{2}{3}$. | (18) $42\frac{9}{7}$. | (19) $7\frac{7}{10}$. | (20) $34\frac{1}{4}$. |
| (21) 0. | (22) $2\frac{1}{5}$. | (23) $2\frac{1}{6}$. | (24) $2\frac{2}{3}$. |

Ex. XII.

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|--|---|-----------------------------------|
| (1) £22. 17. 10 $\frac{1}{2}$. | (2) £16. 11. 11 $\frac{1}{4}$. | (3) £20. 0. 7 $\frac{7}{8}$. |
| (4) £28. 15. 4 $\frac{2}{3}$. | (5) £32. 11. 4 $\frac{5}{8}$. | (6) £25. 7. 8 $\frac{5}{8}$. |
| (7) £25. 0. 11 $\frac{5}{8}$. | (8) £22. 16. 6 $\frac{3}{4}$. | (9) £28. 11. 1 $\frac{7}{8}$. |
| (10) £15. 15. 5 $\frac{1}{2}$. | (11) 14s. 2 $\frac{3}{8}$ d. | (12) 9s. 7 $\frac{3}{4}$ d. |
| (13) 1s. 7 $\frac{1}{2}$ d. | (14) £6. 8. 8 $\frac{5}{8}$. | (15) £3. 9. 11 $\frac{1}{8}$. |
| (16) £3. 0. 8 $\frac{7}{8}$. | (17) £71. 16. 6 $\frac{1}{2}$. | (18) £56. 1. 3 $\frac{3}{8}$. |
| (19) £1. 0. 10 $\frac{7}{8}$. | (20) £33. 16. 9 $\frac{0}{8}$. | (21) £55. 8. 2. |
| (22) £118. 10. 0. | (23) £110. 16. 9 $\frac{3}{4}$. | (24) £1. 16. 2. |
| (25) £8. 6. 0 $\frac{9}{16}$. | (26) £2. 12. 4 $\frac{1}{8}$. | (27) £53. 1. 0 $\frac{1}{2}$. |
| (28) £41. 12. 10 $\frac{3}{8}$. | (29) £63. 18. 5 $\frac{3}{4}$. | (30) £81. 17. 5 $\frac{7}{8}$. |
| (31) 19 cwt. 1 qr. 6 lbs. | (32) 45 tons 10 cwt. 1 $\frac{1}{2}$ lbs. | |
| (33) 68 ac. 2 r. 27 $\frac{3}{8}$ p. | (34) 92 lbs. 4 oz. 1 dwt. 11 $\frac{2}{3}$ grs. | |
| (35) 89 qrs. 3 bus. 1 $\frac{3}{8}$ pks. | (36) 111 dys. 5 h. 51 $\frac{1}{4}$ m. | |
| (37) 10 m. 1 f. 75 $\frac{2}{3}$ yds. | (38) 107 yds. 1 ft. 3 $\frac{3}{4}$ in. | |
| (39) 982 yds. 1 n. 0 $\frac{1}{2}$ in. | (40) 42 c. yds. 3 ft. 1111 $\frac{3}{8}$ in. | |
| (41) £4. 12. 7 $\frac{1}{2}$. | (42) 17s. 4 $\frac{8}{10}$ d. | (43) £3. 17. 9 $\frac{1}{8}$. |
| (44) £12. 13. 4 $\frac{1}{8}$. | (45) £9. 0. 9. | (46) £3. 3. 9 $\frac{3}{8}$. |
| (47) £1. 9. 4 $\frac{2}{3}$. | (48) £297. 2. 6 $\frac{1}{4}$. | (49) £501. 19. 10 $\frac{1}{4}$. |
| (50) £24. 9. 4 $\frac{5}{8}$. | (51) 3 ac. 2 r. 32 $\frac{1}{8}$ p. | |
| (52) 1 lb. 7 oz. 14 $\frac{8}{10}$ drs. | (53) 3 qrs. 7 bus. 0 $\frac{1}{2}$ pks. | |
| (54) 11 yrs. 136 dys. 8 $\frac{3}{4}$ hrs. | (55) 15 m. 5 f. 34 p. 4 $\frac{1}{16}$ yds. | |
| (56) 7 sq. ft. 63 $\frac{2}{3}$ in. | (57) 371 yds. 1 ft. 6 $\frac{1}{4}$ in. | |
| (58) 8 cwt. 10 $\frac{1}{2}$ lbs. | (59) 2 cwt. 2 qrs. 8 lbs. | |
| (60) 140 lbs. 7 oz. 1 dr. 6 $\frac{2}{3}$ grs. | (61) £1. 16. 3 $\frac{1}{2}$. | |
| (62) 9s. 4d. | (63) 2s. 11 $\frac{1}{4}$ d. | (64) 10 $\frac{1}{2}$ d. |
| (65) 1s. 3 $\frac{1}{2}$ d. | (66) £5. 4. 11 $\frac{1}{8}$. | (67) 1s. 1 $\frac{1}{2}$ d. |
| (68) £6. 18. 10 $\frac{3}{8}$. | (69) £5. 1. 2 $\frac{1}{2}$. | (70) 4s. 3 $\frac{1}{2}$ d. |
| (71) 7s. 0 $\frac{1}{8}$ d. | (72) 4s. 5 $\frac{1}{2}$ d. | (73) 14s. 7d. |
| (74) 6s. 4 $\frac{3}{4}$ d. | (75) 2s. 1 $\frac{7}{8}$ d. | (76) 3 cwt. 1 qr. 4 lbs. |
| (77) 1 cwt. 1 $\frac{5}{8}$ lbs. | (78) 1 lb. 5 oz. 4 $\frac{1}{2}$ drs. | |
| (79) 4 cwt. 2 qrs. 8 $\frac{3}{8}$ lbs. | (80) 12 lbs. 2 oz. | |
| (81) 7 lbs. 4 oz. | (82) 1 ton 11 cwt. 3 qrs. 13 lbs. | |
| (83) 15 cwt. 2 qrs. 26 $\frac{3}{8}$ lbs. | (84) 1 ton 7 cwt. 7 lbs. | |
| (85) 7 c. ft. 648 in. | (86) 16 cwt. 3 lbs. 4 oz. | |
| (87) 2 m. 6 f. 97 $\frac{1}{4}$ yds. | (88) 6 fur. 4 p. 3 $\frac{1}{2}$ yds. | |
| (89) 3 hrs. 16 $\frac{1}{4}$ min. | (90) 1 dy. 19 hrs. 30 $\frac{3}{4}$ m. | |
| (91) 1 ac. 1 r. 26 p. 28 yds. 0 $\frac{7}{16}$ ft. | (92) 1 ft. 1 $\frac{2}{3}$ in. | |
| (93) 3 pks. 1 gal. 1 qt. 1 $\frac{1}{3}$ pts. | (94) 1 qr. 2 bus. 0 $\frac{1}{2}$ pks. | |
| (95) 2 fur. 4 $\frac{1}{10}$ yds. | (96) 1 hr. 21 $\frac{3}{8}$ min. | |

(97) 14 cwt. 1 qr. 4 lbs.

(98) 18 cwt. 1 qr. 10½ lbs.

(99) 6 m. 7 fur. 82½ yds.

(100) 1 cwt. 2 qrs. 15¾ lbs.

Ex. XIII.

(1) $\frac{1}{8}$.	(2) $\frac{4}{15}$.	(3) $\frac{2}{3}$.	(4) $\frac{11}{30}$.
(5) $\frac{59}{300}$.	(6) $\frac{19}{70}$.	(7) $\frac{51}{2130}$.	(8) $\frac{17}{108}$.
(9) $\frac{17}{8}$.	(10) $\frac{1}{4}$.	(11) $\frac{7}{20}$.	(12) $\frac{37}{60}$.
(13) $\frac{173}{360}$.	(14) $\frac{95}{1392}$.	(15) $\frac{14}{15}$.	(16) $\frac{33}{61}$.
(17) $\frac{3}{10}$.	(18) $\frac{40}{139}$.	(19) $\frac{21}{133}$.	(20) $1\frac{43}{60}$.
(21) $\frac{91}{100}$.	(22) $\frac{41}{80}$.	(23) $\frac{1}{6}$.	(24) $\frac{47}{30}$.
(25) $\frac{1393}{4201}$.	(26) $1\frac{30}{400}$.	(27) $\frac{4413}{480}$.	(28) $\frac{425}{2263}$.
(29) $\frac{569}{648}$.	(30) $1\frac{393}{6000}$.	(31) $\frac{9769}{11112}$.	(32) $\frac{25}{25}$.
(33) $1\frac{25}{284}$.	(34) $\frac{69}{290}$.	(35) $\frac{5891}{8000}$.	(36) $\frac{979}{4090}$.
(37) $1\frac{66}{119}$.	(38) $\frac{92}{1243}$.	(39) $4\frac{17}{2}$.	(40) $\frac{10}{60}$.
(41) $\frac{113}{240}$.	(42) $\frac{1}{10}$.	(43) $\frac{1}{3}$.	(44) $\frac{13}{23}$.
(45) $1\frac{5}{16}$.	(46) $\frac{1}{5}$.	(47) $\frac{108}{1962}$.	(48) $\frac{6}{8}$.
(49) $\frac{2}{5}$.	(50) $\frac{1}{3}$.	(51) $\frac{1}{5}$.	(52) $\frac{35}{72}$.
(53) $\frac{1}{480}$.	(54) $\frac{53}{80}$.	(55) $\frac{27}{32}$.	(56) $\frac{113}{200}$.
(57) $\frac{57}{184}$.	(58) $\frac{5}{15}$.	(59) $\frac{1}{4}$.	(60) $\frac{5}{64}$.
(61) $\frac{753}{4000}$.	(62) $\frac{11}{336}$.	(63) $1\frac{23}{48}$.	(64) $1\frac{35}{52}$.
(65) $\frac{22}{61}$.	(66) $\frac{205}{10368}$.	(67) $\frac{61}{224}$.	(68) $\frac{111}{290}$.
(69) $3\frac{94}{195}$.	(70) $\frac{7}{30}$.	(71) $\frac{5}{192}$.	(72) $1\frac{32}{176}$.
(73) $\frac{23}{35}$.	(74) $\frac{1}{5}$.	(75) $\frac{1}{812}$.	(76) $\frac{15661}{32076}$.
(77) $1\frac{13}{176}$.	(78) $\frac{1}{4}$.	(79) $\frac{5}{12}$.	(80) $1\frac{4}{33}$.

Ex. XIV.

(1) $\frac{3}{20}$.	(2) $\frac{8}{9}$.	(3) $\frac{26}{35}$.	(4) $1\frac{147}{475}$.
(5) $\frac{281}{368}$.	(6) $\frac{87}{206}$.	(7) $\frac{47}{96}$.	(8) $1\frac{47}{63}$.
(9) $\frac{11}{21}$.	(10) $\frac{23}{366}$.	(11) $\frac{1}{4}$.	(12) $\frac{113}{198}$.
(13) $\frac{357}{400}$.	(14) $\frac{10}{11}$.	(15) $\frac{75}{94}$.	(16) $6\frac{2}{33}$.
(17) $\frac{89}{168}$.	(18) $\frac{110}{117}$.	(19) $1\frac{1}{4}$.	(20) $5\frac{9}{55}$.
(21) $1\frac{419}{1120}$.	(22) $11\frac{13}{17}$.	(23) $\frac{47}{121}$.	(24) $\frac{1}{384}$.
(25) $1\frac{1}{35}$.	(26) $\frac{8}{77}$.	(27) $\frac{9}{800}$.	(28) $1\frac{9}{61}$.
(29) $\frac{35}{66}$.	(30) $\frac{267}{5236}$.	(31) $2\frac{55}{168}$.	(32) $3\frac{4273}{10800}$.
(33) $\frac{231}{45}$.	(34) $15\frac{1}{2}$.	(35) $6\frac{32}{33}$.	(36) $\frac{7}{2}$.
(37) $1\frac{41}{55}$.	(38) $3\frac{37}{40}$.	(39) $4\frac{3}{5}$.	(40) $1\frac{251}{420}$.
(41) $\frac{13}{30}$.	(42) $\frac{1}{3}$.	(43) $\frac{7}{48}$.	(44) $41\frac{9}{196}$.
(45) $\frac{91}{150}$.	(46) $\frac{1}{3}$.	(47) $\frac{2751}{5405}$.	(48) $\frac{938}{1461}$.
(49) $1\frac{1}{100}$.	(50) $1\frac{95}{256}$.		

Ex. XV.

(1) $1\frac{9}{10}$.	(2) $1\frac{1}{2}$.	(3) $3\frac{13}{36}$.
(4) $\frac{1}{2}$.	(5) £2. 13. $1\frac{7}{8}$.	(6) £1. 4. 0.

- | | | |
|---------------------------------|---|---|
| (7) £14. 4. 10½. | (8) 2½. | (9) 21½. |
| (10) 1 yd. 3¾ in. | (11) 3 hrs. 25½ min. | |
| (12) 33 ac. 1 r. 13 p. 10⅓ yds. | (13) £34. 1. 3. | |
| (14) ⅜. | (15) £182. | (16) £558. 9. 9¼. |
| (17) £8. 19. 7⅞. | (18) 4s. 7⅓ d. | (19) £3. 15. 0. |
| (20) 2⅜. | (21) 18 ft. | (22) ⅜. |
| (23) ⅞. | (24) 7. | (25) 8s. 7⅓ d. |
| (26) ⅜. | (27) 50 times. | (28) £2. 14. 0. |
| (29) 44000. | (30) £121. 10. 11⅓. | (31) ⅜. |
| (32) 2¼ d. | (33) 2⅓. | (34) £255. 12. 6. gain. |
| (35) £3791. 15. 6. | (36) ⅞. | (37) 1⅜. |
| (38) 1s. 1¼ d. | (39) £91. 12. 0. | (40) A. 13s.; B. 8s. |
| (41) 2⅓. | (42) ⅞. | (43) 1⅜. |
| (44) 1½. | (45) 3⅜. | (46) 1⅜. |
| (47) 19. | (48) £21. 18. 6½. | |
| (49) 7 bus. 1 pk. 1 gal. 2 qts. | (50) 5 miles. | |
| (51) 77806⅒ gals. | (51) 12⅓. | (53) ⅜. |
| (54) 1⅜. | (52) 121⅓. | (56) £2. 10. 0. |
| (57) Latter by ⅜. | (53) ⅜. | (59) ⅜. |
| (60) £27. 11. 7½. | (54) 383⅞. | (62) 2⅜. |
| (63) 300 bales. | (64) 1 ac. 2 r. 5¼ p. | (65) 10000. |
| (66) 4½ d. | (67) 276480 rev. | (68) ⅜. |
| (69) 1 ft. 4½ in. | (70) 66⅓ tons. | (71) 6596 and 4947. |
| (72) 84586⅓. | (73) 91 miles. | (74) 7000 lbs. Troy. |
| (75) 95 ac. 2 r. 0⅓ p. | (76) ⅜. | (77) 720. |
| (78) 19s. 1⅓ d. gain. | (79) 2⅜. | (80) $\frac{693, 462, 792, 308, 630}{1386}$. |
| (81) 17280 times. | (82) ⅜. | (83) 5s. 2⅓ d. |
| (84) 29⅓. | (85) 30. | (86) £25. 0. 11⅞. |
| (87) £2. 9. 0. | (88) £1. 6. 10½. | (89) ⅜. |
| (90) 5s. 2½ d. | (91) 10 tons 4 cwt. 3 qrs. 14 lbs. 10 oz. | (94) £26. 5. 0. |
| (92) 154. | (93) 2⅓. | (97) £2⅜. |
| (95) 4⅓. | (96) £157. 8. 2. | (100) ⅜. |
| (98) 1 c. ft. 61⅓ in. | (99) £11. 0. 11⅓. | |

DECIMAL FRACTIONS.

Ex. I.

- | | | |
|------------------------------|----------------------------|----------------------|
| (1) .3, .03, .003. | (2) .07, .0007, .07. | (3) 1.9, 1.76, .001. |
| (4) 11.1, 1.09, .1071. | (5) .107, .9, .11, .01569. | |
| (6) .0071, .081496, .000031. | (7) 2.3. | (8) 1.8987. |
| (9) .61489. | (10) .351007. | (11) 6.2513. |

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|-----------------|----------------|----------------|
| (12) ·071141. | (13) 5·610051. | (14) 3·111. |
| (15) 5·165019. | (16) ·036333. | (17) 3·10331. |
| (18) 79·896562. | (19) ·150139. | (20) 9·287037. |
| (21) 10·989. | (22) ·036963. | (23) ·000032. |
| (24) 5·741. | (25) 6·000281. | (26) ·0004284. |
| (27) ·6229. | (28) ·0689086. | (29) 1·001011. |
| (30) ·004033. | | |

Ex. II.

- | | |
|---|---|
| (1) $\frac{1}{2}, \frac{1}{10}, \frac{1}{1000}$. | (2) $\frac{4}{5}, \frac{81}{100}, \frac{81}{10000}$. |
| (3) $\frac{3}{10}, \frac{3}{1000}, \frac{3}{100000}$. | (4) $\frac{68}{200}, \frac{517}{1000}, \frac{43}{50}$. |
| (5) $\frac{10}{200}, \frac{148}{2000}, \frac{1087}{80000}$. | (6) $\frac{257}{500}, \frac{1017}{1250}, \frac{223}{500}$. |
| (7) $\frac{378}{80000}, \frac{2131}{100000}, \frac{389}{15000}$. | (8) $\frac{110078}{800000}, \frac{9908}{10000}, \frac{8167}{100000}$. |
| (9) $3\frac{90}{1000}, 33\frac{3}{100}, \frac{3903}{10000}$. | (10) $\frac{3031}{100000}, 71\frac{81}{1000}, 200\frac{3}{100}$. |
| (11) $3\frac{7}{10}, 8\frac{212}{1000}, 51\frac{01}{1000}$. | (12) $7\frac{3}{1000}, \frac{7003}{100000}, 70\frac{3}{100}$. |
| (13) $5\frac{229}{1000}, 2\frac{03}{100}, 4000\frac{7}{1000}$. | (14) $4\frac{3103}{10000}, 431\frac{3}{100}, \frac{43103}{1000000}$. |
| (15) $82\frac{7}{10}, 590\frac{3}{100}, 5\frac{45003}{10000}$. | (16) $36\frac{7}{100}, 750\frac{13}{100}, 8\frac{8}{100}$. |
| (17) $\frac{71}{1000}, 1\frac{1}{10}, 4000$. | (18) $\frac{713}{1000}, 5\frac{1903}{10000}, 21\frac{7}{1000}$. |
| (19) $4\frac{4041}{10000}, 440\frac{41}{100}, \frac{41}{10000}$. | (20) $3\frac{71879}{200000}, \frac{503}{1000}, \frac{30071}{1000000}$. |

Ex. III.

- | | | |
|-------------------|------------------|-------------------|
| (1) 26·3. | (2) 2·186. | (3) 2·6109. |
| (4) 199·046. | (5) 1341·561. | (6) 6·3615. |
| (7) 378·6131. | (8) 32·79125. | (9) 120·8065. |
| (10) 85·86433. | (11) 80·5847. | (12) 59·8366. |
| (13) 19·88626. | (14) 295·7271. | (15) 13·29486. |
| (16) 10077·29699. | (17) 363·115. | (18) 2170·0457. |
| (19) 344·593. | (20) 995·8571. | (21) 2623·952033. |
| (22) 4155·422. | (23) 208·256807. | (24) 223·3782. |
| (25) 3400·771. | (26) 120·403. | (27) 878·363. |
| (28) 581·89. | (29) 173·0036. | (30) 702·107. |
| (31) 882·119. | (32) 481·23701. | (33) 9033·071. |
| (34) 1005·0962. | (35) 294·4883. | (36) 2·93253. |
| (37) 8·12321. | (38) 1783·378. | (39) 8828·1684. |
| (40) 1274·77. | | |

Ex. IV.

- | | | |
|---------------|---------------|---------------|
| (1) ·058. | (2) ·18971. | (3) 11·212. |
| (4) 52·5564. | (5) 55·6632. | (6) 2·41146. |
| (7) 79·83685. | (8) 13·69631. | (9) 11·923. |
| (10) ·806423. | (11) 18·3169. | (12) 3·3024. |
| (13) 54·3249. | (14) 2·7441. | (15) ·117864. |

(16) 678·171.	(17) ·12084.	(18) 5·86024.
(19) ·99687.	(20) ·219683.	(21) 8·665.
(22) 47·9809.	(23) ·09633.	(24) 272·2827.
(25) 7·09484.	(26) ·03035039.	(27) 3·340526.
(28) ·623967.	(29) ·395614.	(30) ·51635.
(31) 1·79429.	(32) 4·0444.	(33) 13·30187.
(34) 2·23224.	(35) 11·206157.	(36) 489·99986.
(37) ·005993.	(38) 5·204463.	(39) ·671704.
(40) 1·8038.	(41) ·992864.	(42) 11·483.
(43) 786·214.	(44) ·09914.	(45) ·20994.
(46) 2403·69.	(47) 8·1539.	(48) 31·631.
(49) ·1431.	(50) ·003921.	

Ex. V.

(1) 17·6.	(2) 68·026.	(3) 14·625.
(4) 2·61.	(5) 3·4466.	(6) ·0025.
(7) ·0676.	(8) ·15125.	(9) 82·1.
(10) 5·37219.	(11) 2441·8.	(12) ·001764.
(13) 61·91418.	(14) 70·1165.	(15) ·123857.
(16) 96·22404.	(17) 1704·03.	(18) 362·7119.
(19) ·000147.	(20) 8·2940365.	(21) ·0835935.
(22) ·12817832.	(23) ·000017668.	(24) 812765·355.
(25) 2·5689672.	(26) ·34.	(27) ·00532.
(28) 133·46322.	(29) ·33165.	(30) 15·547248.
(31) ·09370536.	(32) 7·742.	(33) 138·188413.
(34) 24·162633971.	(35) ·0147147.	(36) ·053676.
(37) 10·627584.	(38) 257·8011633.	(39) 5·20542.
(40) 10·3823.	(41) 15·686.	(42) ·043188.
(43) ·57574.	(44) ·0035378.	(45) 108·243216.
(46) 139·968.	(47) ·068475.	(48) ·00000005396.
(49) 9·12850715.	(50) ·361.	

Ex. VI.

(1) ·18144.	(2) ·12096.	(3) ·09072.
(4) ·072576.	(5) ·06048.	(6) ·05184.
(7) ·04536.	(8) ·04032.	(9) 181·44.
(10) 120·96.	(11) 90·72.	(12) 72·576.
(13) 60·48.	(14) 51·84.	(15) 45·36.
(16) 40·32.	(17) 181·44.	(18) 120·96.
(19) 90·72.	(20) 72·576.	(21) 604·8.
(22) 518·4.	(23) 45·36.	(24) 4·032.
(25) 403·2.	(26) 10.	(27) 3·4.

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|------------------|---------------------|------------------|
| (28) 3·867. | (29) ·011564. | (30) ·0225. |
| (31) ·0000276. | (32) 30·4315, &c. | (33) 150. |
| (34) ·4525. | (35) 1022·3. | (36) 8·94, &c. |
| (37) 1250. | (38) ·22662, &c. | (39) ·00085, &c. |
| (40) 3438·125. | (41) 20811·138, &c. | (42) 133·3, &c. |
| (43) 98·885, &c. | (44) ·00000414, &c. | (45) ·00889093. |
| (46) 21·245, &c. | (47) 8391·608, &c. | (48) 52·08. |
| (49) 10·252, &c. | (50) 21·08. | |

Ex. VII.

- | | | |
|----------------------|--------------------|---------------------|
| (1) ·53, ·75. | (2) ·3125, ·025. | (3) ·75, 2·375. |
| (4) ·28, 2·22. | (5) ·6, ·4. | (6) 2·6, ·484375. |
| (7) ·336, 1·2656. | (8) ·32, 1·3746. | (9) ·921875, 1·28. |
| (10) ·21875, ·1448. | (11) 3·25, 5·5. | (12) 1·9375, 3·875. |
| (13) 4·34375, 1·375. | (14) 3·375. | (15) 4·2. |
| (16) ·25. | (17) ·31201171875. | (18) 2·77265625. |
| (19) ·2673. | (20) ·0001953125. | (21) ·65. |
| (22) ·83. | (23) 1·03125. | (24) 4·75. |
| (25) ·65625. | (26) 2·0625. | (27) 3·2484375. |
| (28) 78·75. | (29) 4. | (30) 1·375. |
| (31) 12·1875. | (32) 2490. | (33) 1·2. |
| (34) ·005. | (35) 1·104375. | (36) 3·6. |
| (37) 25·4375. | (38) 3·75. | (39) ·24. |
| (40) 2·8125. | | |

Ex. VIII.

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|-------------------------------------|-------------------------------|
| (1) ·3, ·16, ·i42857. | (2) ·2, ·714285, ·6. |
| (3) ·06, ·605, ·10185. | (4) ·63, ·3571428, ·i8. |
| (5) ·72, ·384615, ·857142. | (6) 1·3, ·83, ·2142857. |
| (7) 7·7142857, 2·7303. | (8) ·94, ·2142857, ·6. |
| (9) ·i08, 4·376065. | (10) 1·i42857, 1·8. |
| (11) 4·03, 11·03571428. | (12) 6·0571428, 3·809523. |
| (13) 3·692307, ·54. | (14) 13·3, ·5045. |
| (15) ·972, ·476190. | (16) 3·4, 1·06. |
| (17) ·076923, ·0588235294117647. | |
| (18) ·0434782608695652173913, ·037. | (19) ·i29032258064516, 1·074. |
| (20) ·081, 1·230769. | (21) 1·0099, ·315476190. |
| (22) ·39285714, ·765432098. | (23) 2·194, ·3. |
| (24) ·446428571, ·672. | (25) ·3095238, ·769230. |
| (26) 10·i42857, ·952330. | (27) 1·285714, ·295138. |
| (28) 1·3, 1·6. | (29) 26·074, 8·29. |
| (30) ·73i42857, ·032258064516129. | |

Ex. IX.

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|--|---|--|
| (1) $\frac{1}{3}, \frac{5}{33}$. | (2) $\frac{7}{33}, \frac{17}{99}$. | (3) $\frac{6}{11}, \frac{16}{99}$. |
| (4) $\frac{37}{99}, \frac{91}{111}$. | (5) $\frac{1}{11}, \frac{4}{111}$. | (6) $\frac{11}{11}, \frac{17}{99}$. |
| (7) $\frac{37}{990}, \frac{19}{300}$. | (8) $\frac{301}{9900}, \frac{23}{450}$. | (9) $\frac{11}{3000}, \frac{1}{270}$. |
| (10) $\frac{731}{900}, 47\frac{1}{90}$. | (11) $\frac{3}{7}, \frac{143}{4500}$. | (12) $\frac{3001}{9900}, 21\frac{1}{33}$. |
| (13) $52\frac{9}{55}, 17\frac{7}{100}$. | (14) $63\frac{79}{990}, 84\frac{43}{99}$. | (15) $17\frac{19}{99}, 2\frac{1}{180}$. |
| (16) $11\frac{919}{999}, 11\frac{613}{990}$. | (17) $31\frac{41}{44}, 5\frac{23}{300}$. | (18) $12\frac{205}{1998}, 4\frac{382}{4500}$. |
| (19) $22\frac{7}{22}, 41\frac{13}{25}$. | (20) $\frac{10}{999}, \frac{1001}{99999}$. | (21) $3\frac{647}{2475}, 71\frac{61}{1980}$. |
| (22) $13\frac{3003}{999}, 9\frac{21}{100}$. | (23) $6\frac{5}{99}, 5\frac{913}{999}$. | (24) $52\frac{19}{99}, 64\frac{697}{999}$. |
| (25) $31\frac{001}{3300}, 3\frac{337}{1111}$. | (26) $15\frac{3}{135}, 52$. | (27) $10\frac{911}{9900}, 8\frac{833}{3000}$. |
| (28) $11\frac{37}{225}, 8\frac{23}{6000}$. | (29) $\frac{13}{600}, \frac{4}{185}$. | (30) $5\frac{1}{5}, 3\frac{49}{50}$. |
| (31) $7\frac{31}{55}, 61\frac{1}{45}$. | (32) $\frac{23}{300}, 6\frac{92}{99}$. | (33) $7\frac{3}{00}$. |
| (34) $\frac{31733}{99000}$. | (35) $\frac{1}{13}$. | (36) $\frac{128467}{249780}$. |
| (37) $\frac{13101}{33330}$. | (38) $\frac{4}{37}$. | (39) $\frac{15}{44}$. |
| (40) $\frac{126}{164}$. | (41) $3\frac{317}{9999}$. | (42) $5\frac{53}{16650}$. |
| (43) $1\frac{17}{99000}$. | (44) $11\frac{6737}{33330}$. | (45) $5\frac{30462}{399995}$. |
| (46) $\frac{13793}{499995}$. | (47) $\frac{1}{14}$. | (48) $\frac{15794}{249975}$. |
| (49) $4\frac{613}{99900}$. | (50) $\frac{284609}{499950}$. | (51) $\frac{30373}{99990}$. |
| (52) $\frac{107}{99990}$. | (53) $\frac{1}{990}$. | (54) $\frac{1}{990}$. |
| (55) $\frac{25}{99}$. | (56) $\frac{11837789}{24999780}$. | (57) $\frac{1}{31}$. |
| (58) $\frac{178}{833325}$. | (59) $3\frac{1}{40}$. | (60) $\frac{1}{17}$. |

Ex. X.

- | | | |
|----------------|----------------|----------------|
| (1) 20·88091, | (2) ·39833. | (3) 16·41805. |
| (4) 60·49949. | (5) 550·08151. | (6) 34·15596. |
| (7) 8·51847. | (8) 76·77751. | (9) 11·75817. |
| (10) 14·12679. | (11) ·05876. | (12) ·23036. |
| (13) ·37222. | (14) 1·49076. | (15) 2·89839. |
| (16) ·52468. | (17) ·17459. | (18) 2·94888. |
| (19) ·02302. | (20) ·54586. | (21) ·01111. |
| (22) ·91734. | (23) 1·73863. | (24) ·96353. |
| (25) 7·15179. | (26) 1. | (27) 3·23547. |
| (28) ·13761. | (29) ·03731. | (30) 35·86424. |
| (31) ·01952. | (32) ·00652. | (33) ·04594. |
| (34) ·03948. | (35) ·25793. | (36) 56·31427. |
| (37) ·00041. | (38) ·05263. | (39) ·00298. |
| (40) ·00460. | (41) 5·15094. | (42) 34·5. |
| (43) ·46359. | (44) 7·03411. | (45) ·03293. |
| (46) 2·88184. | (47) ·03911. | (48) 3·44424. |
| (49) ·01563. | (50) ·00100. | |

Ex. XI.

- | | |
|--|---|
| (1) 1s. 6d.; £2. 5. 0. | (2) 3 $\frac{3}{4}$ d.; £6. 12. 6. |
| (3) 3s. 4'944d.; £19. 2. 4'8. | (4) 11'52d.; £2. 10. 5 $\frac{1}{4}$. |
| (5) £2. 11. 4'8; 11'43d. | (6) £1. 8. 8'136; £111. 8. 4'8. |
| (7) £42. 6. 11'6; £24. 3. 0. | (8) £2. 13. 10'38; 14s. 2'8d. |
| (9) £12. 10. 6'36; £2. 15. 1 $\frac{1}{2}$. | (10) £1. 19. 0 $\frac{3}{4}$; 2s. 10'056d. |
| (11) 7 cwt. 2 qrs. 25'76 lbs. | (12) 2 tons 8 cwt. |
| (13) 5 m. 66 yds. | (14) 1 lb. 3 oz. 8 dwts. 16'8 grs. |
| (15) 5'068 poles. | (16) 2 ac. 13 p. |
| (17) 11 yrs. 100 dys. 9 h. 39 m. 25'2 s. | |
| (18) 5 cub. yds. 5 ft. 224'64 in. | (19) 17 ac. 3 r. 12'23 poles. |
| (20) 6 lbs. 3 oz. 13'12 drs. | (21) 3 h. 18 m. 21'6 s. |
| (22) 1 pk. 2 qts. | (23) 2 tons 2 cwt. 2 qr. 21'7 lbs. |
| (24) 3 tons 18 cwt. 1 qr. 12'992 lbs. | (25) 1 ton 13 cwt. 1 qr. 22'94 lbs. |
| (26) 2 yds. 1 ft. 2 $\frac{1}{4}$ in. | (27) 6 fur. 3 $\frac{3}{4}$ poles. |
| (28) 1'13 poles. | (29) 61 sq. m. 48 ac. 3 r. 33'6 poles. |
| (30) 6 cwt. 1 qr. 2'464 lbs. | (31) 5 yds. 2 ft. 11'892 in. |
| (32) 2 sq. yds. 8 ft. 12'78 in. | (33) 17 hrs. 52 m. 39'36 s. |
| (34) 23 lbs. 10 oz. 11 dwts. 10'704 grs. | (35) 58 m. 7 fur. 23'52 poles. |
| (36) 11 hhds. 8 gals. 0'13 qts. | (37) 675 m. 2 fur. 20'8 poles. |
| (38) 1 bar. 3 gals. 0'24 qts. | (39) 49 m. 3 fur. 36'6 poles nearly. |
| (40) 6 cwt. 2 qrs. 8'19 lbs. | (41) £3. 3. 4 $\frac{1}{2}$. |
| (43) £2. 14. 6'54. | (44) £18. 1. 0'3. |
| (46) £7. 13. 8'55. | (47) £1. 1. 9'529. |
| (49) £5. 7. 7'93. | (50) 3s. 3'4d. |
| (52) 21 tons 17 cwt. | (53) 35 tons 9 cwt. 24 lbs. |
| (55) 40 yds. | (56) 4 min. 2 sec. |
| (57) 4 dys. 23 h. 20 m. | (58) 7 lbs. |
| (60) 16 dwts. 8 grs. | (59) £9. 7. 11. |
| (45) £1. 4. 10 $\frac{1}{2}$. | (48) £375. 7. 6. |
| (51) £3. 0. 3. | (54) 1 ft. 6 in. |
| (42) 8s. 0'03d. | |

Ex. XII.

- | | | | |
|---------------|-------------------|------------------|----------------|
| (1) ·125. | (2) ·3. | (3) ·16. | (4) ·125. |
| (5) ·1375. | (6) ·16052, &c. | (7) 8'75. | (8) ·1142857. |
| (9) ·63. | (10) 2'16015, &c. | (11) 25. | (12) ·04. |
| (13) ·142857. | (14) ·29583. | (15) ·1452093. | (16) ·025. |
| (17) ·714285. | (18) ·010185. | (19) ·77857142. | (20) ·172, &c. |
| (21) ·215. | (22) ·175. | (23) ·2583. | (24) ·015. |
| (25) ·83. | (26) ·665625. | (27) ·29. | (28) 2'7. |
| (29) ·36. | (30) ·04583. | (31) ·00826, &c. | (32) ·125. |
| (33) ·025. | (34) 1'221875. | (35) ·2027. | (36) ·037. |
| (37) ·09375. | (38) 1'2916. | (39) ·2692307. | (40) ·22916. |

- (41) .0464, &c. (42) .02128, &c. (43) 9.88235, &c. (44) .0095, &c.
 (45) .82285714. (46) 1.21527. (47) .13095238. (48) .896825.
 (49) .4583. (50) .416. (51) .21078, &c. (52) .4182.
 (53) .3263, &c. (54) 15.96. (55) .00613, &c. (56) .666.
 (57) 16.8595. (58) .125. (59) .07875. (60) .2886, &c.

Ex. XIII.

- (2) Five tenths, one hundredth, three thousandths, and two ten-thousandths.
 (3) To remove the dec. point one, two, or three places respectively towards the right.
 (4) .0031, .001037. (5) $\frac{31}{10000}$, $\frac{79}{100000}$, $\frac{1}{10000}$, $7\frac{103}{10000}$.
 (6) .3, .009, .0705, .04, .6. (7) 9.3179. (8) .006783.
 (9) 10.24068. (10) 360. (11) 1. (12) 3. (13) 1.5.
 (14) .000224595. (15) $\frac{595}{100000}$. (16) 1s. 3 $\frac{3}{4}$ d.
 (17) 5s. 3d. (18) 80 times. (19) .096774193548887.
 (20) .142857. (21) £37. 7. 3.936. (22) £51. 7. 3.27.
 (23) 1 cwt. 3 qrs. 14 lbs. (24) 2935 ac. 337.9025 sq. yds.
 (25) 54 m. 6.36 fur. (26) 1s. 11.3d. (27) 63 ft.
 (28) 10000. (29) 7s. 4.14708d. (30) .2222421.
 (31) 2.568i. (32) 5.3024375.
 (33) 8 cwt. 2 qrs. 2.89 lbs. (34) £12. 4. 1.08.
 (35) .1739130434782608695652. (36) 14.309325 c. ft. (37) $\frac{6777}{100000}$.
 (38) Water 8.4 lbs. F. F. 8.76 lbs., HG. 39.84 lbs. Acc. 2.04 lbs. and Min. M. .96 lbs.
 (39) 1002. (40) .00556i. (41) 5s. 5.772d.
 (42) .000132, &c. (43) .38515625. (44) .142857.
 (45) $\frac{1}{3}$. (46) 6008.13 c. ft. (47) .439, &c.
 (48) £628. 14. 9.78. (49) 1 ton 5 cwt. 2 qrs. 13.3083 lbs.
 (50) .23957, &c. (51) 111.1111. (52) $\frac{1}{31}$.
 (53) £21. 5. 11.412. (54) .00000000024, &c. (55) 71.577 degrees.
 (56) £.125, .7s., .714285d. (57) .25. (58) 58150.
 (59) 820.125. (60) 60 shillings. (61) £49375.
 (62) £3. 8. 0. (63) £1. 0. 0. (64) £64. 0. 7.
 (65) 2 qrs. 22 lbs. (66) £6486. 19. 9. (67) £10. 11. 3 $\frac{1}{2}$.
 (68) .19723, &c. (69) £4. 7. 6.6. (70) 4320 times.
 (71) £73. 5. 6.6. (72) .48125. (73) £1543. 17. 6.351.
 (74) 4 dwts. 10.1472 grs. (75) 1.7407226291.
 (76) .9285714, .93, .9375 and 1.009615384. (77) £3. 4. 9.675.
 (78) .0006747257, &c. (79) 11 poles 24.684 yds. (80) $\frac{13181}{100000}$.
 (81) 106 tons 9 cwt. 1 qr. 14.56 lbs. (82) £7. 10. 1.538.

- (83) ·88. (84) 18 cwt. 11·2 lbs. (85) ·06914, &c.
 (86) 2594· $\frac{1}{4}$ times. (87) 70 feet. (88) 82·992 lbs. and 17·36 lbs.
 (89) 1 qr. 21·859 lbs. (90) 61·796 $\frac{1}{2}$. (91) 1·2. (92) ·016.
 (93) 13706352 cub. ft. (94) £38. 19. 4·875. (95) 35 dys. 7 h. 58 m. 4·8 s.
 (96) 1·05492, &c. (97) ·46435 $\frac{1}{8}$. (98) ·468.
 (99) £119. 3. 3·21. (100) £4. 13. 0.

PRACTICE.

SIMPLE PRACTICE.

- (1) £9. 0. 0. (2) £3. 7. 0. (3) £4. 14. 8.
 (4) £2. 8. 9. (5) £2. 1. 3. (6) £2. 10. 10 $\frac{1}{2}$.
 (7) £2. 8. 8. (8) £2. 19. 4 $\frac{1}{2}$. (9) £8. 0. 4 $\frac{1}{4}$.
 (10) £2. 14. 4 $\frac{1}{2}$. (11) £3. 12. 6. (12) £9. 10. 0.
 (13) £38. 0. 0. (14) £103. 10. 0. (15) £63. 17. 6.
 (16) £99. 3. 4. (17) £183. 12. 0. (18) £188. 3. 6.
 (19) £529. 7. 6. (20) £210. 2. 10. (21) £80. 8. 10.
 (22) £86. 19. 6. (23) £554. 19. 6. (24) £318. 6. 10 $\frac{1}{2}$.
 (25) £160. 6. 0. (26) £484. 3. 7 $\frac{1}{2}$. (27) £358. 9. 4.
 (28) £842. 13. 4 $\frac{1}{2}$. (29) £513. 6. 8. (30) £258. 7. 6.
 (31) £592. 10. 0. (32) £13218. 6. 8. (33) £143. 6. 8.
 (34) £20635. 8. 4. (35) £1988. 5. 0. (36) £3449. 12. 0.
 (37) £9195. 3. 0. (38) £1524. 6. 8. (39) £1768. 5. 10.
 (40) £2346. 1. 8. (41) £5030. 8. 6. (42) £96833. 17. 4.
 (43) £4255. 10. 9. (44) £422. 13. 6. (45) £2923. 0. 9.
 (46) £10589. 6. 8. (47) £2910. 8. 4. (48) £5098. 0. 10.
 (49) £8086. 16. 8. (50) £4070. 18. 6. (51) £9881. 10. 3.
 (52) £12921. 15. 4 $\frac{1}{2}$. (53) £1112. 3. 9 $\frac{1}{2}$. (54) £12732. 6. 10 $\frac{1}{2}$.
 (55) £12641. 10. 1. (56) £9267. 17. 8 $\frac{1}{2}$. (57) £2553. 13. 6.
 (58) £40821. 8. 6. (59) £11824. 15. 2. (60) £124. 14. 0 $\frac{1}{2}$.
 (61) £86. 19. 0 $\frac{3}{4}$. (62) £225. 17. 7 $\frac{3}{4}$. (63) £2696. 5. 0.
 (64) £6574. 13. 4 $\frac{1}{2}$. (65) £963. 0. 0. (66) £16080. 15. 1 $\frac{1}{4}$.
 (67) £3572. 17. 4 $\frac{1}{2}$. (68) £1462. 5. 10 $\frac{1}{2}$. (69) £474. 17. 7.
 (70) £884. 5. 3. (71) £199. 12. 1 $\frac{1}{2}$. (72) £593. 16. 6 $\frac{1}{2}$.
 (73) £1419. 7. 1 $\frac{1}{2}$. (74) £5778. 0. 0. (75) £565. 10. 9.
 (76) £1552. 2. 1. (77) £4277. 17. 8. (78) £3031. 19. 8 $\frac{1}{4}$.
 (79) £5460. 16. 8. (80) £13752. 0. 0. (81) £2643. 3. 9.
 (82) £7130. 12. 9. (83) £3107. 10. 9. (84) £10302. 0. 0.
 (85) £2046. 12. 3 $\frac{1}{4}$. (86) £1919. 0. 0. (87) £181919. 14. 9 $\frac{1}{2}$.
 (88) £29621. 2. 2 $\frac{1}{4}$. (89) £13. 13. 5. (90) £147. 12. 7 $\frac{1}{2}$.
 (91) £498. 9. 4 $\frac{1}{2}$. (92) £129. 13. 11 $\frac{1}{4}$. (93) £347. 9. 3.
 (94) £121. 1. 4. (95) £613. 10. 7. (96) £239. 17. 4.

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|------------------------------------|------------------------------------|-------------------------------------|
| (97) £571. 17. 17 $\frac{1}{2}$. | (98) £12192. 6. 2 $\frac{1}{2}$. | (99) £181. 18. 11 $\frac{1}{2}$. |
| (100) £359. 0. 6 $\frac{3}{4}$. | (101) £34. 15. 4. | (102) £592. 17. 6. |
| (103) £393. 15. 0. | (104) £927505. 6. 0. | (105) £206. 7. 4 $\frac{1}{2}$. |
| (106) £159. 10. 8 $\frac{1}{4}$. | (107) £400. 7. 2 $\frac{1}{4}$. | (108) £64. 8. 0 $\frac{3}{4}$. |
| (109) £397. 10. 10. | (110) £587. 2. 6 $\frac{1}{2}$. | (111) £1112083. 6. 8. |
| (112) £250. 2. 4. | (113) £728. 2. 2 $\frac{1}{4}$. | (114) £12495. 19. 6 $\frac{3}{4}$. |
| (115) £39. 6. 11 $\frac{1}{2}$. | (116) £19597. 13. 6. | (117) £3845. 17. 5 $\frac{1}{2}$. |
| (118) £2850. 9. 4. | (119) £754. 0. 0. | (120) £49. 7. 0. |
| (121) £72. 19. 5 $\frac{1}{4}$. | (122) £543. 17. 3 $\frac{3}{4}$. | (123) £2596. 7. 9. |
| (124) £5389. 16. 8 $\frac{5}{8}$. | (125) £3657. 4. 6. | (126) £22911. 13. 4. |
| (127) £1121. 11. 6. | (128) 5s. 7 $\frac{1}{2}$ d. | (129) £14. 16. 1 $\frac{1}{2}$. |
| (130) £139. 2. 9 $\frac{1}{2}$. | (131) £69. 8. 4. | (132) £692. 6. 6. |
| (133) £3. 0. 7 $\frac{3}{4}$. | (134) £28. 10. 7 $\frac{1}{2}$. | (135) £330. 2. 5 $\frac{1}{4}$. |
| (136) £25798. 10. 0. | (137) £1. 4. 1 $\frac{3}{4}$. | (138) £10034. 16. 4. |
| (139) £1148. 8. 6 $\frac{1}{2}$. | (140) £423. 19. 4 $\frac{1}{2}$. | (141) £117. 18. 1 $\frac{1}{2}$. |
| (142) £177. 0. 1 $\frac{1}{2}$. | (143) £163. 3. 4 $\frac{1}{2}$. | (144) £510. 0. 0. |
| (145) £147. 9. 9. | (146) £324. 16. 10 $\frac{1}{2}$. | (147) £7237. 19. 9 $\frac{1}{2}$. |
| (148) £4. 19. 10 $\frac{1}{4}$. | (149) £21. 8. 10 $\frac{1}{4}$. | (150) £25. 0. 0. |

COMPOUND PRACTICE.

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|------------------------------------|-----------------------------------|-----------------------------------|
| (1) £1. 12. 6. | (2) £7. 9. 10. | (3) £11. 4. 7. |
| (4) £4. 14. 6. | (5) £221. 17. 6. | (6) £5. 18. 1 $\frac{1}{2}$. |
| (7) £53. 10. 5 $\frac{1}{4}$. | (8) £995. 6. 10 $\frac{1}{2}$. | (9) £62. 15. 3 $\frac{1}{4}$. |
| (10) £8. 6. 0 $\frac{3}{4}$. | (11) £18850. 0. 0. | (12) £946. 1. 10 $\frac{1}{2}$. |
| (13) £24. 12. 8 $\frac{11}{10}$. | (14) £3. 15. 4 $\frac{1}{2}$. | (15) £8. 7. 7 $\frac{1}{3}$. |
| (16) £184. 2. 11 $\frac{5}{10}$. | (17) £63. 10. 4 $\frac{4}{5}$. | (18) £441. 18. 8 $\frac{1}{10}$. |
| (19) £1548. 12. 4 $\frac{1}{2}$. | (20) £6916. 17. 6. | (21) £54. 2. 6 $\frac{3}{4}$. |
| (22) £71. 5. 3 $\frac{3}{8}$. | (23) £2224. 13. 5 $\frac{3}{8}$. | (24) £298. 7. 9 $\frac{2}{5}$. |
| (25) £36. 16. 11 $\frac{3}{4}$. | (26) £291. 8. 0 $\frac{3}{10}$. | (27) £141. 9. 4 $\frac{5}{8}$. |
| (28) £941. 9. 9 $\frac{9}{7}$. | (29) £181. 3. 0 $\frac{1}{7}$. | (30) £27. 11. 7 $\frac{1}{4}$. |
| (31) £2148. 4. 5 $\frac{6}{7}$. | (32) £40. 17. 11 $\frac{2}{10}$. | (33) £814. 7. 0. |
| (34) £21. 15. 9. | (35) £2. 17. 11 $\frac{1}{4}$. | (36) £269. 1. 5 $\frac{5}{8}$. |
| (37) £57. 6. 2 $\frac{1}{8}$. | (38) £43. 10. 10. | (39) £921. 17. 6. |
| (40) £16. 17. 4. | (41) £25. 16. 4 $\frac{7}{8}$. | (42) £1. 8. 7 $\frac{1}{2}$. |
| (43) £454. 7. 6. | (44) £135. 18. 3 $\frac{5}{8}$. | (45) £14. 7. 4 $\frac{1}{2}$. |
| (46) £5. 11. 9. | (47) £63. 7. 6. | (48) £12. 14. 5 $\frac{1}{4}$. |
| (49) £333. 17. 8 $\frac{2}{7}$. | (50) £336. 16. 5 $\frac{1}{4}$. | (51) £346. 1. 1 $\frac{1}{8}$. |
| (52) £84. 10. 6 $\frac{3}{8}$. | (53) £138. 2. 6. | (54) £5312. 12. 0. |
| (55) £76. 13. 0. | (56) £212. 15. 9 $\frac{3}{8}$. | (57) £3. 4. 9 $\frac{3}{8}$. |
| (58) £6. 4. 7 $\frac{1}{12}$. | (59) £3. 10. 11 $\frac{1}{8}$. | (60) £25661. 6. 1 $\frac{1}{2}$. |
| (61) £8116. 9. 5 $\frac{21}{10}$. | (62) £175. 5. 0. | (63) £4. 1. 3 $\frac{3}{4}$. |

- (64) £16. 15. 9 $\frac{5}{8}$. (65) £179. 7. 6 $\frac{3}{4}$. (66) £64. 10. 10 $\frac{5}{12}$.
 (67) £7374. 16. 8 $\frac{2}{21}$ $\frac{0}{3}$. (68) £9. 14. 9 $\frac{1}{2}$. (69) £2. 2. 11 $\frac{5}{8}$ $\frac{5}{8}$.
 (70) £4. 18. 8 $\frac{1}{8}$ $\frac{0}{4}$. (71) £2. 8. 2 $\frac{2}{11}$ $\frac{0}{20}$. (72) £7. 6. 2 $\frac{7}{8}$.
 (73) £5. 7. 10 $\frac{1}{2}$. (74) £56. 1. 2 $\frac{5}{8}$. (75) £1. 18. 11 $\frac{2}{8}$ $\frac{8}{8}$.
 (76) £1662. 2. 4 $\frac{1}{8}$. (77) £1374. 17. 4 $\frac{11}{10}$. (78) £319. 1. 10 $\frac{0}{20}$.
 (79) £5. 18. 9 $\frac{2}{8}$ $\frac{0}{8}$. (80) £24. 17. 7 $\frac{7}{8}$. (81) £150. 5. 0 $\frac{1}{5}$ $\frac{5}{8}$.
 (82) £5504. 12. 8. (83) £604. 19. 11 $\frac{1}{4}$. (84) £132. 6. 0.
 (85) 7s. 3 $\frac{3}{4}$ d. (86) £99608. 0. 9. (87) £2. 7. 6 $\frac{3}{8}$.
 (88) £64. 5. 6 $\frac{5}{8}$. (89) £62. 14. 4. (90) £1980. 15. 9 $\frac{2}{7}$ $\frac{7}{7}$.
 (91) £20. 15. 0. (92) £948. 14. 0. (93) £1324. 13. 11 $\frac{1}{7}$.
 (94) £29. 18. 6. (95) £6975. 0. 6 $\frac{7}{8}$. (96) £856. 19. 6 $\frac{3}{10}$.
 (97) £35. 7. 3. (98) £163. 15. 7 $\frac{1}{2}$. (99) £930. 12. 5 $\frac{4}{7}$.
 (100) £1430. 2. 9 $\frac{3}{4}$ $\frac{3}{4}$. (101) £20. 18. 0 $\frac{2}{3}$ $\frac{3}{4}$. (102) £27. 17. 3 $\frac{1}{2}$.
 (103) £101. 0. 10 $\frac{2}{4}$ $\frac{0}{0}$. (104) £1188. 1. 10 $\frac{1}{2}$. (105) £196. 15. 1 $\frac{7}{8}$.
 (106) £1498. 19. 5 $\frac{5}{8}$. (107) £4985. 14. 11 $\frac{19}{40}$.
 (108) £19. 16. 0 $\frac{2}{8}$ $\frac{3}{8}$. (109) £3. 6. 8 $\frac{7}{10}$. (110) £223. 14. 10 $\frac{1}{2}$.
 (111) £1327. 13. 9. (112) £25. 7. 3 $\frac{3}{8}$ $\frac{3}{8}$. (113) £3881. 5. 0.
 (114) £2. 1. 2 $\frac{7}{11}$ $\frac{3}{20}$. (115) £116. 10. 7 $\frac{1}{2}$. (116) £1979. 14. 11.
 (117) £1444. 19. 0. (118) £1353. 8. 8 $\frac{1}{2}$. (119) £49. 5. 3 $\frac{0}{20}$.
 (120) £253. 15. 3 $\frac{1}{2}$ $\frac{0}{8}$. (121) 9s. 1 $\frac{1}{10}$ d. (122) 15 tons 18 cwt. 3 qrs.
 (123) £550. 12. 0. (124) £7. 10. 7.
 (125) 16 tons 14 cwt. 2 qrs. 21 lbs. (126) 642 c. yds. 6 ft.
 (127) £6. 17. 3 $\frac{3}{8}$. (128) £241. 6. 6 $\frac{3}{15}$. (129) £2019. 6. 6.
 (130) £17452. 19. 4 $\frac{1}{2}$. (131) £2367. 1. 3 $\frac{3}{8}$. (132) 2201 $\frac{3}{10}$ miles.
 (133) 19s. 9 $\frac{7}{8}$ d. (134) 11s. 0 $\frac{1}{4}$ d. (135) £163. 4. 7 $\frac{1}{2}$.
 (136) £7. 2. 3 $\frac{3}{8}$. (137) £3470. 12. 6. (138) £104. 7. 6.
 (139) £5. 11. 2 $\frac{7}{8}$. (140) £65. 0. 0. (141) £16. 9. 8 $\frac{1}{4}$.
 (142) £2039. 19. 10 $\frac{1}{2}$. (143) £95. 11. 10 $\frac{1}{2}$. (144) £213. 18. 6 $\frac{3}{4}$.
 (145) £160. 13. 0 $\frac{1}{2}$. (146) £353. 8. 9. (147) £259. 3. 9.
 (148) 11s. 6 $\frac{0}{3}$ $\frac{0}{2}$ d. (149) 68 tons 19 cwt. 6 lbs.
 (150) 1327 ac. 3 r. 32 p. (151) £44. 4. 3 $\frac{3}{8}$.
 (152) £15. 11. 11 $\frac{1}{4}$. (153) £352. 7. 9 $\frac{3}{8}$. (154) £1723. 17. 3 $\frac{3}{8}$.
 (155) £15. 1. 2 $\frac{2}{8}$. (156) £375. 8. 3. (157) £239. 9. 0 $\frac{3}{8}$.
 (158) £108. 15. 9. (159) £57. 6. 7 $\frac{2}{8}$ $\frac{3}{8}$. (160) £81. 16. 7 $\frac{1}{2}$ $\frac{1}{2}$.
 (161) £1. 0. 1 $\frac{1}{2}$. (162) £229. 18. 2 $\frac{1}{4}$. (163) £6. 8. 4 $\frac{5}{8}$ $\frac{5}{8}$.
 (164) £613. 18. 9. (165) £68. 10. 1 $\frac{1}{4}$. (166) £1309. 3. 3.
 (167) £980. 9. 8 $\frac{1}{4}$. (168) £54. 4. 6. (169) £4821. 17. 3.
 (170) 4791 cwt. 1 qr. 20 lbs. (171) £59. 14. 0.
 (172) £28. 8. 3 $\frac{0}{10}$. (173) £128. 1. 2 $\frac{7}{10}$. (174) £231. 0. 0.
 (175) £29. 6. 3. (176) 94 tons 13 cwt. 3 qrs.
 (177) £211. 15. 0 $\frac{1}{2}$. (178) £126. 12. 8 $\frac{1}{4}$. (179) £6. 13. 5 $\frac{0}{8}$ $\frac{0}{8}$.

SIMPLE PROPORTION.

353

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|--|---|--------------------------------------|
| (180) £24. 5. 0 $\frac{1}{2}$. | (181) £81. 15. 7. | (182) £142. 2. 9 $\frac{1}{2}$. |
| (183) £22. 6. 11 $\frac{1}{4}$. | (184) £29. 0. 8 $\frac{1}{2}$. | (185) £1. 9. 8 $\frac{1}{4}$. |
| (186) £981. 10. 9 $\frac{3}{8}$. | (187) £46180. 5. 0. | (188) £275. 8. 9. |
| (189) £140. 16. 7 $\frac{1}{8}$. | (190) £884. 10. 6 $\frac{3}{8}$ $\frac{1}{4}$. | (191) £31. 3. 6 $\frac{3}{8}$. |
| (192) £319. 15. 1. | (193) £261. 11. 10 $\frac{4}{11}$. | (194) £1072. 10. 0. |
| (195) £184. 5. 6 $\frac{3}{8}$. | (196) £3. 3. 8. per qr. | |
| (197) £4. 6. 5. | (198) £424. 18. 5 $\frac{1}{4}$. | (199) £598. 0. 0. |
| (200) £45. 12. 6. | (201) £11. 5. 0. | (202) £5813. 2. 1 $\frac{1}{2}$. |
| (203) 45 tons 1 cwt. 3 qrs. 14 lbs. | | (204) £44. 5. 0. |
| (205) £40. 12. 6 $\frac{1}{8}$ $\frac{5}{8}$. | (206) £1. 1. 6. | |
| (207) 3 tons 14 cwt. 1 qr. 24 lbs. | | (208) £38520. 18. 10 $\frac{1}{2}$. |
| (209) 637 miles. | (210) £2217. 17. 1 $\frac{5}{8}$. | (211) £28. 2. 11 $\frac{5}{8}$. |
| (212) £22. 10. 9. | (213) 8s. 11 $\frac{2}{3}$ d. | (214) £489. 13. 9. |
| (215) £2. 7. 8. | (216) £634. 11. 0 $\frac{2}{8}$. | (217) £44850. 19. 2. |
| (218) £943. 2. 9 $\frac{2}{4}$ $\frac{3}{8}$. | (219) £96. 17. 7 $\frac{9}{16}$. | (220) £27832. 1. 9. |

BILLS OF PARCELS.

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|--------------------------------|--------------------------------|---------------------------------|
| (1) £2. 6. 5 $\frac{1}{2}$. | (2) £4. 8. 2 $\frac{1}{4}$. | (3) £8. 17. 3. |
| (4) £5. 16. 11 $\frac{3}{4}$. | (5) £167. 3. 1. | (6) £3. 1. 4 $\frac{1}{2}$. |
| (7) £33. 15. 5 $\frac{1}{4}$. | (8) £1812. 7. 6. | (9) £180. 18. 0. |
| (10) £8. 9. 1. | (11) £16. 6. 7 $\frac{1}{2}$. | (12) £6. 18. 11 $\frac{1}{4}$. |

SIMPLE PROPORTION.

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|------------------------------------|---|--|---------------------------------------|
| (1) 6. | (2) 7 $\frac{1}{2}$. | (3) 9 $\frac{1}{2}$. | (4) 20. |
| (5) 10 $\frac{1}{2}$. | (6) 24. | (7) 36. | (8) 4. |
| (9) 6. | (10) 9 $\frac{1}{2}$. | (11) 258. | (12) 28 $\frac{1}{2}$. |
| (13) 10. | (14) 509 $\frac{1}{11}$. | (15) 1 $\frac{6}{16}$ $\frac{1}{8}$. | (16) 57. |
| (17) 14 $\frac{1}{4}$. | (18) 42 $\frac{3}{16}$. | (19) 41 $\frac{4}{11}$. | (20) 69. |
| (21) 17. | (22) 30. | (23) 22 $\frac{1}{2}$. | (24) 153. |
| (25) 12 $\frac{8}{11}$. | (26) 8 $\frac{1}{8}$. | (27) 22. | (28) 14 $\frac{7}{8}$ $\frac{1}{8}$. |
| (29) 18 $\frac{3}{8}$. | (30) 36. | (31) 5·15. | (32) ·017. |
| (33) ·6892 nearly. | (34) 11·856 nearly. | (35) 26·208. | |
| (36) £11. 13. 4. | (37) £18. 9. 7 $\frac{5}{8}$. | (38) £19. 9. 0 $\frac{2}{5}$ $\frac{1}{1}$. | |
| (39) 17s. 0 $\frac{3}{4}$ d. | (40) £5. 10. 3 $\frac{7}{10}$ $\frac{5}{9}$. | (41) 619 miles. | |
| (42) 126 tons. | (43) 10 tons 9 cwt. | | |
| (44) 11 tons 15 cwt. 2 qrs. | (45) £11. 18. 5 $\frac{1}{4}$. | (46) £45. 14. 0. | |
| (47) 28 tons 11 cwt. 1 qr. 20 lbs. | | (48) £23. 1. 4 $\frac{1}{11}$. | |
| (49) £3700. 10. 6. | (50) £40. 10. 0. | (51) 900 days. | |
| (52) 156 men. | (53) 8400 acres. | (54) 8s. 9d. | |
| (55) £423. 5. 0. | (56) £1. 2. 8. | (57) £1. 7. 6. | |

P. A.

23

- (58) £1. 0. 11 $\frac{3}{4}$. (59) £43. 10. 2 $\frac{1}{4}$. (60) 46 tons 10 cwt.
 (61) £3. 2. 0. (62) £587. 13. 0. (63) 10s. 9 $\frac{3}{8}$ d.
 (64) £17. 7. 1. (65) 16 hrs. 40 min. (66) £1. 9. 8 $\frac{5}{8}$ $\frac{2}{3}$.
 (67) £3. 14. 4 $\frac{1}{2}$. (68) £1. 3. 4. (69) £662. 8. 0.
 (70) £3606. 4. 0. (71) £5. 5. 0. (72) 13 cwt.
 (73) 2s. 7 $\frac{1}{2}$ d. (74) £10. 10. 4 $\frac{1}{2}$. (75) £52. 19. 6.
 (76) £5. 12. 3 $\frac{1}{2}$. (77) £1. 10. 0.
 (78) 140 hrs. 37 $\frac{1}{2}$ min. (79) 21 days. (80) £140.
 (81) 16s. 5 $\frac{2}{8}$ d. (82) 7 $\frac{1}{4}$ d. (83) 50 tons.
 (84) 49 days. (85) 1 hr. 6 m. 11 $\frac{1}{2}$ sec. (86) 14s. 2d.
 (87) 7 cwt. 3 qrs. 15 $\frac{7}{11}$ lbs. (88) 7s. 3 $\frac{3}{4}$ d. (89) 80 dozen.
 (90) £9. 17. 5. (91) £9. 13. 4 $\frac{1}{2}$. (92) 6 $\frac{3}{4}$ d.
 (93) 11s. 10d. (94) £54. 16. 4. (95) £14. 2. 8 $\frac{1}{2}$.
 (96) 22 qrs. 5 bus. 1 pk. (97) £6. 6. 0. (98) £117. 15. 2 $\frac{1}{2}$ $\frac{1}{3}$.
 (99) £527. 6. 8. (100) 240 yards. (101) £2. 11. 3.
 (102) £42. 0. 0. (103) 45 miles. (104) £13. 18. 9.
 (105) 6 $\frac{3}{4}$ bushels. (106) 30 yards. (107) 2 days.
 (108) 10 hours. (109) £75. 11. 3. (110) £12. 15. 7 $\frac{3}{4}$.
 (111) 77 qrs. 1 pk. (112) £109. 13. 4. (113) £189. 0. 0.
 (114) 4s. 1 $\frac{5}{8}$ d. (115) 6s. 9d.
 (116) £2. 1. 3 $\frac{3}{4}$. nearly. (117) 1 day. (118) 76 men.
 (119) 29 ounces. (120) £7000. (121) £17. 6. 10 $\frac{1}{2}$.
 (122) 10d. (123) £16. 15. 4. (124) 1s. 4d.
 (125) £10. (126) £8. (127) 12 cwt. 4 lbs. 5 oz.
 (128) 2 tons 17 cwt. 1 qr. 5 lbs. 8 $\frac{84375}{1000000}$ oz. (129) 58 tons 17 cwt. 3 $\frac{1}{2}$ lbs.
 (130) 2s. 4 $\frac{1}{8}$ $\frac{3}{8}$ d. (131) £35. 9. 4. (132) 117th page.
 (133) 9s. 7 $\frac{2}{8}$ $\frac{3}{8}$ d. and £258. 10. 0. (134) 3 $\frac{3}{4}$ dozen.
 (135) £25. 15. 3. (136) £3. 10. 11 $\frac{2}{8}$ $\frac{5}{8}$ $\frac{1}{8}$. (137) 35 and 56.
 (138) £42. 10. 0. (139) £13. 6. 8.
 (140) 19 hrs. 41 m. 42 sec. (141) 1 h. 13 min.
 (142) £575. 15. 2. (143) 9 hours.
 (144) In 30 hrs. from B's start when both have walked 120 miles.
 (145) 159 days. (146) £17. 7. 2 $\frac{3}{8}$. (147) £154. 14. 0 $\frac{3}{4}$.
 (148) £4. 3. 5 $\frac{1}{4}$. (149) £588. 0. 0. (150) £87. 3. 0.
 (151) 3 $\frac{1}{4}$ lbs.
 (152) Water 82 cwt. 4·368 lbs., sugar 2 cwt. 3 qrs. 14·784 lbs., starch
 3 cwt. 2 qrs. 0·784 lbs.
 (153) 858750. (154) £33. 17. 6. (155) £570. 8. 6 $\frac{7}{8}$.
 (156) 2 $\frac{1}{2}$ days. (157) 339, 226 and 113.
 (158) 3 lbs. 6 $\frac{1}{2}$ oz. and 2 lbs. 10 $\frac{1}{2}$ oz. (159) 132 hours.
 (160) £1. 13. 8 $\frac{1}{4}$. (161) £88. 14. 7 $\frac{1}{2}$. (162) £18. 0. 7 $\frac{1}{2}$.

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|---------------------------------------|---|---------------------------------|
| (163) 4 lbs. $7\frac{1}{2}$ oz. | (164) £1. | (165) 178·855 miles. |
| (166) 240000 miles. | (167) £161. 14. 0. | (168) 150·89, &c. versts. |
| (169) £10. 4. 9. | (170) £17. 12. 0. | (171) £24. 10. 0. |
| (172) £732. | (173) £7585. 13. 0 son ; £2528. 11. 0 daughter. | |
| (174) 7 lbs. 13 oz. | (175) 7 miles. | (176) 22 days. |
| (177) 220 strokes. | (178) £3. 8. 3. | |
| (179) £1091. 13. 1·9 nearly. | (180) £157. 10. 0. | |
| (181) £142. 3. 9. | (182) 36 yds.; £10. 2. 6. | (183) £18949315 $\frac{5}{7}$. |
| (184) £1576 $\frac{5}{6}$. | (185) 37 $\frac{1}{2}$ yards. | (186) 1132 $\frac{7}{8}$ miles. |
| (187) £176. 17. 6. | (188) 20 $\frac{7}{8}$ tons. | (189) £11. 13. 4. |
| (190) £10. 5. 7 $\frac{1}{2}$. | (191) £1734. 14. 9. | (192) 36 hours. |
| (193) 45 yards. | (194) 5 days. | (195) 7 hours. |
| (196) 34 men. | (197) 22 wks. 5 $\frac{3}{4}$ days. | |
| (198) 221472 blocks; £2768. 8. 0. | (199) 36 reams 9 quires 4 sheets. | |
| (200) £763. 17. 6.; 2s. 1d. in the £. | | |

COMPOUND PROPORTION.

- | | | |
|----------------------------------|-------------------------------------|--|
| (1) 216 men. | (2) 70 horses. | (3) £34. 2. 6. |
| (4) £18. 9. 0. | (5) £3. 3. 0. | (6) 3s. 4d. |
| (7) £210. | (8) £1. 6. 8. | (9) £5. 5. 5. |
| (10) 3 cwt. 1 $\frac{1}{3}$ qrs. | (11) 14 lbs. 2 $\frac{5}{8}$ oz. | (12) 130 yds. 2 ft. |
| (13) £8. 12. 5. | (14) 45 days. | (15) 21 $\frac{1}{2}$ cwt. |
| (16) 172 $\frac{4}{5}$ cwt. | (17) 131 lbs. 13 oz. 6 drs. | (18) £36. |
| (19) 6 shillings. | (20) £945. | (21) 14s. 8 $\frac{3}{4}$ d. |
| (22) 30 guineas. | (23) 5 $\frac{3}{8}$ weeks. | (24) 110 ounces. |
| (25) 6 cwt. 2 qrs. 17 lbs. | (26) 8 $\frac{1}{10}$ years. | (27) 16 $\frac{1}{4}$ bushels. |
| (28) 13s. 4d. | (29) 111 miles. | (30) 10s. 6d. |
| (31) £10. 7. 0. | (32) 723 $\frac{1}{3}$ bushels. | (33) £1000. |
| (34) 9 hours. | (35) 19 $\frac{3}{8}$ days. | (36) £595. 2. 8. |
| (37) £3. 12. 11. | (38) 6 days. | (39) 16 $\frac{3}{8}$ days. |
| (40) 7 days. | (41) 10 days. | (42) £32. |
| (43) 5 $\frac{1}{3}$ months. | (44) £206. 13. 4. | (45) 718 tons 4 cwt. |
| (46) £86. 8. 0. | (47) £5. 4. 5 $\frac{1}{3}$. | (48) 120 days. |
| (49) 5 lbs. | (50) 160. | (51) $\frac{2}{3}$ $\frac{7}{8}$ days. |
| (52) 40000 men. | (53) 36 days. | (54) 15 days. |
| (55) £3266. 13. 4. | (56) 1 lb. 13 $\frac{1}{2}$ oz. | (57) 6 $\frac{2}{3}$ $\frac{9}{8}$ days. |
| (58) 2 $\frac{2}{9}$ months. | (59) 8 men. | (60) 20 men. |
| (61) 72 lbs. | (62) As 9 : 25, 3 : 5, and 21 : 25. | (63) £2. 6. 8. |

PER-CENTAGES.

- | | | |
|------------------|--------------------------------|--------------------------------|
| (1) 10 per cent. | (2) 16 $\frac{2}{3}$ per cent. | (3) 12 $\frac{1}{2}$ per cent. |
| (4) £4. 10. 0. | (5) 12 $\frac{1}{2}$ per cent. | (6) £4. 6. 7 $\frac{1}{2}$. |

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|---|-------------------------------|--|
| (7) 7s. 7 $\frac{1}{8}$ d. | (8) 10s. 5d. | (9) 9s. 7d. |
| (10) £8. 5. 0. | (11) £2. 9. 6. | |
| (12) £2. 12. 6. total gain ; 6 $\frac{1}{4}$ gain per cent. | (13) 23 $\frac{1}{3}$ s. | |
| (14) 10d. | (15) 10s. 10 $\frac{1}{2}$ d. | (16) £8. 7. 3. |
| (17) 6s. 8d. | (18) 50 per cent. | (19) 9s. 5 $\frac{3}{8}$ d. |
| (20) 14 $\frac{1}{10}$ s. | (21) £1. 5. 0. | (22) £5. |
| (23) 8 $\frac{1}{4}$ d. | (24) £10. | (25) 66 $\frac{2}{3}$ per cent. |
| (26) 10 per cent. | (27) £3. 10. 0. | (28) 11s. 2 $\frac{1}{4}$ d. |
| (29) £19. 11. 1. | (30) £2531. 5. 0. | (31) £12837. 10. 0. |
| (32) £41. 13. 7 $\frac{1}{2}$. | (33) 13s. 2 $\frac{1}{4}$ d. | (34) £5253. 6. 8. |
| (35) £46. 16. 0 $\frac{3}{4}$. | (36) £19. 15. 0. | (37) £15. 6. 7. |
| (38) £308. 0. 9 $\frac{3}{8}$. | (39) £10005. | (40) £2. 10. 7 $\frac{1}{2}$. |
| (41) £7. 12. 1. | (42) 17 $\frac{3}{4}$. | (43) 87 $\frac{1}{2}$ per cent.; £1. 1. 0. |
| (44) £350. | (45) £2. 7. 6 $\frac{1}{2}$. | (46) £28. 1. 0. |
| (47) 17s. 10 $\frac{2}{3}$ d. | (48) £382. | (49) £7. 16. 8. |
| (50) £262. 10. 0. | | |

SIMPLE INTEREST.

- | | | |
|-----------------------------------|-----------------------------------|-----------------------------------|
| (1) £24. | (2) £37. 10. 0. | (3) £28. |
| (4) £62. 8. 0. | (5) £23. 8. 0. | (6) £230. |
| (7) £115. | (8) £23. 8. 0. | (9) £83. 2. 6. |
| (10) £75. 0. 9. | (11) £516. | (12) £80. 18. 11 $\frac{1}{10}$. |
| (13) £81. 14. 0. | (14) £460. 9. 0. | (15) £2. 7. 6 $\frac{6}{10}$. |
| (16) £205. 11. 1 $\frac{1}{10}$. | (17) £157. 9. 6 $\frac{3}{4}$. | (18) £93. 7. 6. |
| (19) £15. 5. 3 $\frac{1}{2}$. | (20) £624. 15. 0. | (21) £34. 19. 0 $\frac{3}{4}$. |
| (22) £183. 6. 8. | (23) £7946. 18. 6 $\frac{1}{2}$. | (24) £930. 15. 0. |
| (25) £216. 17. 2 $\frac{1}{2}$. | (26) £518. 2. 1 $\frac{3}{4}$. | (27) £56. 2. 5 $\frac{1}{2}$. |
| (28) £18. 6. 10. | (29) £92. 12. 11 $\frac{1}{2}$. | (30) £109. 5. 0. |
| (31) £526. 15. 0. | (32) £140. 14. 0. | (33) £175. 10. 0. |
| (34) 22 $\frac{2}{3}$ years. | (35) £12. 13. 5 $\frac{1}{4}$. | (36) £512. 15. 1 $\frac{1}{2}$. |
| (37) £300. 14. 8 $\frac{2}{3}$. | (38) 3 $\frac{1}{2}$ years. | (39) 5 per cent. |
| (40) 3 $\frac{1}{3}$ per cent. | (41) £98. 14. 3 $\frac{1}{4}$. | (42) £500. |
| (43) £761. 18. 1 $\frac{1}{7}$. | (44) £10. 14. 9 $\frac{5}{7}$. | (45) £354. 17. 3 $\frac{2}{3}$. |
| (46) £400. | (47) £1. 11. 8 $\frac{1}{4}$. | (48) 2 $\frac{1}{3}$ years. |
| (49) 40 years. | (50) 3 years. | (51) 7 $\frac{1}{3}$ per cent. |
| (52) £226. 1. 0. | (53) £1100. | (54) 6 $\frac{1}{4}$ years. |
| (55) 1 per cent. | (56) £15. 10. 0 $\frac{3}{4}$. | (57) £143. 16. 5. 3. |
| (58) £2. 3. 1 $\frac{1}{2}$. | (59) £323. 7. 11 $\frac{2}{3}$. | (60) £11350. 10. 0. |
| (61) £33. 9. 7 $\frac{5}{8}$. | (62) 5 per cent. | (63) £324. 5. 1. |
| (64) 10 years. | (65) £26. 0. 10. | |

COMPOUND INTEREST.

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|-------------------------------------|------------------------------------|-----------------------------------|
| (1) £24. 7. 2 $\frac{3}{4}$. | (2) £60. 17. 7 $\frac{1}{2}$. | (3) £144. 18. 4 $\frac{1}{2}$. |
| (4) £255. 16. 8 $\frac{1}{4}$. | (5) £191. 0. 7 $\frac{1}{4}$. | (6) £731. 4. 3 $\frac{3}{4}$. |
| (7) £153. 10. 8 $\frac{1}{2}$. | (8) £1702. 8. 6 $\frac{3}{4}$. | (9) £1706. 15. 4 $\frac{3}{4}$. |
| (10) £18822. 19. 11 $\frac{3}{4}$. | (11) £57469. 10. 3 $\frac{3}{4}$. | (12) £1239. 18. 2 $\frac{1}{4}$. |
| (13) £444. 4. 5 $\frac{1}{4}$. | (14) £1862. 4. 7 $\frac{3}{4}$. | (15) £7205. 5. 3 $\frac{1}{4}$. |
| (16) £206847. 18. 5 $\frac{3}{4}$. | (17) £191. 5. 0 $\frac{1}{4}$. | (18) £830. 10. 8. |
| (19) £1972. 5. 2 $\frac{1}{4}$. | (20) £3702. 6. 0. | (21) £401. 17. 0 $\frac{1}{2}$. |
| (22) £1000. | (23) £946. 17. 9. | (24) 4s. 9 $\frac{3}{4}$ d. |
| (25) 6 per cent. | (26) £48. 14. 11. | (27) £167. 6. 2 $\frac{1}{2}$. |
| (28) £109. 10. 2. | (29) £5887. 6. 8 $\frac{3}{4}$. | (30) £69. 11. 3 $\frac{1}{4}$. |
| (31) 3 years. | (32) £10000. | |

DISCOUNT.

- | | | |
|--|--|---|
| (1) £3710. | (2) £497. 4. 0. | (3) £1103. |
| (4) £721. 5. 0. | (5) £1600. | (6) £408. |
| (7) £315. | (8) £80. 13. 4. | (9) £28. 4. 0. |
| (10) £326. 0. 5 $\frac{1}{2}$ $\frac{8}{16}$. | (11) 8s. 1 $\frac{1}{2}$ d. | (12) £11. 1. 0. |
| (13) £9. | (14) £1. 12. 0. | (15) £17. 12. 0. |
| (16) £18. 12. 0. | (17) £1. 0. 4 $\frac{8}{16}$. | (18) £1. 17. 2 $\frac{1}{2}$ $\frac{1}{16}$. |
| (19) £2. 6. 9 $\frac{3}{8}$. | (20) £13. 11. 10 $\frac{3}{8}$ nearly. | (21) £3. 8. 0. |
| (22) 8s. 3d. | (23) £3. 9. 4. | (24) 16s. 3d. |
| (25) £60. 8. 3. | (26) £1. 2. 6. | (27) £1. 5. 0. |
| (28) £4. 14. 1 $\frac{4}{16}$. | (29) £5. 8. 9. | (30) 2s. 7 $\frac{1}{2}$ d. |

STOCKS.

- | | | |
|-------------------------------------|-------------------|------------------------------------|
| (1) £4600. | (2) £123. 3. 0. | (3) £3. 13. 8 $\frac{4}{16}$. |
| (4) In the 4 per cents. | (5) £5. 8. 0. | (6) £23. 8. 9. |
| (7) £90000. | (8) £38. 10. 0. | (9) £50 increase. |
| (10) £200 increase. | (11) £81. 5. 0. | (12) £8099. |
| (13) £30 increase. | (14) £676. 16. 0. | (15) £281. 18. 11 $\frac{3}{16}$. |
| (16) The 3 $\frac{1}{2}$ per cents. | (17) £1760. | (18) £240. 2. 0. |
| (19) £16. 10. 0 increase. | | (20) £5950. |

PROPORTIONAL PARTS.

- | | |
|--|--|
| (1) 369, 246, 123. | (2) 144, 90, 126, 180. |
| (3) 8 $\frac{2}{3}$, 26, 17 $\frac{1}{3}$. | (4) 111, 11·1, 1·11. |
| (5) 7 lbs. 11 dwts. 6 grs. | (5) 48 and 45. |
| (7) 14, 49, 63; 63, 42, 21. | (8) 24lbs. 9 oz.; £1264. 7. 9 $\frac{1}{16}$. |

- (9) Potash 3 cwt., Ph. L. 6 cwt. 1 qr. 16 lbs. 12·8 oz., Ch. P. 3 lbs. 9·344 oz., E. Ph. 8 cwt. 3 qrs. 16 lbs. 12·8 oz., S. 11 lbs. 3·2 oz., M. O. 5 lbs. 9·6 oz.; Loss 1 cwt. 2 qrs. 2 lbs. 0·256 oz.
- (10) 324, 320. (11) $291\frac{3}{7}$, $233\frac{1}{3}$, $194\frac{2}{7}$.
- (12) Ch. S. 1 ton 6 cwt. 2 qrs., S. S. 4 cwt. 2 qrs. 11·2 lbs., Ch. M. 5 cwt. 0 qrs. 11·2 lbs.
- (13) £60, £100, £160, £200. (14) 8 oz. 6 dwts. 16 grs.
- (15) £45 notes, £30 gold, £10 silver.
- (16) W. 14 lbs. 8·96 oz., F. F. 15 lbs. 7·296 oz., H. G. 2 qrs. 24 lbs. 1·28 oz., M. 1 lb. 14·464 oz.
- (17) A £30; B £10; C £3. 6. 8; D £16. 13. 4.
- (18) 1071, 1197, 1449. (19) $30\frac{1}{12}$ and $7\frac{1}{12}$.
- (20) £77. 15. $6\frac{2}{3}$; £155. 11. $1\frac{1}{3}$ and £466. 13. 4.
- (21) £1. 15. 10; £25. 4. 3; £9. 19. $2\frac{1}{2}$; £14. 12. $4\frac{1}{2}$. (22) 97 : 83.
- (23) A £63; B £157. 10. 0; C £178. 10. 0. (24) A £396; B £297.
- (25) £71. 8. $6\frac{2}{3}$; £28. 11. $5\frac{1}{7}$.
- (26) A £3500; B £1000; and C and D £1250 each.
- (27) £6015. 16. $6\frac{3}{4}$; £3609. 9. $11\frac{1}{4}$; £2807. 7. $8\frac{3}{4}$; £3208. 8. 10; £1203. 3. $3\frac{3}{4}$; £4411. 12. $1\frac{3}{4}$; £2005. 5. $6\frac{1}{4}$.
- (28) A £540; B £972; C £810 and D £1158. (29) £4.
- (30) 63, 27, 42, and 57 respectively.
- (31) 169 tons iron, 156 tons grain, and 25 tons provisions.
- (32) Wages £275280; permanent way £165168; rolling stock £229400; material £155992; duty, &c. £91760.
- (33) A £60, B £245, C £405.

INVOLUTION.

- | | | |
|--|------------------------------------|--|
| (1) 29791. | (2) 855625. | (3) 43237380096. |
| (4) 31255·875. | (5) 1·442897. | (6) 801·506204569. |
| (7) 17596287801. | (8) 118587876497. | (9) 78310985281. |
| (10) 1015·075125. | (11) 781. | (12) 177266. |
| (13) 137142080. | (14) ·035012791. | (15) 92100·25. |
| (16) 100875809. | (17) 525. | (18) 124618464. |
| (19) 168210432. | (20) 246949969867776. | (21) 38385223. |
| (22) 247278197870. | (23) $1580\frac{1191}{19850}$. | (24) 14·885593. |
| (25) ·01, &c. | (26) 20275550. | (27) 53·841087. |
| (28) ·118955463. | (29) 1543·1151898784. | (30) 355999·6, &c. |
| (31) $\frac{280}{1155}$ or $\frac{1}{4}$. | (32) $\frac{5832}{8880}$. | (33) $\frac{3125}{7776}$. |
| (34) $\frac{34137560}{88788111}$. | (35) $\frac{1685150}{218847107}$. | (36) $\frac{60025}{2401}$ or $21\frac{204}{101}$. |

EVOLUTION.

(1) 616.	(2) 526.	(3) 729.	(4) 816.
(5) 476.	(6) 593.	(7) 874.	(8) 518.
(9) 307.	(10) 1001.	(11) 1·03.	(12) 12·6.
(13) 6·03.	(14) 55·8.	(15) 28·21347.	(16) 28·30194.
(17) 25·25866.	(18) 2·00748.	(19) 1·92093.	(20) 9·02219.
(21) 22·99258.	(22) 10·00822.	(23) 80·3456.	(24) 272.
(25) 37·21.	(26) 15·36845.	(27) 45·08991.	(28) 45·21871.
(29) 5·51356.	(30) 5·15633.	(31) 1·03811.	(32) 12.
(33) 31.	(34) 97.	(35) 38.	(36) 47.
(37) 54.	(38) 168.	(39) 592.	(40) 732.
(41) 4·17933.	(42) 9·87169.	(43) 4·76220.	(44) 6·78242.
(45) 9·81665.	(46) 9·33319.	(47) 8·40611.	(48) 8·98350.
(49) 3·07231.	(50) 3·36197.	(51) 48202.	(52) 6·42468.
(53) 1·69015.	(54) 3·26417.	(55) 00859.	(56) 0504.
(57) $\frac{5}{8}$.	(58) $\frac{9}{15}$.	(59) $\frac{11}{16}$.	(60) $\frac{41}{61}$.
(61) $\frac{73}{85}$.	(62) $\frac{47}{69}$.	(63) $\frac{68}{83}$.	(64) $\frac{119}{121}$.
(65) $\frac{69}{80}$.	(66) $\frac{8}{13}$.	(67) $\frac{9}{14}$.	(68) $\frac{67}{111}$.
(69) $\frac{81}{82}$.	(70) $\frac{97}{96}$.		

INVOLUTION AND EVOLUTION.

(1) 539·8 nearly.	(2) 33·926 nearly.	(3) 69·57 yards nearly.	
(4) 14 ac. 4440 sq. yds.	(5) 100544 $\frac{2}{3}$ c. ft.	(6) 2655 c. yds. 3 ft. 1507 $\frac{2}{3}$ in.	
(7) 1728.	(8) 649·5.	(9) 11·20965.	(10) $\frac{19}{210}$.
(11) $1\frac{85}{171}$.	(12) $7\frac{1}{27}$.	(13) 9100 sq. yds.	
(14) 19·23538.	(15) 27·11088 ft.	(16) 76 inches.	
(17) 582·06 yds. nearly.	(18) 8·48528 ft. nearly.	(19) 1922 sq. ft.	
(20) 768 sq. inches.	(21) 12.	(22) 7.	(23) 63.
(24) 6 and 12.	(25) 10 and 20.	(26) 4 $\frac{1}{2}$ and 17 $\frac{2}{3}$.	
(27) 244 lbs. 11 oz.			

EXAMINATION PAPERS.

PAPER I.

- (1) 103; 7609; 40020; 1806; 9407.
 (2) Seven thousand and twenty one, three hundred and seven, three thousand and nine, eighteen thousand and eighty seven, five thousand and ten.
 (3) 2283. (4) 429. (5) 95627.
 (6) Two hundred and one thousand nine hundred and fifty five.
 (7) Seventy thousand and seventy, seven hundred and seven, five thousand seven hundred and six, nine millions eleven thousand six hundred and ten, three thousand two hundred and ten, ten thousand one hundred and seventy six, and forty thousand four hundred.
 (8) 152977.
 (9) One million one hundred and thirty four thousand and seventy.
 (10) 89655751.

PAPER II.

- (1) 56. (2) 9115. (3) 960264. (4) 75894084. (5) 6191.
 (6) Seventy two millions nine hundred and seventy five thousand three hundred and eighty nine.
 (7) 27789. (8) 2048. (9) 291375. (10) 16741.

PAPER III.

- (1) 18862. (2) 27 times and 100420 rem^r. (3) 12804.
 (4) 155708. (5) 668192. (6) 20736. (7) 7148 days.
 (8) 35802. (9) 10200 and 915 rem^r. (10) 1377392794281.

PAPER IV.

- (1) 2385. (2) 31. (3) 3753 and 11 rem^r. (4) 708.
 (5) 11292 farthings. (6) £8. 13. 5 $\frac{3}{4}$. (7) 210 dozens.
 (8) 787422. (9) 13s. 9d. (10) £2265. 5. 6.

PAPER V.

- | | | |
|-------------------------------------|------------------------------|-----------------|
| (1) 8702 and 119 rem ^r . | (2) £1. 8. 8 $\frac{3}{4}$. | (3) 72 times. |
| (4) £7. 17. 6 $\frac{1}{2}$. | (5) £1005. 13. 8. | |
| (6) £6865. 11. 10 $\frac{1}{2}$. | (7) £7. 5. 10. | (3) £91. 11. 9. |
| (9) 17s. 7 $\frac{1}{4}$ d. | (10) 407. | |

PAPER VI.

- | | | |
|--|--------------------------------------|--------------------------------|
| (1) £17. 18. 0 $\frac{1}{4}$ $\frac{2}{3}$. | (2) £1552. 5. 7 $\frac{1}{2}$. | (3) £18. 19. 9 $\frac{1}{4}$. |
| (4) £14. 17. 6. | (5) 845941 and 66 rem ^r . | |
| (6) £2. 13. 5 $\frac{1}{3}$. | (7) 40 lbs. | (8) £10. 17. 6. |
| (9) 144. | (10) 12s. 4 $\frac{3}{4}$ d. | |

PAPER VII.

- | | | |
|--|-------------------------------|-----------------|
| (1) £1. 3. 0 $\frac{2}{3}$ $\frac{4}{3}$; £232. 15. 7 $\frac{1}{2}$. | (2) £2009. 3. 6. | (3) £31. 10. 0. |
| (4) 792 $\frac{2}{3}$ yds. | (5) 272 days. | (6) 20 times. |
| (8) £60. 18. 9. | (9) £50. 0. 2 $\frac{1}{2}$. | (10) £5. 15. 9. |
| (7) 604800 times. | | |

PAPER VIII.

- | | | |
|---------------------------------|--------------------------------------|-----------------------------|
| (1) £148. 13. 2 $\frac{3}{4}$. | (2) 1325 m. 6 fur. 2 p. 2 yds. 1 ft. | |
| (3) £68. 3. 10 $\frac{1}{2}$. | (4) £8. 13. 4. | (5) £2. 19. 6. |
| (6) £7. 14. 0. | (7) 293. | (8) 16s. 3 $\frac{1}{2}$ l. |
| (9) £41. 11. 2. | (10) 3s. 8d. | |

PAPER IX.

- | | | |
|---------------------------------|-------------------------------|----------------------------|
| (1) 10d. | (2) £184. 4. 0. | (3) 3s. 6d. |
| (4) £1745. 8. 1 $\frac{1}{2}$. | (5) £5. 8. 11 $\frac{1}{2}$. | (6) 4s. 6 $\frac{1}{2}$ d. |
| (7) 400. | (8) £60. 15. 0. | (9) 792. |
| (10) 19s. 7 $\frac{1}{2}$ d. | | |

PAPER X.

- | | | |
|------------------------------|------------------------------|-------------------------------|
| (1) 110. | (2) £5. 7. 9 $\frac{3}{4}$. | (3) £4. 6. 10 $\frac{1}{4}$. |
| (4) 2s. 3d. | (5) £9. 6. 8. | (6) 5s. 6d. |
| (7) 17s. 10 $\frac{1}{2}$ d. | (8) 210. | (9) 5995 pence. |
| (10) £88. 4. 0. | | |

PAPER XI.

- | | | |
|---|-------------------------------|-------------------------------|
| (1) 18486877 $\frac{1}{7}$ $\frac{2}{3}$; 13664213 $\frac{2}{3}$ $\frac{2}{3}$. | (2) 174 days. | |
| (3) £134. 12. 6 $\frac{1}{4}$; £156. 19. 1 $\frac{3}{4}$. | (4) £3. 12. 9 $\frac{1}{4}$. | (5) 17 weeks. |
| (6) 9506 and 7799. | (7) 47. | (8) £2. 1. 11 $\frac{1}{2}$. |
| (9) 30s. a man, 10s. a woman, 7s. 6d. a boy. | | |
| (10) 177 m. 2 f. 18 p. 2 yds. | | |

ANSWERS.

PAPER XII.

- | | | |
|--------------------------------|-----------------|----------------------|
| (1) 780. | (2) 9s. 9½d. | (3) 10 dozen pairs.. |
| (4) £131. 0. 10. | (5) £1. 15. 9¾. | (6) £22. 6. 3. |
| (7) £69. 6. 0. | (8) 37 tons. | |
| (9) £362. 0. 5¼; £848. 12. 2½. | | (10) £83. 5. 0. |

PAPER XIII.

- | | | |
|------------------|--------------------------------|----------------------------|
| (1) 50706. | (2) 3 m. 1154 yds. 2 ft. 2 in. | (3) 3405. |
| (4) £4054. 2. 6. | (5) £15936. 12. 0. | (6) 853 shillings 2 pence. |
| (7) 1611336. | (8) 120921025. | (9) £2. 16. 7½. |
| (10) £22. 15. 0. | | |

PAPER XIV.

- | | |
|-------------------------------------|---|
| (1) 54 tons 10 cwt. 20 lbs. | (2) 2 tons 1 cwt. 1 qr. 21 lbs. |
| (3) 118 ac. 28 p. 19¼ yds. | (4) 3294 gallons. |
| (5) 1456 bus. 2 pks.; £97. 2. 0. | (6) £6. 11. 11¼ ² / ₅ . |
| (7) £385. 12. 9¾; 4611 threepences. | (8) £4. 3. 9¾. |
| (9) 12 m. 1630 yds. | (10) £767. 5. 0; 1700 cents. |

PAPER XV.

- | | | |
|---|------------------|--------------------|
| (1) £2. 2. 5. | (2) 15355. | (3) £346. 10. 10½. |
| (4) £75. 10. 2. | (5) £4. 15. 0½. | (6) 440. |
| (7) 146 sovs. and 5s. 7½d. remr. | | (8) £2953. 9. 10. |
| (9) £1. 11. 10 ⁵ / ₁₄ . | (10) £15. 0. 0¼. | |

PAPER XVI.

- | | | |
|----------------------------------|---|-------------------|
| (1) £69. 8. 10¾. | (2) 10560 paces. | (3) £142. 17. 5¾. |
| (4) £34143. 2. 10. | (5) 12s. 3d. | (6) £35. 13. 9½. |
| (7) 2 tons 18 cwt. 19 lbs. 8 oz. | (8) 14 tons 2 cwt. 1 qr. 7 ² / ₅ lbs. | |
| (9) £1. 6. 5¼. | (10) 3¼d. | |

PAPER XVII.

- | | | |
|------------------|-------------------|--------------------|
| (1) £125. 1. 8. | (2) 4d. | (3) £75. 17. 6½. |
| (4) 660. | (5) 164½ gals. | (6) £4372. 3. 11½. |
| (7) £47. 10. 8. | (8) £1032. 5. 9¾. | (9) £1. 4. 7¼. |
| (10) £19. 2. 6¼. | | |

PAPER XVIII.

- | | | |
|--------------------------------------|-----------------|---------------------|
| (1) 265. | (2) 100203. | (3) 45 times. |
| (4) £60. 15. 10½. | (5) £22. 15. 0. | (6) £4211302. 1. 8. |
| (7) 5292 florins. | (8) 3840 yards. | (9) 11½d. |
| (10) 12276 lbs. 3 oz. 1 dwt. 10 grs. | | |

PAPER XIX.

- (1) £7. 15. 7½. (2) 16s. 6d. (3) 15.
 (4) 13 tons 10 cwt. 2 qrs. 17 lbs. (5) 60. (6) £1133. 15. 0.
 (7) £3. 8. 3. (8) £10. 2. 0. (9) £2. 15. 8¾.
 (10) £1481. 11. 3.

PAPER XX.

- (1) £73. 17. 7½. (2) £1. 19. 7. (3) 287.
 (4) £27. 5. 3¼. (5) 2341 and 393 rem^r. (6) £7459. 4. 5½.
 (7) £4. 4. 11½; £23. 7. 3¼. (8) 19957 grs. (9) 4950 times.
 (10) Letter, by 16 cwt. 3 qrs. 7 lbs.

PAPER XXI.

- (1) 352. (2) 5 tons 16 cwt. 3 qrs. 24 lbs.
 (3) 127795 tons 4 cwt.
 (4) 84 tons 19 cwt. 2 qrs. 19 lbs. 5 oz.; 48 m. 22 p. 4 yds. 2 ft. 9 in.
 (5) 90381567 sq. in. and 90381567 sec. (6) 1442 qrs. 1 bus. 2 pks.
 (7) 1 cwt. 2 qrs. 18¾ lbs. (8) 6 cwt. 3 qrs. 12 lbs. 7 oz.
 (9) 6 c. yds. 3 ft. 409 in. (10) £3. 12. 0.

PAPER XXII.

- (1) 4 m. 106 yds. 2 ft. (2) £4. 7. 6½.
 (3) 3502035684; 42107871239. (4) 63 m. 1 f. 2 p. 4 in.
 (5) 79103817. (6) 63918¾ days. (7) 356842 half-yards.
 (8) 18287 yds. 2 qrs. (9) £17. 10. 0. (10) £3431.

PAPER XXIII.

- (1) £3. 6. 0. (2) £20. 10. 7½. (3) £1527. 13. 6½.
 (4) 8253 tons 2 cwt. 9 lbs. 7 oz. (5) 4061 times, 25302 oz. rem^r.
 (6) 17s. 3d. (7) 50 min. (8) 4752 times.
 (9) £4. 10. 5. (10) £2. 7. 2¼.

PAPER XXIV.

- (1) 6072 days. (2) Wednesday. (3) 125 half-pence.
 (4) £167. 6. 8. (5) £161. 12. 6. (6) 12 yds. 1 ft. 4 in.
 (7) 261 days. (8) £12. 11. 9½. (9) £3195. 15. 4¾.
 (10) 16s. 11¼d.

PAPER XXV.

- (1) £845866. 13. 4. (2) £1. 12. 0¾. (3) 8936 days.
 (4) 1439. (5) 123 tons 6 cwt. 23 lbs. 12 oz. 2 drs.
 (6) 28193 sq. yards. (7) 240. (8) £66. 18. 10¾.
 (9) 588. (10) £27276. 3. 0.

PAPER XXVI.

- | | | |
|----------------------------------|-----------------------------|-----------------|
| (1) 3125 tons. | (2) 4s. 2½d. and 37f. remr. | (3) £7. 12. 3. |
| (4) 1515 c. yds. 15 ft. 1474 in. | (5) £2925. | (6) £738. 3. 0. |
| (7) £81. 5. 7½. | (8) 77. | (9) 10s. 1d. |
| | | (10) £11. 3. 4. |

PAPER XXVII.

- | | | |
|--------------------------------------|------------------|---------------------|
| (1) 30 yds. 1 ft. 8 in.; 200 poles. | (2) 77. | (3) 21. |
| (4) 1 ac. 3 r. 17 yds. 5 ft. 128 in. | (5) £11. 5. 0. | (6) 320 acres. |
| (7) £7. 0. 6½. | (8) £793. 7. 4½. | (9) 4662 guin. 18s. |
| (10) 68 tons 12 cwt. 2 qrs. 21 lbs. | | |

PAPER XXVIII.

- | | |
|---------------------------------------|------------------------------------|
| (1) 1281 lbs. 11 oz. 10 dwts. 10 grs. | (2) 3 r. 7 p. 16 yds. 2 ft. 68 in. |
| (3) £29. 10. 11½. | (4) £1400. 9. 0¾. |
| (6) £6. 15. 0. | (7) 98 men. |
| (9) 2400 yds. | (10) 10.49 a.m. |
| | (5) 15s. 4d. |
| | (8) £25. 16. 5½. |

PAPER XXIX.

- | | | |
|---|----------------------|-----------------|
| (1) 12 lbs. 2 oz. 9 dwts. 23 grs. Troy; 10 lbs. Avoir. 319 grs. | | |
| (2) 253750-grains. | (3) 113 lbs. 5 dwts. | (4) £32. 9. 8. |
| (5) £18. 11. 10½. | (6) 361 yds. | (7) 69s. 5¾d. |
| (8) 40 articles. | (9) £131. 13. 8½¾. | (10) £2. 4. 4½. |

PAPER XXX.

- | | | |
|--------------------------------------|---------------------------------|----------------------------------|
| (1) £110. 16. 8. | (2) £328¾. | (3) 95 tons 1 cwt. 2 qrs. 8 lbs. |
| (4) 275 tons 19 cwt. 15 lbs. 12 oz. | (5) 220972 lbs. 3 qrs. 1 pk. | |
| (6) £1710. | (7) 3s. 10¾d. | (8) £8566. 10. 0. |
| (9) 15758 tons 3 qrs. 12 lbs. 11 oz. | (10) 22 times and 3s. 11d. rem. | |

PAPER XXXI.

- | | | |
|--------------------------------|-------------------------------------|-------------------|
| (1) £140000. | (2) 1116 m. 7 p. 2 yds. 1 ft. 4 in. | |
| (3) £45208. 6. 8. | (4) £1303. 18. 9. | (5) 15 times. |
| (6) £12653. 3. 9. | (7) 535 days. | (8) 156156957889. |
| (9) 3 tons 4 cwt. 1 qr. 9 lbs. | (10) £246. | |

PAPER XXXII.

- | | | |
|---|-----------------|------------------|
| (1) 12276 lbs. 3 oz. 1 sc. 14 grs. | (2) 155 yards. | (3) £157. 10. 0. |
| (4) 3 sq. m. 352 ac. 2 r. 36 p. 11 yds. | | |
| (5) Horse £46. 13. 4; carriage £37. 6. 8. | (6) 12800. | |
| (7) £26. 19. 6⅞. | (8) £509. 4. 0. | (9) £6675. |
| (10) 48 yards. | | |

PAPER XXXIII.

- | | |
|------------------------------------|--------------------------|
| (1) 151 m. 4 f. 23 p. 3 yds. 9 in. | (2) 1s. $1\frac{1}{2}d.$ |
| (3) £4. 12. 0. | (4) $2\frac{1}{4}$ days. |
| (6) 155 yards. | (7) £98541. 13. 4. |
| (9) £2. 15. 6. | (8) 40 pairs. |
| | (10) £164. 13. 5. |

PAPER XXXIV.

- | | | |
|----------------------------|-----------------|----------------------|
| (1) 271 tons 14 cwt. | (2) £107. 8. 0. | (3) £756. 8. 9. |
| (4) 30 days. | (5) £707. | (6) £20000. |
| (7) 128 tons 8 cwt. 2 qrs. | | (8) A, 18s.; B, 12s. |
| (9) 27 tons 9 cwt. 12 lbs. | | (10) £120. 2. 1. |

PAPER XXXV.

- | | |
|--|------------------------------|
| (1) £5. 0. $3\frac{3}{4}$. | (2) £3. 17. $2\frac{3}{4}$. |
| (3) 25 ac. 1 r. 8 p. 11 yds. 2 ft. | (4) 96. |
| (5) £40. 6. 2 each man; £20. 3. 1 a boy. | (6) 30 times. |
| (7) £18. 10. 6. | (8) 11s. $10\frac{1}{2}d.$ |
| (10) 1s. 8d. | (9) 29 steps. |

PAPER XXXVI.

- | | |
|---|---|
| (1) £16. 13. $6\frac{1}{2}$. | (2) 11 ac. 1 r. 3 p. 20 yds. 3 ft. 70 in. |
| (3) £1. 6. $11\frac{3}{4}$. | (4) 10 lbs. |
| (6) $8\frac{1}{4}d.$ and $9\frac{3}{4}d.$ | (5) 14 cwt. 2 qrs. 11 lbs. |
| (9) £337. 19. $4\frac{1}{2}$. | (7) £1. 15. 1. |
| | (8) 316810 c. ft. |
| | (10) 2751 tons 2 qrs. 21 lbs. 13 oz. |

PAPER XXXVII.

- | | | |
|-------------------------------|----------------------------|--------------------------------------|
| (1) £21. 18. $6\frac{7}{8}$. | (2) 79 acres. | (3) £1329. 6. $9\frac{3}{8}$. |
| (4) 8 c. yds. 9 ft. 1251 in. | (5) £1. 2. 0. | (6) £9. 5. 3. |
| (7) 29 ac. 3 r. 10 p. | (8) $97\frac{1}{8}$ miles. | (9) 5 tons 3 cwt. 1 qr. 4 lbs. 3 oz. |
| (10) 3 yds. 2 in. | | |

PAPER XXXVIII.

- | | | |
|----------------------------------|------------|----------------------------------|
| (1) 3s. $3\frac{9}{10}d.$ | (2) 140. | (3) 195800 yards; 54450 sq. yds. |
| (4) 2 yrs. 88 dys. 10 h. 34 sec. | (5) 12322. | (6) 75 miles. |
| (7) £26. 12. $10\frac{1}{2}$. | (8) £630. | (9) $11\frac{9}{11}$. |
| (10) £14. 8. 0. | | |

PAPER XXXIX.

- | | | | |
|--------------------------------|--------------------------|----------------------|-------------|
| (1) 2 men. | (2) 9s. $2\frac{1}{4}d.$ | (3) $2\frac{3}{4}d.$ | (4) 1s. 6d. |
| (5) 12 yards. | (6) £2815. 0. 9. | (7) 11730 persons. | |
| (8) £146. 15. $9\frac{3}{8}$. | (9) £98. 15. 0. | (10) £1. 4. 0. | |

PAPER XL.

- (1) £1. 13. 10 $\frac{7}{11}$. (2) £17. 17. 2 $\frac{1}{4}$; £5. 19. 0 $\frac{1}{4}$. (3) 14s. 0 $\frac{3}{4}$ d.
 (4) 12 times. (5) 1·94. (6) ·4583. (7) 15s. 8 $\frac{1}{3}$ d.
 (8) 1 $\frac{1}{2}$ m. from T. in $\frac{1}{2}$ hr. (9) 3000071. (10) 2 tons 10 cwt.

PAPER XLI.

- (1) £47. 7. 11. (2) £17. 15. 0 $\frac{3}{4}$. (3) £6. 9. 1 $\frac{1}{6}$.
 (4) £150. 15. 2 $\frac{1}{4}$. (5) 9 qrs. 4 bus. 3 pks.; £19. 3. 9. (6) ·5532407.
 (7) £143. 1. 11 $\frac{3}{4}$. (8) £70. 6. 0. (9) £2. 1. 3. and £1. 8. 9.
 (10) £2. 4. 4 $\frac{1}{2}$.

PAPER XLII.

- (1) £31955. 4. 4 $\frac{1}{4}$. (2) £77. 18. 11 $\frac{7}{18}$. (3) 16 yards.
 (4) 5 cwt. 2 qrs. 9 lbs. (5) £200. (6) 17233 tons 6 $\frac{3}{8}$ cwts.
 (7) $\frac{1}{2}$. (8) 14 $\frac{6}{3} \frac{1}{8}$. (9) 1104780.
 (10) 162 ac. 3 r. 6 p. 1 yd. 3 $\frac{1}{2}$ ft.; 151 c. yds. 26 ft. 1052 in.

PAPER XLIII.

- (1) 6 days. (2) 11s. (3) 69984. (4) 35 $\frac{5}{8}$ yards.
 (5) £10. 4. 5 $\frac{1}{2}$. (6) £1. 13. 4. (7) 3 yards. (8) ·083.
 (9) A, 8s. 4d.; B, 7s. 6d. (10) 333 men.

PAPER XLIV.

- (1) £2. 18. 9. (2) £1. 15. 10 $\frac{1}{2}$. (3) £42. 2. 1 $\frac{1}{2}$.
 (4) 2 r. 8 p. 7 yds. 1 ft. 32 in. (5) 18s. 2d. (6) 16.
 (7) £396. 10. 1 $\frac{1}{2}$, £7348. 4. 6 $\frac{3}{4}$, £5817. 1. 3 $\frac{3}{8}$, £5528. 2. 4 $\frac{1}{2}$, £4508. 16. 7 $\frac{1}{2}$.
 (8) £2. 8. 3 $\frac{3}{8}$. (9) £3. 16. 3. (10) ·0855.

PAPER XLV.

- (1) £940. 2. 0. (2) £3. 8. 3. (3) £3. 11. 9 $\frac{1}{4}$.
 (4) 7 $\frac{2}{3}$ days. (5) £35. 18. 1 $\frac{1}{2}$. (6) 257 ac. 1 r. 16 p. 18 yds. 2 ft.
 (7) £140. 16. 5 $\frac{1}{4}$. (8) 1 ton 2 cwt. 1 qr. 13·28 lbs. (9) 12s. 6d.
 (10) Deal, £71. 14. 3 $\frac{1}{4}$; walnut, £461. 19. 7 $\frac{1}{2}$; hickory, £95. 17. 6;
 mahogany, £43. 12. 1; baywood, £62. 3. 9; freight, &c.
 £310. 9. 6: total, £1045. 16. 8 $\frac{1}{4}$.

PAPER XLVI.

- (1) 1 m. 1142 yds. 1 $\frac{3}{4}$ ft. (2) £400. 15. 1 $\frac{1}{5}$. (3) £15. 16. 1 $\frac{7}{10}$.
 (4) £11004. 4. 1 $\frac{1}{2}$. (5) 4 $\frac{1}{2}$ d. (6) £739. 1. 3.
 (7) 7s. 9d.; £·29375. (8) ·167857142. (9) 4s. 10 $\frac{1}{2}$ d. nearly.
 (10) £17. 14. 6 $\frac{1}{4}$.

PAPER XLVII.

- (1) £3344. 17. 9 $\frac{3}{4}$. (2) £578. 16. 3 nearly. (3) 113808.
 (4) £21. 5. 0. (5) 2846 and 5d. rem^r. (6) £299. 4. 3 $\frac{7}{8}$.
 (7) 6 $\frac{1}{2}$ d. (8) 4 tons 19 cwt. 23·0944 lbs.
 (9) 1·0067, &c. (10) £1649. 13. 4.

PAPER XLVIII.

- (1) 3s. 3 $\frac{3}{4}$ d.; £2. 13. 0·84. (2) 3s. 9 $\frac{3}{8}$ d. (3) £425. 5. 0.
 (4) £79625. (5) 43 $\frac{7}{11}$ min. past 2. (6) 1·02 $\frac{6}{10}$.
 (7) £18. 7. 6. (8) $\frac{4}{8}$, $\frac{1}{3}$, 1 $\frac{1}{8}$, 2. (9) 10 per cent. gained.
 (10) 4 $\frac{3}{4}$ yards.

PAPER XLIX.

- (1) 86 lbs. 10 oz. 6 dwts. 11 grs. (2) 2·1175d. (3) £4. 19. 0 $\frac{3}{4}$.
 (4) 185 cwts. (5) 9 tons 18 cwt. (6) £7. 8. 7 $\frac{3}{4}$.
 (7) 3s. 8 $\frac{1}{2}$ $\frac{3}{8}$ d. (8) 1. (9) £·57875.
 (10) £37. 8. 3·12.

PAPER L.

- (1) £1. 3. 3 $\frac{3}{4}$. (2) $\frac{1}{4}$. (3) 4 tons 3 qrs. 23·666 lbs.
 (4) 15 hrs. 28 $\frac{1}{8}$ min. (5) £·488 or 9s. 9 $\frac{3}{8}$ d. (6) 1000; £31. 17. 6 $\frac{9}{8}$.
 (7) £63. 6. 4 $\frac{1}{2}$. (8) 12 days. (9) 1. (10) 1 $\frac{1}{2}$ days.

PAPER LI.

- (1) ·i42857; ·076923. (2) 28652800 sq. yds. (3) £4. 7. 10 $\frac{3}{8}$.
 (4) 178 $\frac{1}{2}$ miles. (5) 7 min. 52 $\frac{9}{11}$ sec. (6) £99. 10. 9 $\frac{3}{8}$.
 (7) 3 $\frac{4}{7}$. (8) £2. 9. 2. (9) £417. 16. 10 $\frac{3}{8}$.
 (10) £5. 5. 1·44.

PAPER LII.

- (1) 2 $\frac{3}{8}$ hours. (2) £2. 13. 4. (3) 11 yrs. 5 mths.
 (4) £14. 5. 5 $\frac{1}{8}$. (5) £700. (6) 14 $\frac{3}{8}$.
 (7) £254. 15. 9 $\frac{3}{8}$. (8) 7s. 9 $\frac{3}{8}$ d. (9) £11. 17. 6.
 (10) £79. 6. 9 $\frac{3}{11}$.

PAPER LIII.

- (1) £3469. 16. 3. (2) 15 m. per hour. (3) £1. 0. 10.
 (4) £26. 10. 8. (5) 6 $\frac{4}{11}$ d. (6) £456. 9. 4 $\frac{1}{2}$.
 (7) ·0588235294117617; $\frac{2}{3}$ $\frac{1}{8}$ $\frac{1}{8}$. (8) 7147 m. 1120 yds.
 (9) 1440. (10) £12. 4. 6 $\frac{3}{4}$.

PAPER LIV.

- (1) 69 m. 1 fur. 6 yds. 2 ft.; 1·00041. (2) 2·131534657224 yds.
 (3) 13 m. 420 yds. (4) £33. 17. 3. (5) 2·0416.
 (6) £86. 10. 0 $\frac{2}{3}$. (7) 1 $\frac{2}{3}$. (8) ·08627.
 (9) 17·77638; 7·50666. (10) 99 ac. 0 r. 4 p.

PAPER LV.

- (1) A, 15s. 9d.; B, 5s. 3d.; C, 10s. 6d. (2) £3. 18. 7.
 (3) Oct. 19th. 6 p.m. (4) £30 each boy; £45 each man.
 (5) 1792·01 sq. yds. (6) £2. 1. 3·104.
 (7) A, 4 m. 2 fur.; B, 3 m. 1 fur. (8) £60.
 (9) 10s. 5d. (10) £4 per ton.

PAPER LVI.

- (1) 2 cwt. 1 qr. 11 lbs. 5·2 oz. (2) 84 days. (3) 14 ft. 1·6464 in.
 (4) 3 $\frac{3}{4}$ years. (5) 160 days. (6) 900 gals.
 (7) 7 hrs. 20 min. (8) £1. (9) A, 8d.; B, 1s. 4d.; C, 4s.
 (10) 8s. 6d.

PAPER LVII.

- (1) £14. 3. 6. (2) £44. 15. 0. (3) 6.
 (4) 22 $\frac{11}{8}$ hours. (5) 7s. 11 $\frac{5}{10}$ d.
 (6) 73 $\frac{1}{2}$ m. from P. in 21 hrs. (7) 2 tons 7 cwt. 22 lbs. 1151 grs.
 (8) $\frac{4}{5}$. (9) £1. 18. 2·7. (10) 30·12625, &c.

PAPER LVIII.

- (1) £4. (2) 14 men. (3) 1 hr. 57 $\frac{31}{107}$ min.
 (4) 20·42605. (5) £5. 0. 7 $\frac{1}{4}$ nearly. (6) £3. 14. 1 $\frac{1}{2}$.
 (7) 17 cwt. 2 qrs. 3 $\frac{1}{2}$ lbs. (8) 8·034. (9) 5 lbs. 8 oz. 19·2 grs.
 (10) ·171875.

PAPER LIX.

- (1) 5 lbs. (2) £1043. 5. 0. (3) £1.
 (4) £742. 0. 5·55. (5) 75. (6) £646. 2. 0.
 (7) £5. 16. 1 $\frac{1}{2}$. (8) £22350. (9) 6i; 1 $\frac{3}{12}$.
 (10) 1710.

PAPER LX.

- (1) 2487·12 c. ft. (2) 134 $\frac{3}{4}$. (3) 13 m. 210 yds. 1 ft.
 (4) 141376; 71991296. (5) 6s. 11 $\frac{1}{10}$ d. (6) £158. 18. 0 $\frac{1}{2}$.
 (7) £1260. (8) 365·24224. (9) £3079. 3. 5 nearly.
 (10) £148. 18. 8 $\frac{1}{2}$.

PAPER LXI.

- (1) $3\frac{2}{3}\frac{1}{10}$ years. (2) $36\frac{2}{3}$ per cent. gain.
 (3) $13\frac{1}{2}$ miles per hr. (4) £11. 7. $6\frac{1}{2}$ nearly.
 (5) 22 at 3s. 6d.; 28 at 5s. (6) 3·683̄. (7) 10000.
 (8) £11. 9. $10\frac{1}{4}$. (9) £500. (10) ·01058, &c.

PAPER LXII.

- (1) £7. 10. 0. (2) £73. 11. 2. (3) $4\frac{1}{3}$ years.
 (4) 248 lbs. Av. 5440 grs.; ·6857142̄. (5) $254\frac{6}{11}$ kilograms.
 (6) 1hr. 6 m. 40 sec. (7) 138 m. 1397 yds. (8) £6. 6. 0.
 (9) £299. 0. $4\frac{11}{13}\frac{6}{11}$. (10) ·428571̄.

PAPER LXIII.

- (1) 28 p. 8 sq. yds. 7 ft. 75 in. (2) £115. 18. $5\frac{1}{2}$ nearly.
 (3) 13 at 2s. 6d.; 17 at 3s. 6d. (4) 3 years. (5) £25. 3. 0.
 (6) ·99122, &c. (7) Lose 4 per cent. (8) 3s. $5\frac{2}{3}$ d.
 (9) 9091. (10) 90 miles.

PAPER LXIV.

- (1) $27\frac{3}{11}$ min. past 2. (2) $\frac{118827}{117}$.
 (3) Eldest 371 ac. 3 r. 37 p. $2\frac{2}{3}$ yds.; others 103 ac. 3 r. 16 p. 22 yds. each.
 (4) 53489 times. (5) 544. (6) 11451 gals. 2 qts. $1\frac{1}{3}$ pts. nearly.
 (7) ·0021, &c. (8) $11\frac{1}{2}$ m. (9) ·53̄. (10) £115. 5. $4\frac{1}{2}$.

PAPER LXV.

- (1) 57 m. 1467 yds. 2·52 ft. (2) £5100.
 (3) $2\frac{2}{3}\frac{2}{5}$ d. 1st year, decreasing $\frac{1}{1}\frac{2}{2}$ d. yearly.
 (4) 49 yrs. 75 dys. 12 h. $12\frac{1}{2}$ min. nearly. (5) 621; ·013. (6) 2s. 6d.
 (7) 2364 m. 6 f. $166\frac{1}{2}$ yds. (8) £20. 4. $0\frac{1}{2}$ nearly.
 (9) £20. 15. $4\frac{8}{13}$. (10) 73·34491.

PAPER LXVI.

- (1) 3·6947. (2) 3 tons 3 qrs. 9·296 lbs. (3) 9·88.
 (4) £51. 4. 0 more. (5) $1\frac{619}{117}$ years. (6) $117\frac{1}{2}$. (7) $3\frac{1}{3}$ per cent.
 (8) 135 dys. 15 h. 26 m. 6 sec. (9) £152847. (10) $2\frac{2}{3}\frac{7}{11}$ years.

PAPER LXVII.

- (1) £3. 10. 0. (2) $18\frac{1}{2}$ per cent.; £8. 15. 0. (3) 158°.
 (4) 7° 48' 58"; 52° 30', 60° and 67° 30'. (5) 287; 123; 451.
 (6) 11 acres. (7) 27·888701.
 (8) A's gain £22. 10. 0; C's stock £383. 6. 8. (9) ·0015.
 (10) Put back 3 m. $15\frac{1}{7}\frac{2}{11}\frac{5}{11}$ sec.

PAPER LXVIII.

- (1) 2016. (2) ·35779. (3) 1·16̄. (4) £36. 18. 9½.
 (5) 5s. 4¾d. (6) £240. (7) £30000; £16. 17. 6. (8) 62·39.
 (9) 340, 380, 580; and 1100, 110, 9. (10) 75 and 72.

PAPER LXIX.

- (1) 84 $\frac{7}{10}$ yds. (2) £4. 2. 1¼. (3) 4 $\frac{5}{7}$ hours.
 (4) 11 $\frac{2}{5}$ days. (5) £131. 7. 8 $\frac{3}{137}$.
 (6) £1. 3. 6 $\frac{2}{10}$; £34. 8. 0 $\frac{3}{8}$. (7) £10 increase. (8) 6d.
 (9) 15 lbs. 7 oz. 8 grs. (10) 292, 438, 511.

PAPER LXX.

- (1) £2. 8. 11 $\frac{6}{8}$ $\frac{8}{8}$ $\frac{1}{8}$. (2) 392 yards. (3) 269 $\frac{8}{9}$.
 (4) £35. 5. 4 $\frac{1}{2}$ $\frac{6}{3}$ increase. (5) £110. (6) £1. 12. 8 $\frac{8}{5}$.
 (7) £327. 11. 8 $\frac{4}{5}$. (8) 1 $\frac{2}{2}$ $\frac{5}{67}$ $\frac{6}{5}$ $\frac{2}{5}$ d. (9) £57. 13. 9.
 (10) 49 $\frac{1}{11}$ min. past 10.

PAPER LXXI.

- (1) 13 $\frac{1}{3}$ per cent. (2) 2 h. 3 m. 2 sec.
 (3) St Petersburg, 2 h. 1 m. 20 secs. p.m.; Berlin, 0 h. 53 m. 36 secs. p.m.;
 Paris, 0 h. 9 m. 20 secs. p.m.; Dublin, 11 h. 34 m. 56 secs. a.m.;
 New York, 7 h. 4 m. 8 secs. a.m.
 (4) ·863906, &c. (5) 20 tons 17 cwt. 1 qr. 16 $\frac{1}{2}$ $\frac{6}{7}$ lbs.
 (6) 30 qrs. 1½ bus. (7) 1578 m. 1 fur. 73 $\frac{1}{2}$ yds.
 (8) £1. 3. 7·095. (9) £474. 14. 11 $\frac{3}{5}$. (10) 4 $\frac{1}{2}$ deg. C.; 86 deg. F.

PAPER LXXII.

- (1) 625·01376. (2) 1½. (3) £5. 5. 0. (4) 130007; ·0921.
 (5) 8s. 8½d. (6) 72. (7) £6. 5. 10½.
 (8) 15s. 9d.; £1. 3s. 3¾d. (9) 15s. 2½d. (10) 999.

PAPER LXXIII.

- (1) 136·66791. (2) 4·015356. (3) £40. 1. 7½ nearly.
 (4) £240; £6720. (5) £227. 14. 5 $\frac{4}{101}$. (6) £4750.
 (7) 3 $\frac{1}{3}$ hours. (8) 11 $\frac{2}{37}$ hours; 5 $\frac{2}{3}$ hours. (9) £163. 17. 6.
 (10) £39235. 4. 7 $\frac{7}{8}$; £1656. 15. 0.

PAPER LXXIV.

- (1) 8 per cent. (2) 134·79151. (3) £21. 18. 6 $\frac{3}{4}$.
 (4) £4. 4. 4. (5) 15s. 4 $\frac{1}{2}$ d. (6) 6s. 8d.; 18s.; 5s. 4d.
 (7) £2247. 3. 9·27. (8) 8s. 9d. (9) £47. 7. 7 $\frac{1}{2}$. (10) £600.

PAPER LXXV.

- (1) 113 sq. m. 62·464 acres. (2) £201. 15. 8 $\frac{1}{2}$ increase.
 (3) £51. 6. 8 gain; 2 $\frac{2}{7}$ gain per cent. (4) £154. 16. 10 $\frac{3}{4}$ nearly: £1000.
 (5) (i) 27 $\frac{3}{11}$ min. past 5; (ii) 10 $\frac{1}{11}$ m. past 5 and 43 $\frac{7}{11}$ m. past 5;
 (iii) 57 $\frac{3}{11}$ m. past 5.
 (6) L. & N. W. Ry. £10242. 3. 9; L. C. & D. Ry. £7550; G. W. Ry.
 £6117. 3. 9; Midland, £4078. 2. 6.
 (7) 6. (8) 208·303743.
 (9) 6832·8 per cent.; 517·4 per cent.; 274·3 per cent.; 166·6 per cent.;
 and 548022 inhabitants.
 (10) A, 15s.; B, 12s.; C, 9s.; D, 6s.



