

November 2017

# Student Notebook, Arithmetic Measures

Luther Stover

Blue Hill Academy

Follow this and additional works at: [http://digitalmaine.com/blue\\_hill\\_documents](http://digitalmaine.com/blue_hill_documents)

---

## Recommended Citation

Stover, Luther and Blue Hill Academy, "Student Notebook, Arithmetic Measures" (2017). *Blue Hill Documents*. 22.  
[http://digitalmaine.com/blue\\_hill\\_documents/22](http://digitalmaine.com/blue_hill_documents/22)

This Text is brought to you for free and open access by the Blue Hill, Maine at Maine State Documents. It has been accepted for inclusion in Blue Hill Documents by an authorized administrator of Maine State Documents. For more information, please contact [statedocs@maine.gov](mailto:statedocs@maine.gov).



64324	68457	646246	74326
385774	546672	5816214	246
12764	24567	27730	445756
342	123	148652	277304
125528	73701	182841	76
51656	49134		
38372	24567		
4365288	3021741		
3	4		
12745	45678		
246	333		
74078	137034		
49380	137034		
24670	137034		
3036870	15210774		
13243	23456		
2602	1003		
46486	7068		
4648600	2345600		
46532486	23463068		
701231			
1231			
701231			
210367			
002462			
01231			
3225361			

A man has an estate on which he  
 360 bushels of wheat and he had  
 Another on which he raised 6 times  
 as much wheat quantity. Did he raise  
 on both of them, — 360

The man had an estate which among 1 sons  
 as follows viz to the first eight he gave 2160  
 333 dollars each: to the ninth he gave as wanting 360  
 1000 dollars as to the other eight I mean 2520  
 the value of the whole estate; and also the 1 sons share  
 333  
 2664  
 7200  
 1 son's share  
 1 son's share  
 2 sons share  
 4328 whole estate



2

A man sheared 364 six years successively each sheep  
neated 3 pounds of wool per year: how much wool had  
he yearly; and how much six years. 3 64

$$\begin{array}{r} 364 \\ 3 \\ \hline \text{year } 1092 \\ 6 \end{array}$$

I sold 342 tons of iron at 6 years 6 552

142 Dollars per ton I demand the price of

the whole.

$$\begin{array}{r} 342 \\ 142 \\ \hline 684 \end{array}$$

1368 boards in the W at 62 Dollars

$$\begin{array}{r} 342 \\ \hline 48564 \end{array}$$

per thousand what did they come to

What will 6422 quintals of fish

$$\begin{array}{r} 742 \\ 62 \\ \hline 1484 \end{array}$$

come to at 6 per quintal.

$$\begin{array}{r} 6422 \\ 6 \\ \hline 38532 \end{array}$$
$$\begin{array}{r} 1484 \\ 4462 \\ \hline 46104 \end{array}$$

A man traveled 26 days and each day he traveled 37  
mils what distance did he travel in the whole time

$$\begin{array}{r} 37 \\ 26 \\ \hline 222 \\ 79 \\ \hline 762 \end{array}$$

Long Division.

Div 163721471 (232593 Quotient

$$\begin{array}{r} 32 \\ 52 \\ \hline 48 \\ 41 \\ \hline 32 \\ 94 \\ \hline 81 \\ 147 \\ \hline 144 \\ 51 \\ \hline 48 \\ \hline 3 \text{ Remainder} \end{array}$$

24)3102134 (127255

$$\begin{array}{r} 24 \\ 70 \\ 48 \\ \hline 222 \\ 216 \\ \hline 61 \\ 48 \\ \hline 133 \\ 120 \\ \hline 134 \\ 120 \\ \hline 14 \end{array}$$



2 cent 3

$$\begin{array}{r}
 222 \overline{) 1432400 (6452)} \quad \text{Duis} \quad 5560 \overline{) 7845681 (1319)} \\
 \underline{1332} \qquad \qquad \qquad \underline{5566} \\
 1004 \qquad \qquad \qquad 17776 \\
 \underline{888} \qquad \qquad \qquad \underline{16678} \\
 1160 \qquad \qquad \qquad 10988 \\
 \underline{110} \qquad \qquad \qquad \underline{5566} \\
 500 \qquad \qquad \qquad 54221 \\
 \underline{444} \qquad \qquad \qquad \underline{50074} \\
 56 \qquad \qquad \qquad 4127 \text{ Remainder}
 \end{array}$$

$$\begin{array}{r}
 112 \overline{) 2045600 (2242)} \qquad \qquad \qquad 2045600 (2242) \\
 \underline{1824} \qquad \qquad \qquad 2345 \overline{) 5432140 (2316)} \\
 2216 \qquad \qquad \qquad \underline{4670} \\
 \underline{1824} \qquad \qquad \qquad 7421 \\
 3920 \qquad \qquad \text{March the} \qquad \underline{7035} \\
 \underline{3648} \qquad \qquad \text{80} \qquad \qquad 3864 \\
 2720 \qquad \qquad \text{1805-} \qquad \underline{2395} \\
 \underline{1824} \qquad \qquad \qquad 15070 \\
 876 \qquad \qquad \qquad \underline{14070} \\
 \qquad \qquad \qquad 1070
 \end{array}$$

$$\begin{array}{r}
 203 \overline{) 2400032 (46305)} \quad \text{4211} \overline{) 320143 (2213)} \\
 \underline{812} \qquad \qquad \qquad \underline{8422} \\
 1280 \qquad \qquad \qquad 8981 \\
 \underline{1218} \qquad \qquad \qquad \underline{8422} \\
 620 \qquad \qquad \qquad 5574 \\
 \underline{609} \qquad \qquad \qquad \underline{4211} \\
 1132 \qquad \qquad \qquad 13833 \\
 \underline{1015} \qquad \qquad \qquad \underline{12633} \\
 117 \qquad \qquad \qquad 1200 \\
 \qquad \qquad \qquad 2760 \overline{) 6041231 (618)} \\
 \qquad \qquad \qquad \underline{58560} \\
 \qquad \qquad \qquad 18023 \\
 \qquad \qquad \qquad \underline{7761} \\
 \qquad \qquad \qquad 87631 \\
 \qquad \qquad \qquad \underline{80080} \\
 \qquad \qquad \qquad 7551
 \end{array}$$



# Practical Lessons in Division

A man had an estate valued at 2474 Dolls. and it was divided equally between twelve sons I demand the share of each.

$$\begin{array}{r} 12 \overline{) 2474} \phantom{00} (206 \frac{2}{3} \\ \underline{24} \phantom{00} \\ 74 \\ \underline{72} \\ 2 \end{array}$$

If a too of 40000 Dollars were to be lived upon 12000 polls I demand what one poll pay,  $12 \overline{) 40000} (33 \frac{1}{3}$

$$\begin{array}{r} 36 \\ \underline{40} \\ 36 \\ \underline{4} \end{array}$$

Divide 1474 Dollars ~~equally among 35 men~~ ~~to be taken~~ 30 boys 17 women and 27 girls: after taking out 75 Dollars for a present to nephew.

$$\begin{array}{r} 25 \\ 30 \\ 17 \\ \underline{27} \phantom{00} 1474 \\ 97 \phantom{00} \\ \underline{97} \phantom{00} 75 \\ 77 \overline{) 1399} \phantom{00} (14 \frac{2}{3} \\ \underline{97} \phantom{00} \\ 409 \\ \underline{396} \\ 13 \end{array}$$

Sixty men at a feast which lasted 3 days spent 240 Dollars per day how much did each man spend per day and how much did

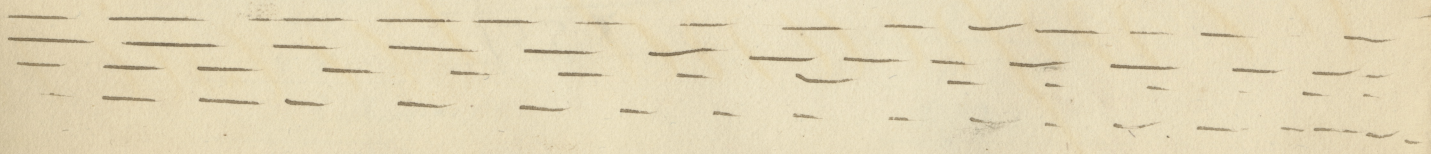
$$\begin{array}{r} 409 \\ \underline{396} \\ 13 \end{array}$$

in the whole?  $6 \overline{) 240} (40$

$$\begin{array}{r} 40 \\ \underline{24} \\ 16 \end{array}$$

Divide 247600 pounds of beef equally among an army of 23724 men

$$\begin{array}{r} 23724 \overline{) 247600} \phantom{00} (10 \frac{10360}{23724} \\ \underline{23724} \phantom{00} \\ 10360 \end{array}$$





Divide 151200 lbs of beef equally among an army consisting of 27 regiments each regiment 7 companies and each companies 100 men.

$$\begin{array}{r} 27 \\ 7 \\ \hline 189 \\ 100 \text{ lbs} \\ \hline 18900 \overline{) 151200} \quad (8 \text{ lbs. trs} \\ \underline{15120} \\ 0 \end{array}$$

If 10500 Dollars are given for 750 barrels of flour, I demand the price of one barrel.

$$\begin{array}{r} 750 \overline{) 10500} \quad (14 \text{ trs} \\ \underline{750} \\ 300 \\ \underline{300} \\ 0 \end{array}$$

If 45 horses were sold in the W India for 9000 Dollars, I demand average price.

$$\begin{array}{r} 45 \overline{) 9000} \quad (200 \text{ trs} \\ \underline{90} \\ 0 \\ \underline{0} \\ 0 \end{array}$$

## Short Division Examples

$$\begin{array}{r} 2423 \\ 21 \overline{) 15} \end{array}$$

$$\begin{array}{r} 34567 \\ 152 \overline{) 23} \end{array}$$

$$\begin{array}{r} 461234 \\ 20308 \overline{) 2} \end{array}$$

$$\begin{array}{r} 71234567 \\ 246713 \overline{) 2} \end{array}$$

$$\begin{array}{r} 64567 \\ 1761 \overline{) 6} \end{array}$$

$$\begin{array}{r} 712345 \\ 1763 \overline{) 4} \end{array}$$

$$\begin{array}{r} 843213 \\ 541 \overline{) 8} \end{array}$$

$$\begin{array}{r} 7642321 \\ 84724 \overline{) 1} \end{array}$$

## Compound Division



# Compound Addition

## American Money

10 Mills make 1 Cent

10 Cents " " " 1 Dime

10 Dimes " " " 1 Dollar

100 Cents " " " 1 Dollar

10 Dollars " " " 1 Eagle

£	D	cent	m
126	"8"	76	"4
21	"4	32	"1
2	"3	45	"6
22	"4	32	"4
<hr/>			
173	"0	86	"5

£	D	cent	m
1234	"4"	43	"6
321	"3"	46	"5
464	"5"	43	"2
364	"6"	34	"1
<hr/>			
2384	"9"	67	"4

D	cent	m
4567	"77"	8
4347	"86"	7
7451	"75"	6
3321	"77"	4
<hr/>		
17689	41	5

## Practical Questions Money

(A)

together \$21.71 cents. & \$63.42 cts & \$84.76 cts

\$	cts
21	71
63	42
84	76
<hr/>	
170	09

It owes me \$16.4 cent & in B \$102.75 cent and C \$21.72 cent

what do they all owe me?

D	cent	m
91	"64"	71
102	"75"	
21	"72"	
<hr/>		
215	"81"	7

A owes B \$11.73 cent C \$12.44 cent and D \$19.91 cent

I demand what he owes to B C and D

D	cent	m
91	"73"	
12	"44"	
19	"91"	
<hr/>		
32	"08"	5



A has a demand upon B for \$642.20 and upon C for 211  
and upon D \$750.74 cents I demand the sum of his due.

642 " 20  
211 "  
750 " 70  

---

1603 " 10 cents

A farmer sold 3 yoke of oxen for one yoke he received \$106

one of 117.45 cent and one of 95.55 cent what did they all

come to, 106 " cent  
117 " 45  
95 " 55  

---

318 " 30 cents

What is the value of 3 ships valued as follows viz one 4750

one \$6742 and one \$7871 4750  
6742  
7871  

---

19383 cents

2

24 Grains make 1 Penny weight

20 Penny weight 1 Ounce

12 Ounces 1 Pound

**Troy Weight**

lb. oz. pwt. gr.  
245 " 10 " 17 " 23  
146 " 11 " 16 " 20  
145 " 2 " 11 " 7  

---

538 " 0 " 17 " 2

lb. oz. pwt. gr.  
2345 " 11 " 17 " 23  
123 " 7 " 8 " 9  
34 " 5 " 16 " 17  

---

2504 " 1 " 5 " 1

**Examples**

A man two wedges of gold one  
weighing 25 lb. 3 oz 12 pwt. and

and the other weighing 1 lb.  
11 oz. 12 pwt. 4 grs. Demand  
the weight of the two wedges

lb. oz. pwt. gr.  
25 " 3 " 12 " 0  
1 " 11 " 12 " 4  

---

27 " 3 " 4 " 7



What is the weight of the following silver articles viz one spoon weighing 1 lb 10 oz 19 part one tankard weighing 4 lb 6 oz one

basin weighing 1 lb 10 oz 19 part 6 Drains make 1 Ounce  
 1" 10" 19  
 4" 6  
 1" 10" 19  
 8" 3" 18

### Examples.

Tons cwt gr lb oz dr  
 444 = 12 = 1" 12" 2" 13  
 41 = 11 = 0" 10" 12" 13  
 123 = 19 = 3" 12" 15" 15  
 610" 3" 1" 7" 15" 7 Ans

T cwt gr lb oz dr  
 123" 12" 2" 22" 12" 12  
 321" 19" 3" 27" 15" 15  
 141" 12" 2" 19" 11" 12  
 587" 5" 1" 14" 6" 7 Ans

Practical Questions  
 in Avoirdupois  
 Weight.

Avoirdupois  
 Weight

16 Ounces = 1 Pound  
 28 Pounds = 1 Quarter  
 4 Quarters = 1 Hundred  
 20 Cwt = 1 Ton

Q 2  
 Add together the following parcels viz 12 cwt 2 gr 11 lb 1 Ton 19 cwt 3 gr 27 lb 15 oz 15 dr and 2 tons 12 cwt 2 gr 20 lb 12 oz 10 dr 5 cwt gr lb oz dr 2" 12" 12" 20" 2" 6 1" 12" 3" 27" 15" 15 1" 20" 11" 7" 5" 5" 1" 7" 12" 7

What is the weight of those kind of sugars weighing as follows viz 1st 9 cwt. 3 gr 12 lb the 2nd 10 cwt 1 gr and 12 lb and the 3rd 3 gr 27 lb.  
 9" 3" 12  
 10" 1" 12  
 3" 27 7  
 29" 0" 2 3



# Apothecaries Weight

20 Grains make 1 Scruple

3 Scruples " 1 Dram

8 Drams " 1 Ounce

12 Ounces 1 Pound

Examples.

$\begin{array}{r} \text{lb.} \quad \text{oz} \quad \text{dr} \quad \text{ss} \quad \text{gr} \\ 23 \text{ lb} \quad 6 \text{ oz} \quad 7 \text{ dr} \quad 2 \text{ ss} \quad 17 \text{ gr} \end{array}$

$\begin{array}{r} 10 \text{ lb} \quad 5 \text{ oz} \quad 4 \text{ dr} \quad 1 \text{ ss} \quad 10 \text{ gr} \end{array}$

$\begin{array}{r} 11 \text{ lb} \quad 0 \text{ oz} \quad 3 \text{ dr} \quad 2 \text{ ss} \quad 1 \text{ gr} \end{array}$

$\begin{array}{r} 45 \text{ lb} \quad 1 \text{ oz} \quad 0 \text{ dr} \quad 1 \text{ ss} \quad 0 \text{ gr} \end{array}$

$\begin{array}{r} \text{lb.} \quad \text{oz} \quad \text{dr} \quad \text{ss} \quad \text{gr} \\ 121 \text{ lb} \quad 11 \text{ oz} \quad 7 \text{ dr} \quad 2 \text{ ss} \quad 17 \text{ gr} \end{array}$

$\begin{array}{r} 91 \text{ lb} \quad 2 \text{ oz} \quad 6 \text{ dr} \quad 1 \text{ ss} \quad 1 \text{ gr} \end{array}$

$\begin{array}{r} 171 \text{ lb} \quad 1 \text{ oz} \quad 4 \text{ dr} \quad 1 \text{ ss} \quad 9 \text{ gr} \end{array}$

$\begin{array}{r} 294 \text{ lb} \quad 4 \text{ oz} \quad 2 \text{ dr} \quad 2 \text{ ss} \quad 12 \text{ gr} \end{array}$

Questions

## Practical Questions in Apothecaries Weight

Add together 22 lb 6 oz 1 dr 2 ss 13 gr 12 lb 0 oz 1 dr 2 ss 11 gr and 22 lb 1 dr 1 ss 11 gr

$\begin{array}{r} \text{lb.} \quad \text{oz} \quad \text{dr} \quad \text{ss} \quad \text{gr} \\ 22 \text{ lb} \quad 6 \text{ oz} \quad 1 \text{ dr} \quad 2 \text{ ss} \quad 13 \text{ gr} \end{array}$

$\begin{array}{r} 12 \text{ lb} \quad 0 \text{ oz} \quad 1 \text{ dr} \quad 2 \text{ ss} \quad 11 \text{ gr} \end{array}$

$\begin{array}{r} 22 \text{ lb} \quad 1 \text{ dr} \quad 1 \text{ ss} \quad 11 \text{ gr} \end{array}$

$\begin{array}{r} 56 \text{ lb} \quad 1 \text{ oz} \quad 2 \text{ dr} \quad 1 \text{ ss} \quad 1 \text{ gr} \end{array}$

$\begin{array}{r} \text{lb.} \quad \text{oz} \quad \text{dr} \quad \text{ss} \quad \text{gr} \\ 11 \text{ lb} \quad 11 \text{ oz} \quad 6 \text{ dr} \quad 2 \text{ ss} \quad 12 \text{ gr} \end{array}$

$\begin{array}{r} 21 \text{ lb} \quad 6 \text{ oz} \end{array}$

$\begin{array}{r} 122 \text{ lb} \quad 9 \text{ oz} \quad 2 \text{ dr} \quad 1 \text{ ss} \quad 0 \text{ gr} \end{array}$

$\begin{array}{r} 156 \text{ lb} \quad 3 \text{ oz} \quad 7 \text{ dr} \quad 1 \text{ ss} \quad 2 \text{ gr} \end{array}$

## Long Measure.

$\begin{array}{r} \text{Deg} \quad \text{ft} \quad \text{in} \quad \text{fur} \quad \text{ro} \quad \text{pt} \quad \text{mi} \quad \text{Roor} \\ 122 \text{ lb} \quad 68 \text{ oz} \quad 6 \text{ dr} \quad 30 \text{ ss} \quad 15 \text{ gr} \quad 10 \text{ ss} \quad 2 \text{ gr} \end{array}$

$\begin{array}{r} 211 \text{ lb} \quad 10 \text{ oz} \quad 4 \text{ dr} \quad 2 \text{ ss} \quad 15 \text{ gr} \quad 9 \text{ ss} \quad 1 \text{ gr} \end{array}$

$\begin{array}{r} 31 \text{ lb} \quad 6 \text{ oz} \quad 2 \text{ dr} \quad 3 \text{ ss} \quad 7 \text{ gr} \quad 4 \text{ ss} \quad 2 \text{ gr} \end{array}$

$\begin{array}{r} 21 \text{ lb} \quad 37 \text{ oz} \quad 3 \text{ dr} \quad 4 \text{ ss} \quad 1 \text{ gr} \quad 2 \text{ ss} \quad 1 \text{ gr} \end{array}$

$\begin{array}{r} 386 \text{ lb} \quad 53 \text{ oz} \quad 1 \text{ dr} \quad 16 \text{ ss} \quad 8 \text{ gr} \quad 0 \text{ ss} \quad 1 \text{ gr} \end{array}$

$\begin{array}{r} 24 \text{ lb} \quad 7 \text{ oz} \quad 3 \text{ dr} \quad 7 \text{ ss} \quad 4 \text{ gr} \end{array}$

$\begin{array}{r} 21 \text{ lb} \quad 3 \text{ oz} \quad 6 \text{ dr} \quad 11 \text{ ss} \quad 2 \text{ gr} \end{array}$

$\begin{array}{r} 12 \text{ lb} \quad 9 \text{ oz} \quad 3 \text{ dr} \quad 1 \text{ ss} \quad 2 \text{ gr} \end{array}$

$\begin{array}{r} 144 \text{ lb} \quad 2 \text{ oz} \quad 2 \text{ dr} \quad 2 \text{ ss} \quad 7 \text{ gr} \end{array}$

$\begin{array}{r} 611 \text{ lb} \quad 5 \text{ oz} \quad 2 \text{ dr} \quad 5 \text{ ss} \quad 3 \text{ gr} \end{array}$



# Practical Questions in L. Measure

The distance from A to B is 3 miles 6 fur 27 rods from  
 B to C is 1 league 2 miles 7 fur from C to D 27 lea 1 mi  
 2 fur 39 rods I demand the distance from A to D

A ship sailed south 6 lea 1 mile  
 S. S. E. 7 lea. 2 mi. 0 fur 39 rods E. S. E.

21 lea. 1 mi 6 fur 7 rods what was the whole distance sailed

Land ore

	mi	fur	rods
3	6	27	
1	2	7	
27	1	2	39
30	4	2	0
2	1	6	7
37	1	4	7

# Square Measure

Acres	roods	rods	ft	inc
272	3		39	216
142	2		26	270
123	1		10	16
321	0		7	8
860	0		3	290

Ac	roods	rods
212	2	27
148	2	27
143	2	10
341	3	37
846	3	27

# Practical Questions in Land Measure

A man had several fields of land the 1st contained 27  
 acres 3 roods the 2d 19 acres 2 roods 27 rods 17 feet and  
 the 3d 6 acres 2 roods 39 rods I demand the quantity in  
 the 3d field.

19	2	27	17	
6	2	39		
27	3			
54	0	26	17	

2 roods 17 rods and 104  
 acres 2 roods 22 rods

64	2	27
104	2	22
61	3	17
231	0	28



# Wine Measure.

## Examples.

Sum	gal	qt	pt	Pipes	hhd	gal	qt	pt
143	2	1	2	1	23	1	62	3
43	2	0	0	7	1	41	2	0
32	1	1	1	2	1	2	1	1
27	2	1	0	1	0	3	1	1
218	7	9	6	58	0	0	0	0
				175	1	1	7	2

## Practical Questions in Wine Measure

What is the sum of the following parcels viz 12 gal 2 qt 1 pint; 12 gal 1 qt 21 qt 3 qt and 1 hhd 3 qt 2 pt gal qt pint

A merchant received from Lisbon 19 2 1  
at one time 123 pip 1 hhd 62 gal 1 2 1  
3 qts 1 pint at another time 21 3  
43 pip 1 hhd 41 gal 2 qts 1 56 2 1

and at another time he received 4 pip 40 gal what  
did he receive in all. Pip hhd gal qt pt

123 1 62 3 1  
43 1 41 2  
4 40  
172 0 1 8 1 1

Wine and Beer  
M E A S U R E E C



# Examples

Stover  
Stover

And gal qts pint  
22 5 1 3 1  
31 5 2 2 1  
7 4 3 1 1  
6 4 1 1 1  
131 27 1 1

122 31 3 1  
320 33 3 1  
31 1 5 1 1  
7 2 9 2 1  
1145 2 3 0

Practical

Questions

in Ale and Beer Measure

And together following quantities of beer viz 33 hhd 51 gal  
2 qts 4 hhd 52 gal 2 qts and hhd 16 gal 1 qt

hhd gal qts  
33 5 1 2  
4 5 2 2  
19 1 6 1  
58 1 2 1

The following parcels of beer were

sold to a merchant first 19 hhd 27 gal 3 qts second

31 hhd 21 gal 2 qts at the third time 11 hhd 6 qts

3 qts what was sold at the three times 17 27 3  
31 21 2  
11 6 3  
62 2 0

# Solid Measure

1728 Inches make 1 Foot

27 Feet " " 1 Yard

40 Feet of round Timber } 1 Ton or Load

50 Feet of beam Timber

H. tons. ft in  
222 49 1721  
321 36 240  
26 41 1000  
9 36 1259  
581 14 770

Yds ft in  
234 26 1727  
678 21 1672  
565 20 1242  
62 21 43  
1549 2 1228



# Practical Questions in Solid Measure

1<sup>st</sup> What is the sum of the three following sticks of timber viz the 1<sup>st</sup> 3 tons, 49 ft 16 1/2 in the 2<sup>d</sup> 4 tons, 48 ft 10 1/2 in the 3<sup>d</sup> 6 tons 40 ft 10 1/2 in.

	Tons	ft	in
3	49	16	7 1/2
4	48	10	1 1/2
6	40	10	1 1/2

2<sup>d</sup> Add together the following parcels viz

29 tons 30 ft	56 tons 39 ft 12 1/2 in	61 tons 17 ft	71 tons 27 ft 16 1/2 in
---------------	-------------------------	---------------	-------------------------

## Wood And

	tons	ft	in
29	30		
56	39	12 1/2	
61	17		
71	27	16 1/2	
219	36	48	

## Bark Measure.

1728 Inches -- make 1 Solid foot  
 16 Solid Feet 1 Foot of wood  
 8 Feet of wood 1 Cord  
 128 Solid Feet 1 Cord

Cord	feet	in	Examples =	
9	127	16 1/2		64 " 90 " 146
2	100	64 1/2		7 " 10 " 140
40	50	60		70 " 80 " 90
61	11	9		10 " 21 " 31
114	33	62 1/2		154 " 73 " 48 1/2

## Practical Questions in Wood Bark

Add together the following parcels of wood viz. 64 cords, 120 feet; 72 cords, 21 feet; and 122 cords.

64 cords	120 feet
72 cords	21 feet
122 cords	

Add together 3 cords 4 ft of wood 12 Sft. 6 cords 2 ft of wood and 12 Sft 7 cords and 6 ft of wood together.

3	4	= 12
6	5	= 12
7	6	= 13
20	0	= 8



# Dry Measure.

## Examples

Chas. bu. pks. gal. qts. pts.	Drs. bu. pks. gal. qts. pts.
54242 = 32 = 2 = 1 = 2 = 0	42 = 7 = 3 = 1 = 3 = 1
52312 = 31 = 0 = 0 = 3 = 1	31 = 6 = 2 = 0 = 2 = 0
213 = 20 = 3 = 1 = 2 = 0	7 = 3 = 3 = 1 = 1 = 1 = 0
4201 = 1 = 2 = 0 = 1 = 1	7 = 6 = 3 = 0 = 3 = 1
0770 = 29 = 1 = 0 = 1 = 0	106 = 7 = 3 = 0 = 2 = 0

## Practical Questions in Dry Measure

Note together the following parcels viz 1627 bushels  
 3 pks. 7 qts. 1 pt. 772 bu. 2 pks. 1 pt. 2471 bu. 1 pks. 2 qts.  
 1 pt. bu. pks. qts. pt.  
 1627 = 3 = 7 = 1  
 772 = 2 = 1  
 2471 = 1 = 2 = 1  
 5071 = 3 = 3 = 0

The following quantities of coal were  
 sold to a Merchant viz 41 chaldron 30  
 bu. 3 pks. 5 chal. 35 bu. 1 pk. and  
 60 chal. 7 bu. what was quantity sold.  
 Chas. bu. pks.  
 41 = 30 = 3  
 51 = 35 = 1  
 60 = 7 = 1  
 59 = 1 = 0

## Cloth Measure.

Yds. gr. na.	Examples	Yds. gr. na.
6543 = 5 = 1	244 = 4 = 3	126 = 3 = 3
3454 = 4 = 3	312 = 3 = 1	245 = 3 = 3
6543 = 3 = 2	121 = 1 = 2	273 = 1 = 0
6543 = 2 = 1	200 = 8 = 3	123 = 1 = 3
3085 = 3 = 3	877 = 3 = 1	769 = 9 = 1
	706 = 1 = 2	

## Practical Questions in Cloth Measure

Note together the following pieces of cloth viz 27 yds.  
 3 gr. 3 na. 30 yds 1 gr. 3 na. 36 yds 1 gr. 1 na. and  
 another piece containing as much as all the others.  
 Yds. gr. na.  
 27 = 3 = 2  
 30 = 1 = 3  
 36 = 1 = 1  
 35 = 5 = 6  
 123 = 1 = 0



How many Frenchells in the following pieces of cloth  
 viz first 22 yds 3 na. second 31 yds 1 na. third 60 yds 2 na.  
 and the fourth 31 yds 1 na.

22 yds 3 na  
 31 yds 1 na  
 60 yds 2 na  
 31 yds 1 na  
 5042  
 7141  
 12345

# Of Time

L yrs	mon	we	hou	min	L yrs	mon	hou	min						
123	11	0	6	23	57	57	12	12	24	23	57	57		
123	11	1	4	21	20	40	19	7	4	11	12	11		
171	12	3	2	1	1	12	10	9	21	4	6	1	0	7
251	11	1	2	1	0	1	0	9	91	2	4	6	7	40
671	7	3	2	1	8	42	68	35	2	14	18	31	57	

## Practical Questions in Time.

How long together 12 years 6 month, 3 mo. 6 d. 23 ho 12 mi 12 s  
 47 years. 5 mo. 2 we 4 day 12 hour. 9 min. 1 year. 9 mo.  
 1 year. 9 mo. 1 we. 1 d. 1 ho. 6 min.

years mon d h m s  
 12 6 3 6 2 3 1 2 1 2  
 49 5 2 4 1 2 7  
 1 7 1 1 1 6  
 63 12 3 5 7 2 2 5 1 2

How long together 21 years 9 month. 6 d. 31 year. 6 mo. 7 d. 6 year  
 4 mo. 7 d. and 12 years 7 mo. 11 d.

years mon d h m s  
 21 9 6  
 31 6 17  
 6 4 7  
 12 7 16  
 77 1 18

## Compound Subtraction

### Examples

Dolls			cts	m	Examples			Dolls	cts	m		
1	2	41	77	7	4	3	12	27	7	1000	00	0
7	7	2	87	8	7	0	4	21	6	772	77	7
2	4	8	72	1	3	6	0	8	1			1



# Practical Questions American Money

A man lent 3 63 Dolls 3 cents received 2 82 Dolls 17 cts and 1 mill. How much remains due. 8 Dolls mill

3" 3" 3" 3

2" 2" 9" 9" 9

1" 0" 3" 3" 1

A man had an estate valued at 3505 Dolls 63 cent 2 m. had three sons to each of whom he gave 604 Dolls 5 cts. 2 m. he also to two daughters 75 Dolls 75 cts. each? What had he left.

Dolls. cts. m  
50 4 5 2  
50 4 5 2  
50 4 5 2  
7 5 75  
7 5 75

Dolls. cts. m  
35 05 6 3 2

1 6 6 3 6 5 6

1 8 4 1 7 7 6

1 6 6 2 65 6

A man was worth 9472 Dolls 65 cts by a misfortune at sea he lost 4547 Dolls 75 cts what was he worth after he sustained the loss.

Dolls cts  
9472 65

4547 75

4922 70

## Troy Weight.

lb. oz. pwt. grs.  
22 3 10 7 22

12 4 11 12 23

9 8 11 6 23

lb. oz. pwt. grs.  
31 23 45 67 6 12 20

13 43 21 48 10 1 3 22

17 80 24 48 7 18 22

## Practical Questions in Troy weight

A person had a basin which weighed 3 lb. 10 oz. It being melted in part it then was again and its weight was 2 lb. 11 oz. 7 pwt 4 grs. what was melted off.

How much silver was he given in exchanging a silver plate for a platter the weight of the platter being 2 lb. 10 oz. and the weight of the plate 1 lb 4 oz 7 pwt?

lb. oz. pwt  
2 10 7 4

1 4 7

1 5 13



# Avoirdupois Weight

$$\begin{array}{r}
 \text{cwt} \text{ gr} \text{ lb} \text{ oz} \text{ Dr} \\
 2 \text{ } 19 \text{ } 2 \text{ } 27 \text{ } 14 \text{ } 14 \\
 7 \text{ } 18 \text{ } 3 \text{ } 24 \text{ } 15 \text{ } 45 \\
 \hline
 3 \text{ } 0 \text{ } 3 \text{ } 2 \text{ } 14 \text{ } 15
 \end{array}$$

$$\begin{array}{r}
 \text{cwt} \text{ gr} \text{ lb} \text{ oz} \text{ Dr} \\
 134 \text{ } 12 \text{ } 3 \text{ } 20 \text{ } 13 \text{ } 12 \\
 94 \text{ } 19 \text{ } 9 \text{ } 21 \text{ } 14 \text{ } 15 \\
 \hline
 37 \text{ } 13 \text{ } 0 \text{ } 96 \text{ } 14 \text{ } 13
 \end{array}$$

## Practical Questions in avoirdupois weight

A merchant had 31 cwt. 2 gr. 21 lb. of sugar he sold to H. 11 cwt. 1 gr. and to B. 13 cwt. 2 gr. 12 lb. what had he left?

$$\begin{array}{r}
 31 \text{ } 2 \text{ } 21 \\
 20 \text{ } 3 \text{ } 17 \\
 \hline
 9 \text{ } 3 \text{ } 4
 \end{array}$$

A merchant had 15. 3 gr. 27 lb. of sugar it was all stolen but 1 cwt 1 gr 8 lb I demand the quantity stolen.

I bought 27 cwt. 2 gr. 17 lb. of flour and sold 19 cwt. 3 gr. 27 lb. what remained on hand?

$$\begin{array}{r}
 27 \text{ } 2 \text{ } 17 \\
 19 \text{ } 3 \text{ } 27 \\
 \hline
 7 \text{ } 2 \text{ } 20
 \end{array}$$

## Apothecaries' Weight.

$$\begin{array}{r}
 \text{lb} \text{ oz} \text{ Dr} \text{ grs} \\
 14 \text{ } 10 \text{ } 6 \text{ } 2 \text{ } 19 \\
 6 \text{ } 11 \text{ } 7 \text{ } 1 \text{ } 10 \\
 \hline
 7 \text{ } 10 \text{ } 7 \text{ } 1 \text{ } 3
 \end{array}$$

$$\begin{array}{r}
 \text{lb} \text{ oz} \text{ Dr} \text{ grs} \\
 123 \text{ } 6 \text{ } 1 \text{ } 1 \text{ } 19 \\
 74 \text{ } 11 \text{ } 6 \text{ } 2 \text{ } 17 \\
 \hline
 28 \text{ } 6 \text{ } 2 \text{ } 2 \text{ } 2
 \end{array}$$

## Practical Questions

An Apothecary had 12 lb. 6 oz. 2 Dr. of medicine in a certain vessel by accident it was broken and there remained in a broken piece of it 8 lb. 11 oz. 7 Dr. 1 es. 13 grs. I demand the quantity lost.

$$\begin{array}{r}
 12 \text{ } 6 \text{ } 2 \text{ } 0 \text{ } 0 \\
 8 \text{ } 11 \text{ } 7 \text{ } 1 \text{ } 13 \\
 \hline
 3 \text{ } 6 \text{ } 2 \text{ } 1 \text{ } 7
 \end{array}$$

What remains after taken 17 lb. 6 oz. 3 Dr. from 26 lb. 7 oz. 7 Dr.?

$$\begin{array}{r}
 26 \text{ } 7 \text{ } 7 \\
 17 \text{ } 6 \text{ } 3 \\
 \hline
 7 \text{ } 1 \text{ } 4
 \end{array}$$

What is the difference between 119 lb. 6 oz. and 11 lb.

$$\begin{array}{r}
 119 \text{ } 6 \\
 11 \text{ } 11 \\
 \hline
 7 \text{ } 8
 \end{array}$$



# Long Measure

D mi fur rods ft in lb  
 27. 57. 6. 30. 15. 11. 2  
 7. 27. 7. 35. 13. 7. 2  
 18. 31. 6. 35. 2. 2. 0

M. fur rods ft in lb  
 224. 2. 21. 13. 1. 7  
 75. 6. 32. 14. 9. 2  
 178. 4. 28. 14. 3. 2

## Practical Questions in Long Measure

Subtract 24 mi. 3 fur. 2 rods. from 26 mi and the

Express the difference between 200 mi. 6 fur. 2 rods. and 150 mi. 7 fur. 2 rods. 4 yds. 2 ft. 1 lb.  
 200. 6. 27. 0. 0. 0. 0  
 150. 7. 2. 4. 2. 0. 1  
 49. 7. 26. 0. 0. 11. 2

Express the difference between 7 lea. 2 mi. 6 fur. 2 rods. and 5 lea. 1 mi. 7 fur. 30 rods.  
 7. 2. 6. 27  
 5. 1. 7. 30  
 2. 0. 6. 37

A man agreed with another to go 51 mi. 4 fur. and he went 60 mi. 2 fur. how much further did he go than he agreed to?  
 60. 2  
 51. 4  
 8. 6

## Land or Square Measure.

Acres rods ft in  
 126. 1. 32. 16.  
 112. 3. 20. 17.  
 73. 2. 7. 2.  
 2456. 7. 12. 10. 11  
 1367. 2. 22. 7. 7  
 1088. 2. 30. 4. 4

## Practical Questions in Square Measure

A man had 3442 feet 142 in. of boards he sold 1247 feet 126 in. what had he left?  
 3442. 142  
 1247. 126  
 2223. 16



A man's farm contained 246 acres 1 rood 7 rds he sold to A 27 acres 2 roods 1 rd to B 39 acres 37 rds and to C 60 acres 2 roods how much had he left

$$\begin{array}{r}
 246^{\circ} 1^{\circ} 7^{\circ} \\
 27^{\circ} 2^{\circ} 1^{\circ} \\
 39^{\circ} 37^{\circ} 0^{\circ} 37^{\circ} \\
 50^{\circ} 2^{\circ} \\
 \hline
 117^{\circ} 1^{\circ} 0^{\circ} \\
 \hline
 122^{\circ} 0^{\circ} 7^{\circ}
 \end{array}$$

A man 700 Acres of land and he had four sons to the eldest he gave 60 acres 2 roods and to the second third and fourth he gave half as much to each as he did to the first how he left.

$$\begin{array}{r}
 700^{\circ} 0^{\circ} \\
 60^{\circ} 2^{\circ} \\
 30^{\circ} 1^{\circ} \\
 30^{\circ} 1^{\circ} \\
 30^{\circ} 1^{\circ} \\
 \hline
 151^{\circ} 1^{\circ} \\
 \hline
 548^{\circ} 3^{\circ}
 \end{array}$$

## Wine Measure

$$\begin{array}{r}
 \text{Bin gal qts pts} \\
 12345^{\circ} 70^{\circ} 3^{\circ} 1^{\circ} \\
 10947^{\circ} 75^{\circ} 2^{\circ} 0^{\circ} \\
 \hline
 1377^{\circ} 77^{\circ} 1^{\circ} 1^{\circ}
 \end{array}$$

$$\begin{array}{r}
 \text{P hhd gal qts pts} \\
 23^{\circ} 1^{\circ} 60^{\circ} 2^{\circ} 1^{\circ} \\
 17^{\circ} 0^{\circ} 57^{\circ} 3^{\circ} 0^{\circ} \\
 \hline
 4^{\circ} 1^{\circ} 0^{\circ} 3^{\circ} 1^{\circ}
 \end{array}$$

## Practical Questions in Wine Measure

A wine seller bought 22 hhd. 54 gal of wine he sold 12 hhd 60 gal I demand the quantity unsold

$$\begin{array}{r}
 22^{\circ} 54^{\circ} \\
 12^{\circ} 60^{\circ} \\
 \hline
 10^{\circ} 54^{\circ}
 \end{array}$$

A bought 247 gal. 3 qts 1 pt of rum and he sold from it 178 gal. 2 qts how much had he left?

$$\begin{array}{r}
 247^{\circ} 3^{\circ} 1^{\circ} \\
 178^{\circ} 2^{\circ} \\
 \hline
 69^{\circ} 1^{\circ} 1^{\circ}
 \end{array}$$

I demand the Difference between 3 pips 1 hhd 54 gal and 1 pip 1 hhd 61 gal

$$\begin{array}{r}
 3^{\circ} 1^{\circ} 54^{\circ} \\
 1^{\circ} 1^{\circ} 61^{\circ} \\
 \hline
 1^{\circ} 1^{\circ} 56^{\circ}
 \end{array}$$



# Solid Measure

$  \begin{array}{r}  \text{36 tons} \quad \text{ft} \quad \text{in} \\  246^{\circ} 49^{\circ} 1720 \\  179^{\circ} 46^{\circ} 1723 \\  \hline  67^{\circ} \quad 2^{\circ} 1725  \end{array}  $	$  \begin{array}{r}  \text{36 tons} \quad \text{ft} \quad \text{in} \\  12^{\circ} 16^{\circ} 1111 \\  7^{\circ} 49^{\circ} 1727 \\  \hline  2^{\circ} 16^{\circ} 1112  \end{array}  $
---	--

## Practical Questions in Solid Measure

A man 249 tons 12 ft of rived timber lying in the docks in a high tide part of it went a drift there remained in the docks 142 tons 12 ft 1721 in I demand the quantity lost.

$  \begin{array}{r}  \text{tons} \quad \text{ft} \quad \text{in} \\  249^{\circ} 12^{\circ} 0 \\  142^{\circ} 12^{\circ} 1721 \\  \hline  106^{\circ} 39^{\circ} 7  \end{array}  $
--

What is the Difference between 49 tons 39 ft. and 27 tons 38 ft 1272 in?

$  \begin{array}{r}  \text{tons} \quad \text{ft} \quad \text{in} \\  49^{\circ} 39^{\circ} 0 \\  27^{\circ} 38^{\circ} 1272 \\  \hline  22^{\circ} 0^{\circ} 456  \end{array}  $
--

A Stone cutter had on hand 1427 feet of stone he sold 192 1424 ins. I demand quantity unsold.

$  \begin{array}{r}  \text{ft} \quad \text{in} \\  1427^{\circ} 0 \\  192^{\circ} 1424 \\  \hline  1234^{\circ} 301  \end{array}  $
---

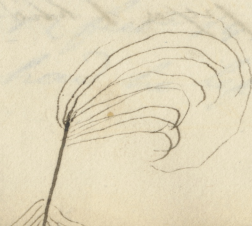
## Wood Measure.

$  \begin{array}{r}  \text{Cords} \quad \text{sq ft} \\  1346^{\circ} 127 \\  1297^{\circ} 121 \\  \hline  49^{\circ} \quad 6  \end{array}  $	$  \begin{array}{r}  \text{Cords} \quad \text{sq ft} \\  1327^{\circ} 120 \\  1317^{\circ} 101 \\  \hline  8^{\circ} \quad 19  \end{array}  $	$  \begin{array}{r}  \text{Cords} \quad \text{sq ft} \\  2456^{\circ} 11 \\  1341^{\circ} 125 \\  \hline  1114^{\circ} 14  \end{array}  $
---	---	---

## Practical questions in Wood Measure

A wood seller bought 127 cords of wood 120 ft and sold 100 cords 101 solid feet how much had he left.

$  \begin{array}{r}  \text{Cords} \quad \text{sq ft} \\  127^{\circ} 120 \\  100^{\circ} 101 \\  \hline  27^{\circ} \quad 19  \end{array}  $
--





A master freighted his vessel 65 cords 118 solid ft of wood  
 in a storm he was lighted by throwing wood overboard  
 when she arrived in port there was but 21 cords 106 solid ft  
 on board. I Demand the quantity lost.

$$\begin{array}{r} \text{Cords} \quad \text{Solid ft} \\ 65 \cdot 118 \\ 21 \cdot 106 \\ \hline 44 \cdot 12 \end{array}$$

What is the difference between 27 cords 104 solid ft and 19 cords

$$\begin{array}{r} 125 \text{ ft.} \quad \text{Cords} \quad \text{ft} \\ 27 \cdot 104 \\ 19 \cdot 125 \\ \hline 7 \cdot 107 \end{array}$$

# Dry Measure

chals	bu	pkts	pts	chals	bu	pkts	pts
224	30	2	1	345	6	27	3
19	35	3	0	176	7	30	2
204	30	3	1	1488	33	0	6

## Practical Questions in Dry measure

What is the difference between 7753 chaldrons 13 bushels  
 and 3789 chald 35 bushels

$$\begin{array}{r} \text{chal} \quad \text{bus} \\ 7753 \quad 13 \\ 3789 \quad 35 \\ \hline 163 \quad 14 \end{array}$$

A merchant in Boston had a vessel coming from Virginia  
 freighted with 2478 bus 3 pkts of corn in a storm she was lighted  
 by throwing corn overboard on her arrival in port she had but 2027  
 bushel 1 pkts on board I Demand the quantity lost.

$$\begin{array}{r} \text{bush} \quad \text{pkts} \\ 2478 \cdot 3 \\ 2027 \cdot 1 \\ \hline 451 \cdot 2 \text{ chals} \end{array}$$

## Cloth Measure

Yds	qr	na	Yds	qr	na
12	4	3	121	4	3
7	5	3	109	2	3
2	5	0	12	0	3



# Practical Questions in Cloth measure

A dealer in cloth had 3 pieces containing in all 80 yards 3 qrs  
he sold 51 yds. 3 qrs 3 na. I demand what he had left.

$$\begin{array}{r} \text{yds} \text{ qrs} \text{ na} \\ 80 \text{ } 3 \text{ } 0 \\ \underline{51 \text{ } 3 \text{ } 3} \\ 28 \text{ } 3 \text{ } 1 \end{array}$$

A merchant bought 6 pieces of cloth each piece containing  
27 yds 3 qrs 3 na. two pieces sold how many yds had he  
left

$$\begin{array}{r} \text{yds} \text{ qrs} \text{ na} \\ 26 \text{ } 3 \text{ } 3 \\ 26 \text{ } 3 \text{ } 3 \\ \underline{26 \text{ } 3 \text{ } 3} \\ 26 \text{ } 3 \text{ } 3 \\ 26 \text{ } 3 \text{ } 3 \\ \underline{26 \text{ } 3 \text{ } 3} \\ 161 \text{ } 9 \text{ } 2 \\ \underline{26 \text{ } 3 \text{ } 3} \\ 26 \text{ } 3 \text{ } 3 \\ \underline{53 \text{ } 3 \text{ } 2} \\ 107 \text{ } 1 \text{ } 0 \end{array}$$

*OF TIME*

$$\begin{array}{r} \text{Le year mo wd ho mo se yds d h} \\ 21 \text{ } 12 \text{ } 3 \text{ } 6 \text{ } 1 \text{ } 2 \text{ } 21 \text{ } 22 \text{ } 125 \text{ } 32 \text{ } 1 \text{ } 1 \text{ } 2 \\ 19 \text{ } 18 \text{ } 2 \text{ } 5 \text{ } 1 \text{ } 5 \text{ } 30 \text{ } 40 \text{ } 103 \text{ } 33 \text{ } 2 \text{ } 1 \\ \underline{2 \text{ } 21 \text{ } 0 \text{ } 20 \text{ } 50 \text{ } 42 \text{ } 15 \text{ } 356 \text{ } 15} \end{array}$$

# Practical Questions in Time

A man hired a servant for 6 years 4 months 3 we  
6 days and he stayed 7 years 6 months 3 weeks  
how much longer did he stay than he agreed to.

$$\begin{array}{r} \text{years mo wd} \\ 7 \text{ } 6 \text{ } 3 \text{ } 0 \\ 6 \text{ } 4 \text{ } 3 \text{ } 0 \\ \underline{1 \text{ } 1 \text{ } 3 \text{ } 1} \end{array}$$

What is the Difference between 21 years. 6 mo 3 weeks 4 Days  
12 hours and 19 years. 9 mo 2 we. 6 da 21 hours

$$\begin{array}{r} \text{years mo wd} \text{ } \text{hours} \\ 21 \text{ } 6 \text{ } 3 \text{ } 4 \text{ } 12 \\ 19 \text{ } 9 \text{ } 2 \text{ } 6 \text{ } 21 \\ \underline{1 \text{ } 0 \text{ } 0 \text{ } 4 \text{ } 15} \end{array}$$

## CASE II

A wool seller  
100 condr 107 difference of time between the 16<sup>th</sup> Day of  
and the 17<sup>th</sup> Day of may 1806?

$$\begin{array}{r} \text{year mo da} \\ 1806 \text{ } 5 \text{ } 17 \\ 1805 \text{ } 2 \text{ } 16 \\ \underline{6 \text{ } 3 \text{ } 3} \end{array}$$



How long between the 15<sup>th</sup> Day June 1829 and  
the 30<sup>th</sup> Day August 1806 inclusive

years	mo	days
1806	8	0
1729	5	15
<hr/>		
77	2	15

I was born 1<sup>th</sup> Day of May 1777 what is my age  
it being the 20<sup>th</sup> Day of June 1810? years mo days

1810	1	20
1777	0	7
<hr/>		
33	1	13

A gave B his note on interest Dated the 21<sup>st</sup> of August  
1809 on the 21 Day of November 1809 the note was paid  
I demand the time that the note was at interest.

year	mo	Day
1809	3	8
1804	0	0
<hr/>		
5	3	8

## Addition of Decimals.

27.123	341.346	74.789	7.123
1.0341	11.2	7.61741	1.2
.1345	2.023	.214	10.32
<hr/> 28.7716	<hr/> 434.569	<hr/> 82.62041	<hr/> 18.643

### Practical Questions

Add 504.22, 64.1, 23.09, and 55.6 together.

504.22
64.1
23.09
55.6
<hr/> 647.08

Subt \$1327.64 cents \$2341.96 cents

3 mills and 1572.21 cents together.

46.969	1327.64
6.01	2341.969
.946	1572.21
<hr/> 53.925	<hr/> 5241.819



# Subtraction of Decimals

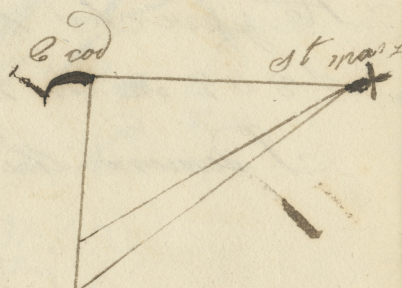
$234.101000$	$21.21000$	$141.1$	$7.00041$
$145.164321$	$81.11234$	$283$	$5.17864$
<hr/>	<hr/>	<hr/>	<hr/>
$88.936679$	$10.79766$	$42.8$	$1.80177$

## Multiplication of Decimals.

{ Examples }

$$\begin{array}{r}
 11.23 \\
 117.8 \\
 \hline
 8784 \\
 7861 \\
 1123 \\
 1123 \\
 \hline
 1322.874 \text{ prod}
 \end{array}$$

$$\begin{array}{r}
 .1213 \\
 .1321 \\
 \hline
 1213 \\
 9496 \\
 3637 \\
 1213 \\
 \hline
 .01009373 \text{ product}
 \end{array}$$



$$\begin{array}{r}
 1.23 \\
 17.8 \\
 \hline
 984 \\
 861 \\
 123 \\
 \hline
 11.894
 \end{array}$$

$$\begin{array}{r}
 10.4 \\
 123 \\
 \hline
 312 \\
 208 \\
 104 \\
 \hline
 1278.2
 \end{array}$$

$$\begin{array}{r}
 12.3 \\
 1.45 \\
 \hline
 615 \\
 492 \\
 123 \\
 \hline
 178.35
 \end{array}$$

$$\begin{array}{r}
 .002 \\
 .661 \\
 \hline
 002 \\
 012 \\
 012 \\
 \hline
 01322
 \end{array}$$

How much is the product of 27.5 multiplied by .76

$$\begin{array}{r}
 27.5 \\
 .76 \\
 \hline
 1770 \\
 2655 \\
 \hline
 28.320
 \end{array}$$

How much will 1000 pounds of butter come to at  $1\frac{1}{2}$  cts per pound?

$$\begin{array}{r}
 1000 \\
 11\frac{1}{2} \\
 \hline
 500 \\
 1000 \\
 1000 \\
 \hline
 11500
 \end{array}$$



How much will 64.5 bushels of corn come to at \$1.12  
 ct per bushel. 64.5  
 1.12  
 1990  
 645  
 645

72.94:0

# Division of Decimals

Examples

I It is required to divide 34.21 by 12.1

.101)1302.000(12891.082 // 12.1)34.21(2.8 Rem  
 101 242

II sum  
 272  
 202  
 200  
 808  
 720  
 707  
 110  
 101  
 908

I sum  
 1001  
 968  
 33 Rem

808  
 720  
 707  
 11 Remainder

III sum 1320)263146(.199466  
 1320  
 13114  
 11880  
 12346  
 11880  
 466

IV sum 33)4567(0013238  
 333  
 1237  
 999  
 238 Remainder

V sum  
 777  
 742  
 111  
 31





# Reducing Decimals



Examples

1 Reduce  $\frac{5}{6}$  to the decimal of the same value.  $\frac{95.000}{833\frac{1}{3}}$

2 Reduce  $\frac{1}{4}$  to a decimal of the same value  $2\frac{1}{2} \frac{1.0}{5} \text{ Ans}$

3 Reduce  $\frac{1}{4}$  to the decimal of the same value  $4\frac{1.00}{25}$

4 Reduce  $\frac{3}{4}$  to the decimal of the same value.  $9\frac{3.00}{75}$

## Case II

Reduce 16 gr. 12 part to the decimal of a pound Troy weight

24	16.0000
20	12.6666 $\frac{1}{10}$
12	0.6333 $\frac{1}{6}$
	1527 Ans

Reduce 6 gr. 12 parts to the decimal of a pound Troy weight

24	15.000
20	12.625 $\frac{1}{10}$
12	6.63 $\frac{1}{2}$
	552.6 Ans

Reduce 2 cart. 3 gr 12 lb 12 oz 1 dr to the decimal of a ton Avordupoise weight.

16	11.0000
16	12.6875
28	12.7727 $\frac{1}{7}$
4	3.4568 $\frac{1}{8}$
20	2.8642
	1432 $\frac{1}{2}$ Ans

Reduce 3 gr. 3 na. to the decimal of a yard Cloth measure

4	3.0000
4	3.7500
	2375 $\frac{1}{2}$

Reduce 2 mil. 6 fur. 2 rods. 12 ft 6 in. 2 bar to the decimal of a mile

3	2.000
12	6.666
16	12.555
40	24.760
8	6.519
3	2.814 $\frac{1}{2}$
	23.82 Ans



Reduce 3 rods 30 rods 29 yds to the Decimal of an acre Land measure.

304 2.2000

40 3.0959

4 3.7739

Ans 2434+

Reduce 5 gal 3 qts 1 pt to the Decimal of a hhd allowing 63 gallons to a hhd

2 1.0

4 3.500

63 56.875

Ans 9027

Reduce 39 ft 1727 inches to the Decimal of a ton of round Timber.

1728 1727.00

40 39.9900

Ans 9999

Reduce 1 pk 2 qts 1 pt to the Decimal of a chaldron.

2 1.0

8 2.5000

4 1.3125

36 32.8125

Ans 0001

Reduce 12 months, 3 weeks 6 Days, 23 hours 59 minutes 12 seconds to the Decimal of a year.

60 12.0

60 59.1000

24 23.7866740

7 6.9994710

4 3.999971

13 12.999973

Ans 9999712

Reduce 1 ft to the Decimal of a hhd Wine measure.

2 1.0

4 0.500

63 0.125

Ans 0019753

Reduce 1 week to the Decimal of a year allowing 13 months to a year.

4 1.00

13 0.25000

Ans 01723

Reduce 1 minute to the Decimal of a year 360 Days to a year.

60 1.00

24 00100

7 00004

52 000005

360 00000007

Ans 0000017



# Case III Examples

Required the value of 10627 of a pound Troy weight.

$$\begin{array}{r}
 12 \\
 10627 \\
 \hline
 126480 \\
 20 \\
 \hline
 25920 \\
 12960 \\
 \hline
 38880 \\
 20 \\
 \hline
 77760 \\
 20 \\
 \hline
 155520 \\
 20 \\
 \hline
 311040 \\
 20 \\
 \hline
 622080 \\
 20 \\
 \hline
 1244160 \\
 20 \\
 \hline
 2488320 \\
 20 \\
 \hline
 4976640 \\
 20 \\
 \hline
 9953280 \\
 20 \\
 \hline
 19906560 \\
 20 \\
 \hline
 39813120 \\
 20 \\
 \hline
 79626240 \\
 20 \\
 \hline
 159252480 \\
 20 \\
 \hline
 318504960 \\
 20 \\
 \hline
 637009920 \\
 20 \\
 \hline
 1274019840 \\
 20 \\
 \hline
 2548039680 \\
 20 \\
 \hline
 5096079360 \\
 20 \\
 \hline
 10192158720 \\
 20 \\
 \hline
 20384317440 \\
 20 \\
 \hline
 40768634880 \\
 20 \\
 \hline
 81537269760 \\
 20 \\
 \hline
 163074539520 \\
 20 \\
 \hline
 326149079040 \\
 20 \\
 \hline
 652298158080 \\
 20 \\
 \hline
 1304596316160 \\
 20 \\
 \hline
 2609192632320 \\
 20 \\
 \hline
 5218385264640 \\
 20 \\
 \hline
 10436770529280 \\
 20 \\
 \hline
 20873541058560 \\
 20 \\
 \hline
 41747082117120 \\
 20 \\
 \hline
 83494164234240 \\
 20 \\
 \hline
 166988328468480 \\
 20 \\
 \hline
 333976656936960 \\
 20 \\
 \hline
 667953313873920 \\
 20 \\
 \hline
 1335906627747840 \\
 20 \\
 \hline
 2671813255495680 \\
 20 \\
 \hline
 5343626510991360 \\
 20 \\
 \hline
 10687253021982720 \\
 20 \\
 \hline
 21374506043965440 \\
 20 \\
 \hline
 42749012087930880 \\
 20 \\
 \hline
 85498024175861760 \\
 20 \\
 \hline
 170996048351723520 \\
 20 \\
 \hline
 341992096703447040 \\
 20 \\
 \hline
 683984193406894080 \\
 20 \\
 \hline
 1367968386813788160 \\
 20 \\
 \hline
 2735936773627576320 \\
 20 \\
 \hline
 5471873547255152640 \\
 20 \\
 \hline
 10943747094510305280 \\
 20 \\
 \hline
 21887494189020610560 \\
 20 \\
 \hline
 43774988378041221120 \\
 20 \\
 \hline
 87549976756082442240 \\
 20 \\
 \hline
 175099953512164884480 \\
 20 \\
 \hline
 350199907024329768960 \\
 20 \\
 \hline
 700399814048659537920 \\
 20 \\
 \hline
 1400799628097319075840 \\
 20 \\
 \hline
 2801599256194638151680 \\
 20 \\
 \hline
 5603198512389276303360 \\
 20 \\
 \hline
 11206397024778552606720 \\
 20 \\
 \hline
 22412794049557105213440 \\
 20 \\
 \hline
 44825588099114210426880 \\
 20 \\
 \hline
 89651176198228420853760 \\
 20 \\
 \hline
 179302352396456841707520 \\
 20 \\
 \hline
 358604704792913683415040 \\
 20 \\
 \hline
 717209409585827366830080 \\
 20 \\
 \hline
 1434418819171654733660160 \\
 20 \\
 \hline
 2868837638343309467320320 \\
 20 \\
 \hline
 5737675276686618934640640 \\
 20 \\
 \hline
 11475350553373237869281280 \\
 20 \\
 \hline
 22950701106746475738562560 \\
 20 \\
 \hline
 45901402213492951477125120 \\
 20 \\
 \hline
 91802804426985902954250240 \\
 20 \\
 \hline
 183605608853971805908500480 \\
 20 \\
 \hline
 367211217707943611817000960 \\
 20 \\
 \hline
 734422435415887223634001920 \\
 20 \\
 \hline
 1468844870831774447268003840 \\
 20 \\
 \hline
 2937689741663548894536007680 \\
 20 \\
 \hline
 5875379483327097789072015360 \\
 20 \\
 \hline
 11750758966654195578144030720 \\
 20 \\
 \hline
 23501517933308391156288061440 \\
 20 \\
 \hline
 47003035866616782312576122880 \\
 20 \\
 \hline
 94006071733233564625152245760 \\
 20 \\
 \hline
 188012143466467129250304491520 \\
 20 \\
 \hline
 376024286932934258500608983040 \\
 20 \\
 \hline
 752048573865868517001217966080 \\
 20 \\
 \hline
 1504097147731737034002435932160 \\
 20 \\
 \hline
 3008194295463474068004871864320 \\
 20 \\
 \hline
 6016388590926948136009743728640 \\
 20 \\
 \hline
 12032777181853896272019487457280 \\
 20 \\
 \hline
 24065554363707792544038974914560 \\
 20 \\
 \hline
 48131108727415585088077949829120 \\
 20 \\
 \hline
 96262217454831170176155899658240 \\
 20 \\
 \hline
 192524434909662340352311799316480 \\
 20 \\
 \hline
 385048869819324680704623598632960 \\
 20 \\
 \hline
 770097739638649361409247197265920 \\
 20 \\
 \hline
 1540195479277298722818494394531840 \\
 20 \\
 \hline
 3080390958554597445636988789063680 \\
 20 \\
 \hline
 6160781917109194891273977578127360 \\
 20 \\
 \hline
 12321563834218389782547955156254720 \\
 20 \\
 \hline
 24643127668436779565095910312509440 \\
 20 \\
 \hline
 49286255336873559130191820625018880 \\
 20 \\
 \hline
 98572510673747118260383641250037760 \\
 20 \\
 \hline
 197145021347494236520767282500075520 \\
 20 \\
 \hline
 394290042694988473041534565000151040 \\
 20 \\
 \hline
 788580085389976946083069130000302080 \\
 20 \\
 \hline
 1577160170779953892166138260000604160 \\
 20 \\
 \hline
 3154320341559907784332276520001208320 \\
 20 \\
 \hline
 6308640683119815568664553040002416640 \\
 20 \\
 \hline
 12617281366239631137329106080004833280 \\
 20 \\
 \hline
 25234562732479262274658212160009666560 \\
 20 \\
 \hline
 50469125464958524549316424320019333120 \\
 20 \\
 \hline
 100938250929917049098632848640038666240 \\
 20 \\
 \hline
 201876501859834098197265697280077332480 \\
 20 \\
 \hline
 403753003719668196394531394560154664960 \\
 20 \\
 \hline
 807506007439336392789062789120309329920 \\
 20 \\
 \hline
 1615012014878672785578125578240618659840 \\
 20 \\
 \hline
 3230024029757345571156251156481237319680 \\
 20 \\
 \hline
 6460048059514691142312502312962474639360 \\
 20 \\
 \hline
 12920096119029382284625004625924949278720 \\
 20 \\
 \hline
 25840192238058764569250009251849898557440 \\
 20 \\
 \hline
 51680384476117529138500018503699797114880 \\
 20 \\
 \hline
 103360768952235058277000037007399594229760 \\
 20 \\
 \hline
 206721537904470116554000074014799188459520 \\
 20 \\
 \hline
 413443075808940233108000148029598376919040 \\
 20 \\
 \hline
 826886151617880466216000296059196753838080 \\
 20 \\
 \hline
 1653772303235760932432000592118393507676160 \\
 20 \\
 \hline
 3307544606471521864864001184236787015352320 \\
 20 \\
 \hline
 6615089212943043729728002368473574030704640 \\
 20 \\
 \hline
 13230178425886087459456004736947148061409280 \\
 20 \\
 \hline
 26460356851772174918912009473894296122818560 \\
 20 \\
 \hline
 52920713703544349837824018947788592245637120 \\
 20 \\
 \hline
 105841427407088699675648037895577184491274240 \\
 20 \\
 \hline
 211682854814177399351296075791154368982548480 \\
 20 \\
 \hline
 423365709628354798702592151582308737965096960 \\
 20 \\
 \hline
 846731419256709597405184303164617475930193920 \\
 20 \\
 \hline
 1693462838513419194810368606329234951860387840 \\
 20 \\
 \hline
 3386925677026838389620737212658469903720775680 \\
 20 \\
 \hline
 6773851354053676779241474425316939807441551360 \\
 20 \\
 \hline
 13547702708107353558482948850633879614883102720 \\
 20 \\
 \hline
 27095405416214707116965897701267759229766205440 \\
 20 \\
 \hline
 54190810832429414233931795402535518459532410880 \\
 20 \\
 \hline
 108381621664858828467863590805071036919064821760 \\
 20 \\
 \hline
 216763243329717656935727181610142073838129643520 \\
 20 \\
 \hline
 433526486659435313871454363220284147676259287040 \\
 20 \\
 \hline
 867052973318870627742908726440568295352518574080 \\
 20 \\
 \hline
 1734105946637741255485817452881136590705037148160 \\
 20 \\
 \hline
 3468211893275482510971634905762273181410074296320 \\
 20 \\
 \hline
 6936423786550965021943269811524546362820148592640 \\
 20 \\
 \hline
 13872847573101930043886539623049092725640297185280 \\
 20 \\
 \hline
 27745695146203860087773079246098185451280594370560 \\
 20 \\
 \hline
 55491390292407720175546158492196370902561188741120 \\
 20 \\
 \hline
 110982780584815440351092316984392741805122377482240 \\
 20 \\
 \hline
 221965561169630880702184633968785483610244754964480 \\
 20 \\
 \hline
 443931122339261761404369267937570967220489509928960 \\
 20 \\
 \hline
 887862244678523522808738535875141934440979019857920 \\
 20 \\
 \hline
 1775724489357047045617477071750283868881958039715840 \\
 20 \\
 \hline
 3551448978714094091234954143500567737763916079431680 \\
 20 \\
 \hline
 7102897957428188182469908287001135475527832158863360 \\
 20 \\
 \hline
 14205795914856376364939816574002270951055664317726720 \\
 20 \\
 \hline
 28411591829712752729879633148004541902111328635453440 \\
 20 \\
 \hline
 56823183659425505459759266296009083804222657270906880 \\
 20 \\
 \hline
 113646367318851010919518532592018167608445314541813760 \\
 20 \\
 \hline
 227292734637702021839037065184036335216890629083627520 \\
 20 \\
 \hline
 454585469275404043678074130368072670433781258167255040 \\
 20 \\
 \hline
 909170938550808087356148260736145340867562516334510080 \\
 20 \\
 \hline
 1818341877101616174712296521472290681735125032669020160 \\
 20 \\
 \hline
 3636683754203232349424593042944581363470250065338040320 \\
 20 \\
 \hline
 7273367508406464698849186085889162726940500130676080640 \\
 20 \\
 \hline
 14546735016812929397698372171778325453881000261352161280 \\
 20 \\
 \hline
 29093470033625858795396744343556650907762000522704322560 \\
 20 \\
 \hline
 58186940067251717590793488687113301815524001045408645120 \\
 20 \\
 \hline
 116373880134503435181586977374226603631048002090817290240 \\
 20 \\
 \hline
 232747760269006870363173954748453207262096004181634580480 \\
 20 \\
 \hline
 465495520538013740726347909496906414524192008363269160960 \\
 20 \\
 \hline
 930991041076027481452695818993812829048384016726538321920 \\
 20 \\
 \hline
 1861982082152054962905391637987625658096768033453076643840 \\
 20 \\
 \hline
 3723964164304109925810783275975251316193536066906153287680 \\
 20 \\
 \hline
 7447928328608219851621566551950502632387072133812306575360 \\
 20 \\
 \hline
 14895856657216439703243133103901005264774144267624613150720 \\
 20 \\
 \hline
 29791713314432879406486266207802010529548288535249226301440 \\
 20 \\
 \hline
 59583426628865758812972532415604021059096577070498452602880 \\
 20 \\
 \hline
 119166853257731517625945064831208042118193154140996905205760 \\
 20 \\
 \hline
 238333706515463035251890129662416084236386308281993810411520 \\
 20 \\
 \hline
 476667413030926070503780259324832168472772616563987620823040 \\
 20 \\
 \hline
 953334826061852141007560518649664336945545233127975241646080 \\
 20 \\
 \hline
 1906669652123704282015121037299328673891090466255950483292160 \\
 20 \\
 \hline
 3813339304247408564030242074598657347782180932511900966584320 \\
 20 \\
 \hline
 7626678608494817128060484149197314695564361865023801933168640 \\
 20 \\
 \hline
 15253357216989634256120968298394629391128723730047603866337280 \\
 20 \\
 \hline
 30506714433979268512241936596789258782257447460095207732674560 \\
 20 \\
 \hline
 61013428867958537024483873193578517564514894920190415465349120 \\
 20 \\
 \hline
 122026857735917074048967746387157035129029789840380830930698240 \\
 20 \\
 \hline
 244053715471834148097935492774314070258059579680761661861396480 \\
 20 \\
 \hline
 488107430943668296195870985548628140516119159361523323722792960 \\
 20 \\
 \hline
 976214861887336592391741971097256281032238318723046647445585920 \\
 20 \\
 \hline
 1952429723774673184783483942194512562064476675446093294891171840 \\
 20 \\
 \hline
 3904859447549346369566967884389025124128953350892186589782343680 \\
 20 \\
 \hline
 7809718895098692739133935768778050248257906701784373179564687360 \\
 20 \\
 \hline
 15619437790197385478267871537556100496515813403568746359129374720 \\
 20 \\
 \hline
 31238875580394770956535743075112200993031626807137492718258749440 \\
 20 \\
 \hline
 62477751160789541913071486150224401986063253614274985436517498880 \\
 20 \\
 \hline
 124955502321579083826142972300448803972126507228549970873034997760 \\
 20 \\
 \hline
 249911004643158167652285944600897607944253014457099941746069995520 \\
 20 \\
 \hline
 499822009286316335304571889201795215888506028914199883492139991040 \\
 20 \\
 \hline
 999644018572632670609143778403590431777012057828399766984279982080 \\
 20 \\
 \hline
 1999288037145265341218287556807180863554024115656799533968559964160 \\
 20 \\
 \hline
 3998576074290530682436575113614361727108048231313599067937119928320 \\
 20 \\
 \hline
 7997152148581061364873150227228723454216096462627198135874239856640 \\
 20 \\
 \hline
 15994304297162122729746300454457446908432192925254396271748479713280 \\
 20 \\
 \hline
 31988608594324245459492600908914893816864385850508792543496959426560 \\
 20 \\
 \hline
 63977217188648490918985201817829787633728771701017585086993918853120 \\
 20 \\
 \hline
 127954434377296981837970403635659575267457543402035170173987837706240 \\
 20 \\
 \hline
 255908868754593963675940807271319150534915086804070340347975675412480 \\
 20 \\
 \hline
 511817737509187927351881614542638301069830173608140680695951350824960 \\
 20 \\
 \hline
 1023635475018375854703763229085276602139660347216281361391902701649920 \\
 20 \\
 \hline
 2047270950036751709407526458170553204279320694432562722783805403299840 \\
 20 \\
 \hline
 4094541900073503418815052916341106408558641388865125445567610806599680 \\
 20 \\
 \hline
 8189083800147006837630105832682212817117282777730250891135221613199360 \\
 20 \\
 \hline
 16378167600294013675260211665364425634234565555460501782270443226398720 \\
 20 \\
 \hline
 32756335200588027350520423330728851268469131110921003564540886452797440 \\
 20 \\
 \hline
 65512670401176054701040846661457702536938262221842007129081772905594880 \\
 20 \\
 \hline
 131025340802352109402081693322915405073876524443684014258163545811189760 \\
 20 \\
 \hline
 262050681604704218804163386645830810147753048887368028516327091622379520 \\
 20 \\
 \hline
 524101363209408437608326773291661620295506097774736057032654183244759040 \\
 20 \\
 \hline
 1048202726418816875216653546583323240591012195549472114065308366489518080 \\
 20 \\
 \hline
 2096405452837633750433307093166646481182024391098944228130616732979036160 \\
 20 \\
 \hline
 4192810905675267500866614186333292962364048782197888456261233465958072320 \\
 20 \\
 \hline
 8385621811350535001733228372666585924728097564395776912522466931916144640 \\
 20 \\
 \hline
 16771243622701070003466456745333171849456195128791553825044933863832289280 \\
 20 \\
 \hline
 33542487245402140006932913490666343698912390257583107650089867727664578560 \\
 20 \\
 \hline
 67084974490804280013865826981332687397824780515166215300179735455329157120 \\
 20 \\
 \hline
 134169948981608560027731653962665374795649561030332430600359470910658314240 \\
 20 \\
 \hline
 268339897963217120055463307925330749591299122060664861200718941821316628480 \\
 20 \\
 \hline
 5366797959264342401109266158506614991825982441213297224014378836426332569$$