No. 39



BROWNS' SCHOOL SERIES.

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Dec 18th

If £387 . 10 be lent for 7 years at 2½ per cent what will be the amount:

£ : s
2)387 : 10
2
775 : 0
193 : 15
968 : 15
7
67.81 3
20
16.25
12
3.00

£ : s : d
67 : 16 : 3
387 : 10 : 0
£455 : 6 : 3 Ans

If 3 cwt . 2 qrs of tea cost £13 : 13 : 4 what would a ton cost.

cwt : qrs :: cwt :: £ : s : d
As 3 : 2 :: 20 :: 15 : 13 : 4
4 4 20
14 80 313
7 40 12
7|150400 3760
21485 5/7 1 40
12|214855
£1794 . 5
89 . 10
89 : 10 : 5/7 Ans

gal · qt · pt @ 2¼ ₰ pint

```
  17 · 3 · 1
   4
  71
   2
 143
```

```
d
2 = 1/6   143      d
1/4 = 1/8  23 · 10
            2 · 11 3/4
          2 | 26 · 9 3/4
              1 · 6
            £ · s · d
            1 · 6 · 9 3/4  Ans
```

If 53 ach 3 rds 8 pls cost 968£ - 8 s what will 63 ach 0 rds 15 pls cost

```
ach rds pls     ach rds pls     £ · s
53 · 3 · 8  :   63 · 0 · 15  ::  968 · 8
   4               4                20
 213             252 rds          19368
  40              40              4842
 8608           10095             2421
 2152           24221
 1076           10095
                20190
               40380
              201960
```

```
1076 | 24439995 | 2732 4 | 2515
       2152      1136 12   2152
        2919      4356      363
        2152      4304       12
         767       52       4356
```

```
d  53
   1076
£ · 12 · 6
Ans 1,136
```

Find the average of 40 mls 3 fur 10 pls, 20 mls 160 pls. 9 fur 13 pls and 2 mls 1 fur 17 pls

mls	fur	pls
40	3	10
20	4	0
	9	13
2	1	17
4)64	2	0
16	0	20

mls · fur · pls
16 · 0 · 20 Ans

R

Dec 22nd

953 @ 1£ 11s 3d ¾ ea

	s	d	£			
	10	0 = ½	953			
1	1	0 = 1/10	476	10		
		3 = ¼	47	13	d	
			11	18	3	
			£1489	1	3	Ans

56 stones @ $\frac{d}{4}$ a pound

56
14
224
56
784
261 " 4
20)1045 " 4
52 · 5
£ · s · d
52 · 5 · 4 Answ

If £625 be placed in the bank at 3½ per cent how much interest will be drawn in 4½ years

2)625
3
1875
312 · 10
2)2187 · 10
4
8750 · 0
1093 · 15
9843 · 15

9843 · 15
20
875
12
9000
£ · s · d
98 · 8 · 9 Answ

Reduce $3 \cdot {}^{d}7\frac{1}{2}$ to the fraction of $1\frac{1}{2} \cdot {}^{d}8\frac{1}{4}$

$3 \cdot {}^{d}7\frac{1}{2}$

12
43
4
174
58

$1\frac{1}{2} \cdot {}^{d}8\frac{1}{4}$

12
152
4
609
203

Dec 31st

From $(3\frac{3}{4} + 7\frac{9}{10})$ Take $(5\frac{1}{2} - 2\frac{4}{5})$

$\frac{15}{4} + \frac{79}{10} = \frac{75+158}{20} = \frac{233}{20}$

$\frac{11}{2} - \frac{14}{5} = \frac{55-28}{10} \quad \frac{27}{10}$

R

$\frac{233}{20} - \frac{27}{10} \quad \frac{233-54}{20} \quad \frac{179}{20}$

$8\frac{19}{20}$ Ans^{r}

Take $\frac{4}{5}$ of $9\frac{1}{2}$ From $\frac{7}{8}$ of $9\frac{3}{4}$

$\frac{4}{5} \times \frac{19}{2} = \frac{38}{5}$ $\frac{7}{8} \times \frac{39}{4}$ $\frac{273}{32}$

R

$\frac{273}{32} - \frac{38}{5}$ $\frac{1365}{160} - \frac{1216}{160} = \frac{149}{160}$

$\frac{149}{160}$ Ans^r

Dec 31st

Card 16 A Sums

Find the ~~value~~ average of the following fractions

2 $\frac{3}{8}$, 4 $\frac{1}{2}$, 5 $\frac{1}{10}$, 6 $\frac{3}{4}$, 2 $\frac{1}{2}$,

R

$\frac{3}{8} + \frac{9}{2} + \frac{51}{10} + \frac{27}{4} + \frac{17}{8}$ $\frac{15+180+204+270+85}{40}$ 754/40

$\frac{754}{40} \times \frac{1}{5} = \frac{754}{200}$ 3 ~~154~~/~~200~~ $3\frac{77}{100}$

$3\frac{77}{100}$ Ans^r

76 79 3

Simplify $\frac{1}{3}$ of $\frac{1}{1+\frac{3}{3+\frac{1}{4}}}$

$\frac{3}{1} + \frac{1}{4}$ $\frac{12+1}{4}$ $\frac{13}{4}$ $\frac{4}{13} \times \frac{1}{3} = \frac{4}{39} + \frac{1}{1}$ $\frac{4+39}{39}$ $\frac{43}{39}$

R

$\frac{39}{43} \times \frac{1}{1} = \frac{\overset{3}{\cancel{39}}}{43} \times \frac{1}{\cancel{13}}$ $\frac{3}{43}$ Ansr

$\frac{3}{43}$ Ansr jan 5th

~~Simplify $\left(3\frac{1}{3} + \frac{2}{10\frac{1}{2}} - \frac{5}{6}\right.$ of $\left.\frac{1}{2}\right) \times 1\frac{3}{4}$~~

~~Simplify~~ $\left(\frac{2\frac{1}{3}+2}{7}\right.$

Simplify $\left(3\frac{1}{3} + \frac{2}{10\frac{1}{2}} - \frac{5}{6} \text{ of } 2\frac{4}{1}\right) \times 1\frac{3}{4}$

$\frac{10}{3} \times \frac{1}{7} = \frac{10}{21}$ $\quad$ $\frac{2}{1} \times \frac{2}{21} = \frac{4}{21}$

$\frac{10}{21} - \frac{4}{21}$ $\quad$ $\frac{10-4}{21} = \frac{6}{21}$ $\quad$ $\frac{2}{3}$

R

$\frac{5}{\cancel{6}_{3}} \times 2\frac{\cancel{4}^{2}}{21}$ $\quad$ $\frac{10}{63}$ $\quad$ $\frac{2}{3} - \frac{10}{63}$ $\quad$ $\frac{42-10}{63} = \frac{32}{63}$

$\frac{\cancel{32}^{8}_{\cancel{63}_{9}}}{} \times \frac{7}{\cancel{4}_{1}}$ $\quad$ $\frac{8}{9}$ Ans

£ £ £
74 : 5 :: 100 :: 1856 : 5

20 20 20
1485 2000 37125
297 400 12375
99 4125
33 1375
11 125
400
50,000 Ans

R

If 100 £ stock bearing interest at the rate of 4 per cent can be purchased for 27½ £ how much stock can ~~be sold for pound to realize 14 per cent~~ I buy for 8400 £

£	s	£	£
87	10	100	8400
20		20	20
1750		2000	168000
350		400	24000
70		80	8
14		16	192008
7		8	9,600 . 0

9,600 £ Ans.

$$\frac{8\frac{1}{5} - 3\frac{1}{4}}{2\frac{1}{2} \times 1\frac{1}{3}}$$

$$\frac{41}{5} - \frac{13}{4} \quad \frac{164-65}{20} = \frac{99}{20}$$

$$\frac{1}{1} \times \frac{2}{5} = \frac{2}{5} \times \frac{3}{4_2} = \frac{3}{10} \qquad \frac{1}{1} \times \frac{3}{4} = \frac{3}{4}$$

$$\frac{\frac{33}{99}}{\frac{20}{2}} \times \frac{16}{3} \quad \frac{33}{2} \quad 16\frac{1}{2} \text{ Ans}$$

Jan 1.

289 @ s. d
3 " 9 ½

s	d				
2	0	= ½	289		
1	0	= ½	28	s	18
	6	= ½	14	"	9
	3	= ½	7	"	4 " 6 d
	½	= 6	3	"	12 " 3
					12 " 0 ½
			5 2	·	15 " 9 ½

Jan 19th

Card 18 A Sums

In a class

30 $\frac{22}{2} \times \frac{30}{1} = \frac{220}{1}$

24 $\frac{79}{12} \times \frac{158}{1} = \frac{158}{1}$ 96 $\frac{11}{2} \times \frac{528}{1} = \frac{528}{1}$

30 @ $7\frac{1}{3}$ = 220
24 @ $6\frac{1}{2}$ = 158
96 @ $5\frac{1}{2}$ = 528
150 150 | 906 | $\frac{6}{150}$ $6\frac{1}{25}$
900
6
150

R

2

$6\frac{1}{25}$ years Ans

Simplify $\left(3\frac{1}{3} + \frac{2}{10\frac{1}{2}} - \frac{5}{6} \text{ of } \frac{4}{21}\right) \times 1\frac{3}{4}$

$\frac{10}{3} \times \frac{1}{7} = \frac{10}{21}$ $\quad \frac{2}{1} \times \frac{2}{21} = \frac{4}{21}$

3 $\frac{10}{21} + \frac{4}{21}$ $\frac{10+4}{21} = \frac{14}{21}$ R

$\frac{5}{6} \times \frac{2}{21} = \frac{10}{63}$ $\quad \frac{14}{21} - \frac{10}{63}$ $\frac{42-10}{63}$ $\frac{32}{63}$

$\frac{32}{63} \times \frac{7}{4}$ $\quad \frac{8}{9}$ Ans

Simplify $\frac{16\frac{3}{4}}{\frac{2}{3}\text{ of }1\frac{1}{3}} - (3\frac{3}{7}+10\frac{5}{8})$

$\frac{2}{3} \times \frac{4}{3} = \frac{8}{9}$ $\quad \frac{67}{4} \times \frac{9}{8} = \frac{603}{32}$

$\frac{24}{7} + \frac{85}{8}$ $\quad \frac{192+595}{56}$ $\quad \frac{787}{56}$ R

$\frac{603}{32} - \frac{787}{56}$ $\quad \frac{4221-3148}{224}$ $\quad \frac{1073}{224}$

$4\frac{177}{224}$ Ans

C Sums Card 18

As £87 . s15 : £100 :: £350

20 20 20

4 1755 2000 7000

351 1400

351 \ 28000.0000 \ 7977 2000

28 00000

73

20

1460

2457

3430

3159

2710

2457

2530

2457

73

7977"

Jan 21st 1903

Simplify $1\frac{1}{6}$ of $5\frac{1}{4} + \frac{4\frac{1}{2} - \frac{3}{10}}{1\frac{1}{15}} + \frac{6\frac{3}{4}}{\frac{1}{2}\text{ of }2\frac{2}{3}}$

$\frac{7}{6} \times \frac{21}{4} = \frac{49}{8}$ $\qquad$ $\frac{9}{2} - \frac{3}{10} \quad \frac{45}{10} - \frac{3}{10} = \frac{42}{10}$

$\frac{21}{12} \times \frac{15}{16} = \frac{63}{16}$ $\qquad$ $\frac{63}{16} + \frac{49}{8} \quad \frac{63}{16} + \frac{98}{16} = \frac{161}{16}$

$\frac{1}{2} \times \frac{8}{2} = \frac{4}{2}$ $\qquad$ $\frac{27}{4} \times \frac{3}{4} = \frac{81}{16}$ R

$\frac{81}{16} + \frac{161}{16} \quad \frac{81}{16} + \frac{161}{16} = \frac{242}{16}$

$15\frac{2}{16}$ $\qquad$ $15\frac{2}{16}$ Ans

Add together $\frac{1}{4}$ of 1 guinea, $\frac{3}{8}$ of 4 £

$\frac{13}{15}$ of 2/6 and $\frac{1}{3}$ of 1 shilling reduce the result

to the decimal of 8/4.

$\frac{1}{4} \times \frac{3}{1} = \frac{3}{2} = 1 : 6$

$\frac{3}{8} \times \frac{10}{1} \frac{30}{1} = 1 : 10 : 0$

$\frac{13}{15} \times \frac{2}{1} = \frac{26}{1} = 2 : 2$

$\frac{1}{3} \times \frac{4}{1} = \frac{4}{1} = 4$

8 : 4 | 100

12

100

s	d
1	6
1	10
0	2
2	4
1	14

20
34
12
408

£ : s : d
1 : 14 : 0

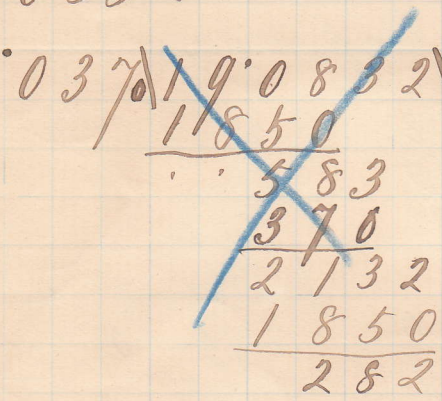
20
34
12

408 | 100
400
800
800
...

4·08 Ans

Jan 21st 1903

What number multiplied by .037 will equal 19.0832



If 3·25 yards cost ·625 of £ how much will 30·81 yds

yds		yds		£
30·81		3·25		·625
3		3		6
2·43		0·75		3·750
12		12		20
5·16		9·00		15·000

As yds " ft " inc : yds " ft " in :: £ " s

3 " 0 " 9 : 3 0 " 2 · 5 · 16 :: 3 " 15

yds yds £

3·25 : 30·81 :: ·625

6

3·250 | 15·53750 | 35·55

97500 — 3750

18037·5 — 3081

162500 — 3750

17875 — 30000

16250 — 112500

1625 — 115537·50

1625

....

35·55

20

11·00

£ " s

35 " 11 Ans

Jan 26th 1903

$25.042 \times 6 + .24$

0.02×0.004

25.042
6
150.252
24

0.004
0.02
0008

800 | 50.492 | 188.115

800
7049
6400
6492
6400
920
800
1200
8
400
400

188.115 Ans

Find the simple ~~interest~~ interest on 1, 1 5 £/2 for

8 mts at 3 1/3 per cent per annum

£

1/3)1, 1 5 2

3

3 4 5 6

3 8 4

3 8.4 0

2 0

8'0 0

	£	s	
mts			
6 = 1/2	3	8	8 for 1 year
2 = 1/3	1	9	4
		6	8
	2	5	12

£	s	
2	5	12 And

What decimal fraction of 3 cwt is 1 cwt 0 qrs 14 lbs

cwt
3
4
12
28
336

cwt	qrs	lbs
1	0	14

4
4
28

336) 260 (.375
1008
2520
2352
1680
1680
. . . .

Jan 28th

I want to make a profit of 12½ percent on goods which cost me 35 £ what must be the selling price

£ £ £
As 100 : 112 : 10 :: 35

20 20 20
2000. 2250 700
400 450 350
80 90 175
16 18 9
8 9
4 Ans 39 " 7 " 6 2 | 157 ½ d
2 2 | 78 | 7 " 6
39 " 7

Jan 2 8th

A grocer 200 lbs of sugar at 2d per lb and 300 lbs at 3d a lb. What was the average price per lb.

200 @ 2 per lb = 400
300 @ 3 " " = 900
500 1300
2 2/5 Ans

I bought a horse for 90 £ and kept it for 15 weeks @ 6s a week. I sold it for 100 guineas what was the gain per cent

£ : s :: £ : s :: £
9 : 10 : 10 : 10 :: 9 | 100
20 20 11 1/9 Ans
180 200
63 70
9 7

Jan 29th

What is the difference between .678 of 1 mile and .356 of 1 furlong

.678 mile

8
8
5.424
40
16.960
5
4800
480
5.280
3
0.840
12
10.080

.356 fur

40
14.240
5
1200
126
1320
3
0.960
12
11.520

5	16	5	0	10.080
	14	1	0	11.520
5	2	3	2	10.56

What is the difference in decimals between 3 cwt 1 qr 14 lbs and 5 cwt 1 qr 7 lbs the decimal to be of a ton.

cwt	qrs	lbs
5	1	7
3	1	14
1	3	21

28)210
4)3.75
20)1.9375
.0968 75

.0968 75 Ans

If .2 lbs cost .3 what will 2.2 lbs cost

As lbs : lbs :: $: $

2 : 2.2 :: .3

3

2 | 6.6 | 3.3

6

6

6

$.

1.13 Ans

Feb 9th

Add 2.805 to .56 subtract it from 5.376 and divide the result by .05

5.376

2.805

.56

3.365

.05 | 201.1 | 40.22 Ans

200

11.

10

10

10

What is the greater and by how much is $\frac{4}{5}$ of 4 or $\frac{5}{4}$ of 5

$$\frac{4}{5} \times \frac{4}{1} = \frac{16}{5} \qquad \frac{5}{4} \times \frac{5}{1} = \frac{25}{4}$$

$$\frac{25}{4} - \frac{16}{5} = \frac{125 - 64}{20} = \frac{61}{20}$$

$$\frac{61}{20} = 3\frac{1}{20} \text{ Ans}$$

Ans $\frac{5}{4}$ of $\frac{5}{1}$ greater by $3\frac{1}{20}$

Divide 21,021 £ between 2 persons so that one shall have twice as much as the other

£

3 | 21021

7007

7007

14014

A would get 14014 £

B would get 7007 £ Ans

If £460 is lent for 3 years at 3 per cent what sum should be returned at the end of that of that time

£
460
3
1380
3
4140
20
800

£ s
Interest 41 : 8
460 : 0
Amount 501 : 8 Ans^r

If 5/16 of a ship cost £3780 what did 17/32 cost

5/16 × 17/32 × 3780/1

378
17
2646 Ans^r

Feb 10th

$$\frac{\frac{3}{5} \div 1\frac{1}{8}}{5\frac{1}{2} \times 9} \text{ of } 5£$$

$$\frac{3}{5} \times \frac{8}{\cancel{9}_{3}} = \frac{8}{15} \qquad \frac{11}{2} \times \frac{9}{1} = \frac{99}{2}$$

$$\frac{\cancel{8}^{\cancel{15}^{3}}}{\cancel{15}^{3}} \times \frac{2}{99} \times \frac{\cancel{100}^{20}}{1} = \frac{320}{297}$$

R

$$297 \overline{)320} \; 1 : d \; 0\frac{23}{99} \text{ Ans}$$

$$\begin{array}{r} 297 \\ \hline 23 \end{array}$$

$$\begin{array}{r} 12 \\ \hline 276 \\ 297 \end{array} = \frac{92}{99}$$

$$1 : d$$
$$1 : 0\frac{23}{99} \text{ Ans}$$

What is the value of 36·125 guineas in £.s.d

	£	s	d
36 guineas =	37	16	0
		2	7½
Ans	37	18	7½

125
21
125

250
2·625
12
7500
4
½000

Ans 37 £ 18 s 7½ d

Reduce 12/6½ to the decimal of 2£.

412
12)6·5
40)12·5 416
·3125 Ans

Find the interest 39 £ 5 " 17 " 6 for 1 yr 219 dys at 1½ per cent

	£	"	s	"	d
½)	39		5	"	1 7 " 6
	19		7	"	18 " 9
	5.9		3	"	16 " 3
			20		
	18.7		6		
			12		
	9.15				

R

dys
7 3 = 1/5

£	"	s	"	d
5	"	18	"	9
1	"	3	"	9
1	"	3	"	9
1	"	3	"	9
£9	"	10	"	0 Ans

25
13
75
25
32.500

7

Find the value of $13.587 \div (2.5 \times 13)$

$$
\begin{array}{r}
2.5 \\
13 \\
\hline
75 \\
25 \\
\hline
\end{array}
$$

$$
\begin{array}{r|l}
13.587 & 32.500 \;\big|\; 2.3 \\
 & 27174 \\
\hline
 & 5326 \\
 & 761
\end{array}
$$

A boy's steps measure 18 inc how many steps will he take in walking $\frac{3}{4}$ of a mile

1760
3
4)5280
1320
2
2640 Ans

R

Jane has 700 half guineas and Alice has 5,000 pence how much has one more than the other

2)700
10
7000
350
7350 d
116.8
20)6938.4
346.13

12)5000 d
416.8

R

£ " ' " d
346 " 13 " 4 Ans

Feb 17th

Find the value of

$$\frac{3}{4} + \frac{2}{3} \quad \frac{9+8}{12} \quad \frac{17}{12}$$

$$\frac{17}{12} - \frac{1}{2} \quad \frac{17-6}{12} \quad \frac{11}{+2} \times \frac{35}{+05} \quad \frac{415}{4}$$

$$\begin{array}{r} 2\ \cancel{21}\ \overset{1}{0}\ \overset{1}{3}\ \overset{1}{\cancel{3}}\ \overset{1}{\cancel{3}} \\ \hline 5\ 3\ 9 \end{array}$$

£ 5 s 3 d

5 3 9 Ans

Add together. 375 of 1£ = .75 of a guinea
.3125 of 1 crown and .5 of 6

.375	.75		4 5
12	21		15" 9
4.500	75	.5	1 " 6.75
	150	6	3
	15.75	3.0	17 " 11.75 Ans
	12		
	9.00		

.3125	
5	
1.5625	
12	
6.7500	

R

Find the simple interest on £80.5 for 3 yrs at 3.75 per cent

£			
80.5			
3.75	10 and	87.80625	87.
39025		800000	
54635		780625	
23415		700000	
292.6875		80625	
3		80000	
878.0625		625	

87.80625	
20	
16.12500	
1.500000	
.500000	

R

A ship and cargo is worth 10,000 £ the ship is worth $\frac{5}{12} \times \frac{8}{15}$ of the ~~ship~~ Whole find the value of each

$$\frac{\overset{1}{\cancel{5}}}{\underset{3}{\cancel{12}}} \times \frac{\overset{2}{\cancel{8}}}{\underset{3}{\cancel{15}}} = \frac{2}{9}$$

R

$$\frac{1}{1} \times \frac{2}{9} \times \frac{10,000}{1} \quad \frac{20000}{9}$$

9)200000

2222 " 4 " $5\frac{1}{3}$

$\underline{7777}$ · 15 " $6\frac{2}{3}$ Ans

Simplify $\frac{25.042 \times 6 + .24}{0.02 \times 0.004}$

25.042	0.004
6	0.02
150.252	0.00008
24	

8)1504.9200

188.1150 Ans

R

What fraction of $\frac{2}{11}$ of $4\frac{2}{5}$ yards is $1\frac{1}{3}$ of $1\frac{1}{2}$ of 2 feet

$$\frac{2}{11} \times \frac{22}{5} \times \frac{3}{1} = \frac{12}{5}$$

$$\frac{4}{3} \times \frac{3}{2} \times \frac{2}{1} \quad \frac{4}{1}$$

$$\frac{4}{1} \times \frac{5}{12} \quad \frac{5}{3} \quad 1\frac{2}{3} \text{ Ans}$$

When the 3 per cents are at $96\frac{3}{8}$ how much stock can be bought for 2425 ff

Feb 23rd

$$
\begin{array}{r}
1\,7\,6 \\
2\,6\,0 \\
\hline
0 \\
1\,0 \\
\hline
1 \\
5\,0 \\
7\,2 \\
\hline
1\,0\,0 \\
\hline
8\,\big|\,2\,7\,6 \\
\hline
3\,4\,\tfrac{1}{2}
\end{array}
\quad \text{Ans}^{r}
$$

Feb 25th

Bring 8 square feet 20 square inc to the decimal of 40 square feet inc

$$
\begin{array}{r}
8\text{"}\,20 \\
144 \\
\hline
4\,8\,\big|\,1\,1\,7\,2 \\
\hline
8\,0 \\
\hline
3\,7\,2 \\
3\,6\,0 \\
\hline
1\,2\,0 \\
1\,2 \\
\hline
\end{array}
\quad 29'3 \text{ Ans}^{r}
$$

Find the value of $\frac{0.0625 \times .775}{7\frac{3}{4} \times 6\frac{1}{4}}$ of £ 1 : 3 : 4

£ 1 : 3 : 4

4 · 3 · 4

20

83

12

1,000

7.75

6.25

3875

1550

4650

4843 75

4843 75

0.0.625

775

03125

04375

4375

4843 75 | 1

4843 75

. . . . . d

d Ans

How long would 7 men be building a wall that 11 men can build in 16 ½ days

Ans 7 men : 11 men :: days 16½

2

33

7

11 | 231

2

As 7 men 11 men 16 dys 1/2

2

33

11

7)363

2)51 " 6

25 " 6/5 Ans

How much less than 1 is 1/6 2/8 1/3

1/6 + 2/8 + 1/3 2+6+8 / 24 = 16/24 = 6/8 3/4

1/1 − 3/4 4+3/4 1/4 Ans

March 2nd Reduce 3 " 1 " 15 " 22 to the decimal of 1 ton

2|2

8|1

7|15 1 2 5

4|2 1 6 0 7 1

4|1 5 4 0 1 7 7 5

2|3 3 8 5 6 4 4 3 7 5 8

1 6 9 2 5 2 2 1 8 7 x Ans

~~Reduce .6975~~

Find the value of .6975 of 1 mile

.6975
8
5.5800
40
23.2000
5
1.0000
1000
1.1000
3
.3000
12
3.6000

fur. rds. yds. feet inc.
5 : 2 3 " 1 " 0 " 3.6000

~~$3\frac{1}{9}+5$~~ $3\frac{1}{9}+\frac{9}{10}-\left(6\frac{3}{4}-5\frac{1}{8}\right)$

$\frac{27}{4}-\frac{41}{8}\quad\frac{54-41}{8}=\frac{13}{8}$

$\frac{28}{9}+\frac{9}{10}\quad\frac{280+81}{90}=\frac{361}{90}-\frac{13}{8}\quad\frac{2888-1170}{720}=\frac{1718}{720}$

$2\frac{278}{720}$ Ans

$3\frac{1}{9} + 5\frac{7}{10} - \left(6\frac{3}{4} - 5\frac{1}{8}\right)$

$\frac{28}{9} + \frac{59}{10} \quad \frac{280+531}{90} = \frac{811}{90}$

$\frac{27}{4} - \frac{41}{8} \quad \frac{54-41}{8} = \frac{13}{8}$

$\frac{811}{2)\ 90} - \frac{13}{8} = \frac{3244-910}{360} \quad \frac{2334}{360}$

$45 \qquad 4$

$4\frac{594}{360}$ Ans

March $\frac{4}{4}$th Card 22

(2)

$$
\begin{array}{r}
7.56 \\
.094 \\
\hline
3024 \\
\hline
.00084 \;\big|\; 0.71064 \;\big|\; 845.3 \text{ Ans} \\
\quad 6\,40 \\
\hline
\quad\;\; 706 \\
\quad\;\; 640 \\
\hline
\quad\quad 664 \\
\quad\quad 640 \\
\hline
\quad\quad\;\; 24\,0 \\
\quad\quad\;\; 21\,0 \\
\hline
\end{array}
$$

(1) $\frac{3}{20} \times \frac{5}{1} = \frac{3}{4} \times \frac{2}{1} = \frac{3}{2} = 1\frac{1}{2}$ Ans^r

$1\frac{1}{2}$ Ans^r

~~58 : 54 ::~~

As $\frac{4}{9} \times \frac{5}{8} \times \frac{£\ 1\ 4\ 0\ 8}{3\ 2\ 6\ 4\ 8\ 1\ 6\ 0} = \frac{}{1\ \ \ \ \ \ \ \ 9}$

$9\overline{)8160}$

$905 \cdot \frac{5}{9}$ Ans^r

(2) As $\frac{9}{4} \times \frac{5}{8} \times \frac{1\ 0\ 2}{4\ 0\ 8\ £\ \ \ £}$
$\frac{}{3\ 2\ 6\ 4\ 4590}$

$\frac{£}{4,590}$ Ans^r

(4) As men : men :: days

12 : 9 :: 15

4

4 | 135

33 3/4 days Ans

(4) As men : men :: days

8 : 12 :: 15

4

days 60 Ans

(6)

£ " s " d

8,914 " 6 " 8

4

35657 " 6 " 8

7

2496.01 " 6 . 8

20

0.26

12

3.20

4

£ " s " d

2496 " 0 " 3.20 Ans

June 11
July ~~31~~ 6
August

June 19
July 31
August 31
Sept 30
Oct 31
Nov 12

If $8\frac{1}{3}$ per cent of ~~the~~ children are absent how many are on books if 132 are present

As $100 : 180\frac{1}{3} :: 132$

$3 \quad 3 \quad 3$

$300 \quad 541 \quad 396$

$150 \quad 33 \quad 198$

$75 \quad 1623 \quad 99$

$25 \quad 1623 \quad 33$

$25 \overline{)} 7853 \overline{)} 714$

175

35

20

103

100

3

$3 \overline{)} 714$

$238 \frac{2}{25}$ Ans

Paid.

$$\frac{(321 \times 321) - (179 \times 179)}{(321 - 179)} \text{ of } £5$$

321
321
321
642
963
103041

179
179
1611
1253
179
032041

321
179
142

032041
271000

142 | 271000 | 5
710 | 54
2 5
20
100

£2 10s Ans

1 book cost 5/= another 2/6 another 1/= another 6
What would 1/6 cost if the average price is 2/6

March 10th

$$\left(\frac{2}{10\frac{1}{2}} + \frac{3\frac{1}{3}}{7} - \frac{5}{9} \text{ of } \frac{2}{7}\right) \div \frac{4}{1}$$

$\frac{2}{1} \times \frac{2}{21} = \frac{4}{21}$ $\quad \frac{10}{3} \times \frac{1}{7} = \frac{10}{21}$

$\frac{4}{21} + \frac{10}{21} \quad \frac{4+10}{21} \quad \frac{14}{21}$

$\frac{5}{9} \times \frac{2}{7} = \frac{10}{63}$

$\frac{14}{3)\,2+} - \frac{10}{63} \quad \frac{42-10}{63} = \frac{32}{63} \times \frac{7}{4} = \frac{8}{9}$ Ans

$7)\,7$ $\quad 24$ $\quad 3$

$\frac{8}{9}$ Ans

Multiply 39·8 by ·0059 and divide product by ·008

·0059		·008)	2·3482) 29·3525 Ans
39·8			1600
0472			7482
0531			7200
0177			2820
0·2348 2			2400
29·3525 Ans			4200
			4000
			2000
			1600
			400
			400

If $\frac{7}{16}$ of a ship be worth ~~4 75 " 15~~
£ " s
4,812 " 10 what is the value of the whole of the vessel

£ " s
4,812 " 10
20
96250
1

As $\frac{16}{7} \times \frac{1}{1} \times$

13750
16
2) 220000
11,000

R

£
11,000 Ans^r

If $2\frac{1}{3}$ cost $7\frac{2}{5}$ £ what will $5\frac{6}{7}$ cost

$3 \times 41 \times 37 = 4551$
$1 \times 7 \times 5 = 245$

As $\frac{3}{1} \times \frac{41}{7} \times \frac{37}{5} = \frac{4551}{245}$

245) 4551 (18 $\frac{141}{245}$
245
2101
1960
141

R

If 2 cwt 1 qr 14 lbs cost .85 £ what will .46 of 1 lb cost

4
9
28
266

As 266 lbs : 46 lbs :: .85 £

133 : 23 ::

.85
.23
255
170

133.00000 | 19550 | .001462
133
625
532
930
798
320
266

as 266 lbs : 46 lbs :: 85 £

85
46
480
0

Card 22 D Sums March 30th

	£	s	d	
4465½ @ 2/1	2	15	1½	each
	6	7	6¾	

s d
10 " 0 = ½

2) 4465
1 2

53580 " s

(1)

5 " 0 = ½	2	2	32	" 10
1 = 1/10	1	1	16	" 5
½ = ½			10	" 9 " d
			5	" 9 " 6
	5	6	94	5 " 3 " 6
		2	23	2 " 10 " 0
£	59	17	7	" 13 " 6 Ans

West Butterwick
March 30th 1902

Mr Worm
(2) To J Frog

				£	s	d
36	books	@	3/6 ea	6	6	0
42	Do	@	9/6 per Doz	1	13	3
300	parcels	@	2/6 for 50		15	0
94	gals Ink	@	1/ per qua	18	16	0
				£2	7	10	3 Ans

$\frac{9}{10} + \frac{3}{4} \quad \frac{18}{20} + \frac{15}{20} \quad \frac{33}{20}$

$\frac{15}{16} - \frac{7}{8} \quad \frac{15}{16} - \frac{14}{16} \quad \frac{1}{16}$

(3)

$\frac{33}{4)20} - \frac{1}{16} \quad \frac{132}{80} - \frac{5}{80} = \frac{127}{80}$

$1\frac{47}{80}$ Ans^r

(4)

hrs	:	hrs	::	miles
As 18	:	$7\frac{1}{2}$	::	72
2		2		6
36		15		5
72		5		30 miles

Ans^r

March 12th

If 3.6875 lbs will buy 9.25 yds how many yds can be bought for 6.6375 lbs

As 3.6875 lbs : 6.6375 lbs :: 9.25 yds

9.25

33 1875

13 27500

59 73750

3.6875) 61.39687500 (16

3.6875 00

24 52187500

22 12500000

2 39687500

Ans: 16

A B C own a ship among them valued at 11000. A share is ~~2~~ $\frac{2}{11}$ B $\frac{2}{3}$ C $\frac{1}{5}$ find the value of each share

$\frac{2}{11} + \frac{2}{3} + \frac{1}{5}$ $\frac{30 + 110 + 33}{165}$ $\frac{173}{165}$

4465 £ @ 2 | £ 12 · 15 s 1 $\frac{1}{2}$ d @

6 · 7 · 6 $\frac{3}{4}$

s d
10 · 0 $\frac{1}{2}$ 4465
12
53580 s

(1) 5 · 0 $\frac{1}{2}$ 2232 · 10
+ 1 $\frac{1}{60}$ 111 6 · 5 · d
$\frac{1}{2}$ $\frac{1}{2}$ 10 · 19 · 1
5 · 9 · 6 $\frac{1}{2}$
6 · 7 · 6 $\frac{3}{4}$
5769 5 1 · 11 · 2 $\frac{1}{4}$ Ans

Card 22 March 31st 2 | £ 12 · s 15 · d 1½ D
6 · 7 · 6¾

s · d
10 · 0 = ½
4 - 0 = ⅕

24 6 5
1 2
5 3 5 8 0.
2 2 3 2 · 10
8 9 3 · 0
2 2 3 · 5
2 7 · 18 · 1½
6 · 7 · 6¾
£56,963 · 0 · 8¼ Ans^r

1 . 1 - 0 = ¼ 1½ = ⅛

1/1 - 2/5 = 5 - 2 / 5 = 3/5

5
12 · 6
5
3|62 · 6
2|12 0 · 10
1 · 0

£ · s · d
1 · 0 · 10 Ans^r

s · d
12 · 6
5
3|62 · 6
2|12 0 · 13
1 · 10

£ · s · d
1 · 10 · 13 Ans^r
£ · s · d
1 · 11 · 3 Ans^r

E

$\frac{2}{3} + \frac{5}{12} \quad \frac{8+5}{12} \quad \frac{13}{12}$

1 $\quad \frac{13}{4} \quad \frac{13}{12} \quad \frac{39 - 13}{12} \quad \frac{26}{12} \quad 2\frac{2}{12} = 2\frac{1}{6}$

$2\frac{1}{6}$ Ans.

2) 2 s 0 d
3
3)60
12 . 0
2 . 3
9 . 9

2 s 0 d
2 . 6
9
10)22 . 6
2 . 3
12 . 0
14 . 3
9 . 9
4 6 Ans.

3

3
2
3)6
2 feet

12
5
12)60
5 inc

ft · inc
2 · 5 Ans^r
12
29 inc Ans^r

Diamond Card 12 A Sums

1

£ · d
10 · 0 = 1/2
5 " 0 = 1/2 1/5
2 " 0 = 1/5
6 = 1/4 1/3
2 = 1/3
1/2 = 1/4
1/4 = 1/2

5196
2598
1299
519 · 12
129 · 18
43 " 6 " d
10 " 16 " 6
5 " 8 " 3
4,606 " 0 " 9 Ans^r

April 1st

If 9 yds cost 5 · 14 : 4 ½ what would be the

cost of 40 yds

As 9 yds : 40 yds :: £ " s " d
5 · 14 " 4 ½

20
114
2
1372

2 | 1 2 2 0 0
2 | 6 1 0 0
2 | 5 0 8 · 4
2 5 4 · 8

2 | 4 8
3 0 5
4 0
2 | 1 2 2 0 8
2 | 6 1 0 " 0
2 | 5 0 " 10
2 5 · 0

Ans £ 25 · 8 · 4

2

$\frac{3}{7} + \frac{5}{9} + \frac{1}{4} \quad \frac{108+140+63}{252} = \frac{311}{252} = 1\frac{59}{252}$ Ans

63
28
140
4
36
7
252
4
36
3
108
311
252
59

10 · 0 = ½ 146 @ £0 " 15 · 6½ ea

0

1460

5 · 0 = ½ 7 3 " 5

6 = 10 36 " 10

½ = ½ 3 · 13 " 4

6 " 1

£1,573 " 9 " 1 Ansr

bus " pks

3 " 3

6

22 " 2 bus · pks :: d

as 22 · 2 :: 5

4

90 pks

2

180 gal

4

720 qrt

qrs :: bus · pks

7 " 0 · Ansr 360

5

4 | 1800

2 | 450

4 | 225 pks

8 | 56 " 1

7 · 0

12 | 1800

28 | 150

£7 · 10 Ansr

A grocer mixed ½ cwt tea at 2/6 per lb with 1 cwt at 2/= per lb what would he have gained by selling it at 2/4 per lb.

£	s	d			
2	0	½	5	6	0
6	¼		5	12	
			1	8	
			7	0	

£	s	d			
2	0	½	11	12	0
			11	4	
			7	0	
			18	4	

£	s	d			
2	0	½	16	8	0
4	⅙		16	16	
			2	16	
			19	12	
			18	4	
			1	8	

gained £1 " 8 Ans^r

3 $\frac{2}{3}$ " $\frac{1}{10}$ " $\frac{1}{9}$ " $\frac{5}{12}$ 120 " 18 " 80 " 75
180

$\frac{2}{3} - \frac{1}{10}$ 120 − 3 17
30 30 Ans^r

West Batterwick
April 1st 1903

Mr Robin
To J Cuckoo

		£	s	d
12500	Envelopes @ 2/9 per 1000	1	14	4½
3	pints of ink @ 7/6 per gal		2	9¾
1152	nibs @ 1/6 per gross		12	0
120	quires of paper @ 5 quires for 1/-		4	0
13	books @ 3/6 each	2	7	6
		£6	0	1¼ Answer

If when wheat is 6s a quarter the 4 lb loaf costs 6d what should the 4 lb loaf cost when wheat is 24s per quarter

As 6s : 24s :: R 6d

6 × 6 = 36
36 ÷ 24 = 1 12/24 = 1½

Answer 1½d

A merchant gave £50 for some cloth he gained £12 10s. he sold it @ 6/3 per yard. How many yards had he

£	s	d
50	0	0
12	10	0
62	10	0

s d
6 3
12
75

20
1250
12
75 | 15000 | 200 yds Ans^r
150
00

West Butterwick
April 7th 1902

Mr West
To W Cast

	£	s	d
3 bus 1 pk flour @ 1/9 per peck	1	2	9
2 3/4 Cheeses each 1/4 cwt @ 7/- per lb	20	2	6
9 1/2 lbs of tea @ 2/6 per lb	1	3	9
15 loaves @ 5/3 per doz		6	6 3/4
	£22	15	6 3/4

Paid April 7th 1902
W. Cast.

April 14th

As £38 : 19 : 0 : £26 : 2 : 9 :: tons 38 : 19

20
779
12
9348
4674
1558

20
522
12
6273
2091
19
18819
22091

1558) 39729 (25 tons 10 cwt Ans

3176
8569
7790
779
20
15580
15580
....

Find the simple interest (to the nearest penny) on 225 £. 7 s. 10 d. for 3 yrs at 2½ per cent per annum.

	£	s	d
½) 2 2 5		7	10
			2
	4 5 0	15	8
	1 2	13	11
	3 6 3	9	7
			3
	16 9 0	8	9
		20	
	18 0	8	
		12	
	1 0 5	1	
	1 0 0	20	
	£ 16	s 18	d 1 1/20 Ans

$1\frac{1}{2} + 2\frac{1}{3} + 3\frac{3}{4}$ $1 + 2 + 3 = 6$

$\frac{1}{2} + \frac{1}{3} + \frac{3}{4}$ $\frac{6+4+9}{12}$ $\frac{19}{12} = 1\frac{7}{12}$

$7\frac{7}{12}$ Ans

April 15 12

4)28
7
280
14
9)294
32 6/9 2/3

5·0 = 1/2 32
6 = 10 8

0
16
3·8
8·19·8

R 3·6
2
3)11·0
3·8

Multiply 2·813 by ·0125 and Divide ·014
·014 0625 by ·0375

2·813
0125
14065
5626
028 13
0351625

R

0375000 \ 0140625 \ 375
01125 00
2815 25
2625 0
1875 0
1875
. . . .

Find the G.C.M. of 5785101 and 805067

5785101 \ 7
5635469 \ 7
149632 \ 805067

April 28th

£	s	d
35	1/4	18 9
31	3	10 0
3	9	8 9

£ 180
30
20
37

$$\frac{925}{7} \div \frac{5}{2} = \frac{925}{7} \times \frac{2}{5} = \frac{370}{7} = 52\frac{6}{7}$$ Ans 52 6/7 years

How much 3 cwt of currants @ 3 6/- must be sell per lb to gain 30/- on the whole.

210 / 12 = 17 1/2 R

17 1/2 / 4 1/2 per lb Ans

May 6th

X

3.7805
.0125

189025
75610
37805

1.4725625 | 1811.1562 5 Ans

4.0000.00
7256258
400000
3256258
3200000
56258
40000
6258
4000
2258
2000
258
248
10
8
20
20

A May 11th Card 29

8576
9088
7808 \ 17664 \ 2
15616
2048 \ 7808 \ 3
6144
1 128 \ 384 \ 2 1664 \ 2048 \ 1
128 1664
128 \ 128 \ 1 384 \ 664
128 1536
128

128 Ans

2 2 1/2 2/3
8 4/5
8 11 3/4 3/5
4 4 6 1/2
7 1/2
15 2 11/20 Ans

3 31/8/2 X 1/5 31/10 1/9 X 16/3 16/27

31/10 - 16/27 8 3/27 - 1 6 . 6/270

2 137/270 Ans

Card 39

D sums

£ s d
1 " 3 · 7 3/4

20
23
12
283
4
1135

6619/6968 × 1/1 = 7541256/5/6968

6968) 7541256 (1082
6968
57235
55744
14915
13936
979
6968

(1) 12) 270 (22·6
24
30
24
6

6968 / 979 = 1 + 393/6968

£ s d
1 " 2 " 6 1/2 Ans

June 2nd

If $\frac{2}{3}$ of my money be $10\frac{1}{2}$ what is $\frac{1}{2}$ of it

$$\frac{3}{2} \times \frac{1}{2} \times \frac{126}{1} \quad \frac{63}{2} \quad \frac{189}{2}$$

12)189(15 Ans

$10\frac{1}{2}$ Ans

How much paper 21 inc wide would be required to paper the walls of a room 19 feet long, 16 feet broad $10\frac{1}{2}$ feet high

19
16
304
10
3040
152
3192
1224
12768
12768
314976

21)5964(284
42
176
168
84
84

12)2188(182
12
98
96
2
Ans 152

A Sums June 3rd Card 13

Find the G. C. M. of 119, 459, and 510

(1)

510
459
119 | 9 6 9 | 8
95 2
17 | 119 | 7
119
0

R

17 Ans^r

$\frac{1}{6} + \frac{15}{1} + \frac{133}{10} + \frac{4}{21} \quad \frac{35 + 450 + 2793 + 40}{210}$ 3318/210

(2) $\frac{3318}{210} - \frac{173}{35} \quad \frac{3318 - 1038}{210}$ 2280/210

$10\frac{6}{7}$ Ans^r

R

de $3/4\frac{2}{7}$ by $1/9$.

$\frac{282}{7} \times \frac{9}{10} = \frac{1269}{35}$

$3/0\frac{9}{35}$ Ans^r


TRAFALGAR SQ
ST PAUL'S
ST STEPHENS