

Samuel Rush

1792

111

MADE IN U.S.A.

1 2 3 4 5 6 7 8 9 10 11 12 13 14

Samuel P. Smith

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Decending

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Chinery Hall and the Lake, Belmont Ave.)

Handwritten scribbles and numbers on a pink background. The scribbles are in black ink and appear to be a mix of loops and lines. The numbers '11' and '15' are visible, along with some other less distinct markings.

F. VESTER, JERUSALEM.
 PRINCIPAL MANUFACTURER OF WELL-SEASONED
 OLIVE WOOD, BALSAM, ABRAHAM'S OAK,
 SPECIMENS IN THE
 TURKISH DEPARTMENT,
 OF THE CENTENNIAL EXHIBITION;
 STOCK ON SALE, by special concession of the Centennial Commission, in the
 WORLD'S TICKET OFFICE
 OF
 COOK, SON & JENKINS,
 No. 84 Centennial Grounds.
 (Between the Angle of Machinery Hall and the Lake, Belmont Ave.)

John Bonnectle
 commenced Tending
 the 16 April

Samuel Rush
 Sand Lake
 August 23d
 1835

Under Long
 Under Long

Mr Samuel Rush June 18 1833
 Like Enoch may I walk with God,
 And shew the paths of sin and death,
 So shall I reach that best abode,
 Where all is joy, and peace, and rest.

Before Christ 1913 years.
 The King of Salem having heard;
 To meet the victor train appeared,
 Gives bread and wine, proceeds to bless,
 And praises God for there success.

Mr Samuel Rush June 20 1833
 Pain, pain, go away,
 Come again, April day;
 Little Johnny wants to play
 In the meadow on the hay.

12.3

Samuel Rush
Sand Lake
August 30
1835

12.3

Mr John B Schmoritz
 John Galt Lake Kesselauer County
 State of New York Kesselauer County
 Compromissarius Devandatione Greco
 Sand Lake Abram Galt Lake

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

Phib

Alligation Alternate.

Rule Rule

Take the prices of the simples the least uppermost set in
 under each other connect with continued line the price of each
 of ingredient which is less than that of the compound which
 number of those that are greater than the compound and
 rate or price with one or any number of those that
 less

A druggist had several sorts of tea viz one sort at 12 pence
 a third at 9s and the fourth at 8 pence I demand
 sort he must mix together that the whole quantity
 at 10 pence

$$\begin{array}{l}
 \text{M B } 10 \left\{ \begin{array}{l} 12 \\ 9 \\ 8 \end{array} \right. \begin{array}{l} 2 \text{ of } 8 \\ 1 \text{ of } 9 \\ 2 \text{ of } 12 \end{array} \\
 \text{M B } 10 \left\{ \begin{array}{l} 12 \\ 9 \\ 8 \end{array} \right. \begin{array}{l} 1 \text{ of } 12 \\ 2 \text{ of } 9 \\ 2 \text{ of } 8 \end{array} \\
 \text{M B } 10 \left\{ \begin{array}{l} 12 \\ 9 \\ 8 \end{array} \right. \begin{array}{l} 1 \text{ of } 12 \\ 2 \text{ of } 9 \\ 2 \text{ of } 8 \end{array} \\
 \text{M B } 10 \left\{ \begin{array}{l} 12 \\ 9 \\ 8 \end{array} \right. \begin{array}{l} 1 \text{ of } 12 \\ 2 \text{ of } 9 \\ 2 \text{ of } 8 \end{array}
 \end{array}$$

This is the property of
 Samuel P. Christ

Reduction.

Reduction teaches to bring or exchange numbers of one denomination to others of different denominations retaining the same value

S. M.
 It is of two kinds

When high denominations are to be brought into lower as pounds into shillings pence and farthings it is then called Reduction Descending and is performed by Multiplication

When lower denominations are to be brought into higher as farthings into pence or into pence shillings and pounds it is then called Reduction Ascending and is performed by Division.

Reduction Descending

Rule

Multiply the highest denomination by that number which it takes of the next less to make one of that greater so continue to do till you have brought it as low as your question requires.

2 St £7 14s 6d. 1qr how many farthings

$$\begin{array}{r}
 \text{£} \quad \text{s} \quad \text{d} \quad \text{qr} \\
 7 \quad 14 \quad 6 \quad 1 \\
 \times 4 \\
 \hline
 28 \\
 56 \\
 24 \\
 4 \\
 \hline
 112 \quad 4 \quad 1 \quad 7 \text{ qrs}
 \end{array}$$

3 St £7 6s 4d how many pence

$$\begin{array}{r}
 \text{£} \quad \text{s} \quad \text{d} \\
 7 \quad 6 \quad 4 \\
 \times 12 \\
 \hline
 84 \\
 72 \\
 84 \\
 \hline
 175 \quad 6 \quad 0
 \end{array}$$

Continued.

In 29 guineas at 28s each how many farthings — Ans 38976grs.

$$\begin{array}{r} 28 \\ 28 \\ 28 \\ \hline 28 \\ 56 \\ \hline 812 \\ 9744 \\ \hline 4 \\ \hline \text{Ans } 38976 \text{ grs} \end{array}$$

In 12 crowns at 6s 7d how many pence and farthing

$$\begin{array}{r} 67 \\ 12 \\ \hline 79 \\ 12 \\ \hline \text{Ans } 9480 \\ 4 \\ \hline \text{Ans } 3792 \text{ grs} \end{array}$$

In £73-15s how many six pence — Ans 6950

$$\begin{array}{r} 173-15 \\ 20 \\ \hline 3475 \\ 2 \\ \hline \text{Ans } 6950 \end{array}$$

In £71 eagles at 10 doll. each how many shillings three pence pence and farthings Ans 40260s 161040 three pence 483120 pence and 1932480 grs

$$\begin{array}{r} 10 \\ 6710 \\ 10 \\ \hline 6710 \\ 13420 \\ 3 \\ \hline 40260 \\ 161040 \\ 3 \\ \hline 483120 \\ 4 \\ \hline 1932480 \end{array}$$

Reduction Ascending Rule.

Divide the lowest denomination given by that number which it takes of the same to make one of the next higher and so continue to do till you have brought it into the denomination which your question requires

Reduction Ascending.

Examples.

In 1768 pence how many pounds

$$\begin{array}{r} 12 \\ 1768 \\ \hline 20147-1 \\ \hline \text{Ans } 7-1 \end{array}$$

In £7 7s 10d In 38976 farthings how many guineas Ans 29

$$\begin{array}{r} 4 \\ 38976 \\ \hline 1319744 \\ 28787220 \\ 56 \\ \hline 252 \\ 252 \\ \hline 7 \end{array}$$

In 6950 six pence how many pound Ans £175-15s

$$\begin{array}{r} 100 \text{ pence} \\ 6950 \\ \hline 2013475 \\ \hline \text{Ans } 175-15 \end{array}$$

In 3792 farthings how many crowns Ans 12

$$\begin{array}{r} 4 \\ 3792 \\ \hline 15168 \\ 12 \\ \hline 79 \end{array}$$

In 48960 farthing how many pence three pence six pence and doll

$$\begin{array}{r} 4 \\ 48960 \\ \hline 312240 \\ 207080 \\ 122040 \\ \hline \text{Ans } 170 \end{array}$$

In 12240 pence 4080 three pence many pistoles at 22s Ans 79

$$\begin{array}{r} 4 \\ 6952 \\ \hline 221138129 \\ 154 \\ \hline 198 \\ 198 \\ \hline 2 \end{array}$$

Continued.

Money

In 57 moidores at 30s each how many dollars Ans 3342

$$\begin{array}{r} 57 \\ 30 \overline{) 1710} \\ \underline{150} \\ 210 \\ \underline{180} \\ 30 \end{array}$$

In £43 how many guineas Ans 52 guineas 4s

$$\begin{array}{r} 43 \\ 52 \overline{) 2224} \\ \underline{104} \\ 1184 \\ \underline{1040} \\ 144 \\ \underline{104} \\ 40 \end{array}$$

In 172 moidores how many eagles dollars and nine pence of each the like number

$$\begin{array}{r} 172 \\ 36 \overline{) 6192} \\ \underline{1032} \\ 5160 \\ \underline{5160} \\ 0 \end{array}$$

In this question the first step will be to bring the moidores into shillings into dollars

In 75 pistoles how many pounds

$$\begin{array}{r} 75 \\ 22 \overline{) 1650} \\ \underline{154} \\ 1100 \\ \underline{1100} \\ 0 \end{array}$$

In £63 and 8 guineas how many Dollars Ans 3233 2s

$$\begin{array}{r} 63 \\ 20 \overline{) 1260} \\ \underline{1200} \\ 60 \\ \underline{60} \\ 0 \end{array}$$

In 237 quintes how many moidores pistoles pounds and dollars each the like number

$$\begin{array}{r} 237 \\ 28 \overline{) 6636} \\ \underline{56} \\ 1036 \\ \underline{840} \\ 196 \\ \underline{196} \\ 0 \end{array}$$

Troy Weight

In 10lb of silver how many spoons each weighing 8oz 10 parts

$$\begin{array}{r} 10 \\ 8 \overline{) 80} \\ \underline{80} \\ 0 \end{array}$$

In 45681 grains of silver how many pounds

$$\begin{array}{r} 45681 \\ 7000 \overline{) 319767} \\ \underline{28000} \\ 39767 \\ \underline{35000} \\ 4767 \\ \underline{4700} \\ 67 \end{array}$$

In 252240 grains of silver how many pounds Ans 49

$$\begin{array}{r} 252240 \\ 5120 \overline{) 1258880} \\ \underline{102400} \\ 234880 \\ \underline{234880} \\ 0 \end{array}$$

In 45681 grains of silver how many teaspoons each one ounce

$$\begin{array}{r} 45681 \\ 96 \overline{) 47808} \\ \underline{36000} \\ 11808 \\ \underline{11520} \\ 288 \end{array}$$

Avoirdupois Weight.

In 14048^{oz} how many hundred weight Ans 7 C 3 qrs 10 lb

$$\begin{array}{r} 16 \overline{) 14048} \\ 128 \overline{) 128} \\ 12 \overline{) 12} \\ 128 \overline{) 128} \\ 128 \overline{) 128} \\ 128 \overline{) 128} \\ 128 \overline{) 128} \\ 128 \overline{) 128} \\ 128 \overline{) 128} \\ 128 \overline{) 128} \end{array}$$

In 470 boxes of sugar each 26 lb how many but Ans 109 C 0 qrs

$$\begin{array}{r} 470 \\ 26 \overline{) 10920} \\ 940 \overline{) 10920} \\ 1520 \overline{) 10920} \\ 1180 \overline{) 10920} \\ 1680 \overline{) 10920} \\ 120 \overline{) 10920} \end{array}$$

In 17 Cwt 1 qr 1 lb of sugar how many parcels each 17 lb

Ans 114 parcels

$$\begin{array}{r} 17 \overline{) 1938} \\ 17 \overline{) 17} \\ 23 \overline{) 23} \\ 68 \overline{) 68} \\ 68 \overline{) 68} \end{array}$$

Time.

Supposing a man to be 21 years old how many seconds has he lived allowing 365 days 6 hours to a year Ans 662709600 seconds

$$\begin{array}{r} 21 \text{ years} \\ 365 \text{ days} \\ 6 \text{ hours} \\ 365 \overline{) 7710} \\ 730 \overline{) 7710} \\ 410 \overline{) 410} \\ 30660 \overline{) 30660} \\ 15330 \overline{) 15330} \\ 126 \overline{) 126} \\ 185086 \overline{) 185086} \\ 60 \overline{) 60} \\ 11048160 \overline{) 11048160} \\ 60 \overline{) 60} \\ 662709600 \end{array}$$

How many minutes from the commencement of the war between America and England April 12, 1775 to the settlement of a general peace which took place January 20, 1783 Ans 4079160 minutes

$$\begin{array}{r} 365 \text{ days} \\ 24 \text{ hours} \\ 60 \text{ minutes} \\ 2160 \overline{) 8760} \\ 2880 \overline{) 2880} \\ 24 \overline{) 24} \\ 11324 \overline{) 11324} \\ 5662 \overline{) 5662} \\ 67944 \overline{) 67944} \\ 42 \overline{) 42} \\ 87986 \overline{) 87986} \\ 60 \overline{) 60} \\ 4079160 \end{array}$$

In 413280 minutes how many weeks Ans 41 weeks

$$\begin{array}{r} 60 \overline{) 413280} \\ 360 \overline{) 360} \\ 532 \overline{) 532} \\ 480 \overline{) 480} \\ 528 \overline{) 528} \\ 480 \overline{) 480} \\ 480 \overline{) 480} \\ 480 \overline{) 480} \end{array}$$

Long Measure.

How many times does the wheel which is 18 feet 6 inches in circumference turn round in the distance of 150 miles

$$\begin{array}{r}
 150 \\
 120 \overline{) 40} \\
 48000 \\
 240000 \\
 24000 \\
 264000 \\
 3 \\
 792000 \\
 12 \\
 222 \overline{) 9804000} \quad 42810 \\
 888 \\
 624 \\
 444 \\
 1800 \\
 1776 \\
 240 \\
 222 \\
 180
 \end{array}$$

How many barley corn will reach round the globe it being 360 degrees

$$\begin{array}{r}
 360 \\
 63 \overline{) 2160} \\
 2160 \\
 180 \\
 25020 \\
 8 \\
 200160 \\
 40 \\
 8006400 \\
 8 \\
 40032000 \\
 4003200 \\
 44038200 \\
 3 \\
 132105600 \\
 12 \\
 1585267200 \\
 3 \\
 4755801600
 \end{array}$$

Land or Square Measure.

In 2882 rods how many acres

$$\begin{array}{r}
 402882 \\
 4 \overline{) 1611528} \\
 1611528
 \end{array}$$

How many solid inches in a cord
Ans 221184

$$\begin{array}{r}
 1728 \\
 128 \\
 13824 \\
 3456 \\
 1728 \\
 221184
 \end{array}$$

In 36 guineas how many crowns
Ans 183 crown & 90 over

$$\begin{array}{r}
 36 \\
 28 \\
 72 \\
 1008 \\
 12 \\
 79 \overline{) 12096} \quad 1539
 \end{array}$$

In 5829600 solid inches how many cords of wood

$$\begin{array}{r}
 1728 \\
 5829600 \\
 5184 \\
 3456 \\
 3456
 \end{array}$$

In 9376 quarts how many bushels

$$\begin{array}{r}
 32 \overline{) 9376} \quad 293 \\
 64 \\
 2976 \\
 288 \\
 96 \\
 96
 \end{array}$$

How many rings each weighing 8 pwt 7 grs may be made of 5 lb 8 oz 16 pwt 2 grs of gold Ans 158

$$\begin{array}{r}
 9 \text{ oz } 16 \text{ pwt } 2 \text{ grs} \\
 5 \text{ lb } 8 \text{ oz } 16 \text{ pwt } 2 \text{ grs} \\
 12 \\
 4120 \\
 836 \\
 24 \\
 3346 \\
 1272 \\
 127 \overline{) 20066} \quad 158
 \end{array}$$

Continued.

How many steps of 2 feet 6 inches each will it require a man to take travelling from Loominster to Boston it being 43 miles

$$\begin{array}{r}
 43 \text{ miles} \\
 344 \\
 40 \\
 13760 \\
 84 \\
 68800 \\
 68800 \\
 78680 \\
 127040 \\
 11744480 \text{ (95947)} \\
 114 \\
 87 \\
 274 \\
 161 \\
 138 \\
 116 \\
 220 \\
 203 \\
 17
 \end{array}$$

How many square feet in a square mile

$$\begin{array}{r}
 640 \\
 4840 \\
 28600 \\
 5120 \\
 2860 \\
 3017600 \\
 27978400
 \end{array}$$

Let 70 dollars be distributed among three men in such manner that as often as the first has 58 the second shall have 75 and the third 95 what will each one receive

$$\begin{array}{r}
 70 \\
 21)350(16.4 \\
 140 \\
 210 \\
 140 \\
 70 \\
 21)8674 \\
 42 \\
 44 \\
 21)23030 \\
 630
 \end{array}$$

Continued.

If a vintner be desirous to draw off a pipe of Canary into bottles containing pints quarts and 2 quarts of each an equal number how many must he have?

$$\begin{array}{r}
 1 \\
 2 \\
 63 \\
 126 \\
 252 \\
 21008144 \\
 30 \\
 28 \\
 28
 \end{array}$$

There are three fields one contains 7 acres another 10 acres and the other 12 acres and 1 rood how many shoots of 76 perches each are contained in the whole?

$$\begin{array}{r}
 70 \\
 12 \\
 24 \\
 117 \\
 40 \\
 76)4640(61.46 \\
 480 \\
 80 \\
 76 \\
 44
 \end{array}$$

Continued.

There are 100 lb of silver the property of 3 men of which A receives 17 lb 10 oz 19 pwt 19 grs of what remains B shares 100 grs so often as

C shares 13 pwt 15 grs that are the shares of B and C

Thus B's share is 34 lb 8 oz 8 pwt 8 grs C's share is 34 lb 4 oz 15 pwt

$$\begin{array}{r}
 \text{lb. oz. pwt. grs} \\
 100.00.00.00 \\
 17.10.19.19 \\
 \hline
 82.1.6.8 \\
 \hline
 18 \\
 1057 \\
 \hline
 20 \\
 21140 \\
 \hline
 24 \\
 84568 \\
 \hline
 42280 \\
 799 \overline{) 507365685} \\
 \underline{4794} \\
 2796 \\
 \underline{2397} \\
 3998 \\
 \underline{3995} \\
 3
 \end{array}$$

$$\begin{array}{r}
 \text{pwt} \\
 13 \\
 24 \\
 \hline
 37 \\
 \hline
 312 \\
 \hline
 10 \\
 487 \\
 \hline
 312 \\
 \hline
 199
 \end{array}$$

$$\begin{array}{r}
 208255 \\
 12 \overline{) 412.15} \\
 \hline
 34415 \\
 \hline
 67 \\
 48 \\
 \hline
 132 \\
 \hline
 120 \\
 \hline
 120 \\
 \hline
 120
 \end{array}$$

$$\begin{array}{r}
 \text{lb. oz. pwt. grs} \\
 88.1.0.5 \\
 34.4.15.0 \\
 \hline
 53.8.5.5
 \end{array}$$

Fractions.

When the thing or things signified by figures are whole ones then the figures which signify them are called integers or whole numbers but when only some parts of a thing are signified by figures as two thirds of any thing five sixths seven tenths &c then the figures which signify these parts of a thing being the expressions of some quantity less than one are called Fractions

Decimal Fractions

Decimal Fractions are also expressions of an integer or are in value some thing less than one of any thing whatever it may be which is signified by them.

$$\begin{array}{r}
 22.821 \\
 546.35 \\
 84 \\
 \hline
 37.325 \\
 \hline
 629.896
 \end{array}$$

$$\begin{array}{r}
 600.005 \\
 400.03 \\
 \hline
 400.035
 \end{array}$$

$$\begin{array}{r}
 329.7 \\
 37.182 \\
 16 \\
 \hline
 367.022
 \end{array}$$

Subtraction of Decimals.

Rule

Place the numbers according to their value then subtract as in whole numbers and point off the decimals as in Addition

$$\begin{array}{r}
 112.1384 \\
 95.9100 \\
 \hline
 23.2284
 \end{array}$$

$$\begin{array}{r}
 287.000 \\
 5.115 \\
 \hline
 283.885
 \end{array}$$

$$\begin{array}{r}
 67.0 \\
 92 \\
 \hline
 66.08
 \end{array}$$

Multiplication of Decimals

Pude.

Whether they are mixed numbers or pure decimals, place the factors and multiply them as in whole numbers.

Print off so many figures from the product as there are decimal places in both the factors and if there be not so many decimal places in the product supply the defect by prefixing cyphers.

$$\begin{array}{r} 25238 \\ 1217 \\ \hline 176666 \\ 25238 \\ 50476 \\ 25238 \\ \hline 30714646 \end{array}$$

$$\begin{array}{r} 176 \\ 75 \\ \hline 880 \\ 1232 \\ \hline 13200 \end{array}$$

$$\begin{array}{r} 60 \\ 04 \\ \hline 0240 \end{array}$$

Division of Decimals.
Rule.

Rule.

The places of decimal parts in the divisor and quotient counted together must be always equal to those in the dividend therefore divide as in whole numbers and from the right hand of the quotient point off so many places for decimals as the decimal places in the dividend exceed those in the divisor.

25 17

$$\begin{array}{r} 2517 \times 29 \\ \hline 19113 \\ 5034 \\ \hline 125885 \\ \hline 10043 \\ 7881 \\ \hline 24092 \end{array}$$

$$\begin{array}{r} 573948 \\ 1500 \\ \hline 2304 \\ 2250 \\ \hline 1448 \\ 1125 \\ \hline 3230 \\ 3000 \\ \hline 2300 \\ 2250 \\ \hline 500 \\ 375 \\ \hline 125 \end{array}$$

Reduction of Decimals.

Rule.

Rule.

Annex a cypher to the numerator and divide it by the denominator annexing a cypher continually to the remainder the quotient will be the decimal required.

2 Reduce $\frac{1}{4}$ $\frac{1}{2}$ and $\frac{3}{4}$ to decimals.

4) $\begin{array}{r} 1925 \\ 8 \overline{) 10} \\ 20 \end{array}$ 2) $\begin{array}{r} 105 \\ 10 \overline{) 10} \end{array}$ 4) $\begin{array}{r} 3875 \\ 2 \overline{) 80} \\ 2.0 \end{array}$

Reduce $\frac{5}{26}$, $\frac{12}{480}$ and $\frac{9}{1129}$ to decimals

$$\begin{array}{r} 26 \quad 50 \quad 19 \quad 25 \\ 240 \\ 234 \\ \hline 60 \\ 82 \\ \hline 50 \\ 780 \\ \hline 2 \end{array} \quad \begin{array}{r} 11.29 \quad 2000 \quad 0079 \\ 7903 \\ \hline 10970 \\ 10161 \\ \hline 8080 \\ 7953 \\ \hline 187 \\ \hline 7 \end{array}$$

Case 2

To reduce numbers of difference denominations as of Money
Weight and Measures to their decimal values.

Rule

- 1 Write the given numbers perpendicularly under each other for dividends proceeding orderly from the least to the greatest
- 2 Opposite to each dividend on the left hand place such a number for a divisor as will bring it to the next superior denomination and draw a line perpendicularly between them
- 3 Begin with the highest and write the quotient of each division as decimal parts on the right hand of the dividend next below it and so on till they are all used and the last quotient will be the decimal sought
- 4 Reduce 13s 8 $\frac{1}{2}$ d to the decimal pt of a ounce
- 5 of a pound

$$\begin{array}{r|l} 4 & 2, 0 \\ 12 & 5, 5 \\ 20 & 13, 4, 5, 8, 3 \\ \hline & 6, 7, 2, 9, + \end{array}$$

24	14.0
20	12.5833
	6291+

Continued

Case 3.

To find the value of any given decimal in the terms of an integer.

Rule.

Multiply the decimal by that number which it takes of the next less denomination to make one of that denomination in which the decimal is given and cut off so many figures for a remainder to the right hand of the quotient as there are places in the given decimal proved in the same manner with the remainder and continue to do so through all the parts of the integer and the several denominations standing on the left hand make the answer.

2 What is value of 73968 of a pound.

$$\begin{array}{r} 73968 \\ 20 \\ \hline 1479360 \\ 12 \\ \hline 959424 \\ 4 \\ \hline 383680 \end{array}$$

If a pile of wood be 18 feet long 14 wide and 7 ft high how many cords does it contain

$$\begin{array}{r} 118 \\ 18 \\ \hline 2090 \\ 18 \\ \hline 2090 \\ 10350 \\ 14400 \\ 14400 \\ 14400 \\ 128 \\ \hline 160425012 \\ 128 \\ \hline 324 \\ 256 \\ \hline 68 \end{array}$$

3 What is the value of 768 of a pound Troy?

$$\begin{array}{r} 768 \\ 20 \\ \hline 15360 \\ 24 \\ \hline 1280 \\ 140 \\ \hline 7680 \end{array}$$

$$\begin{array}{r} 1728 \\ 25 \\ \hline 8640 \\ 3356 \\ \hline 43200 \end{array}$$

Continued.

If a load of wood be 9 feet long 3 1/2 feet wide and 4 feet high how many square feet does it contain

$$\begin{array}{r} 9 \\ 3\frac{1}{2} \\ \hline 31\frac{1}{2} \\ 4 \\ \hline 1260 \end{array}$$

What is the value of 0625 of a shilling

$$\begin{array}{r} 0625 \\ 12 \\ \hline 7500 \\ 4 \\ \hline 30000 \end{array}$$

Reduce 3 farthings to the decimal of a shilling

$$\begin{array}{r} 430 \\ 12075 \\ \hline 0625 \end{array}$$

What is the value of 725 of a day

$$\begin{array}{r} 725 \\ 24 \\ \hline 2900 \\ 1450 \\ \hline 16400 \\ 24000 \end{array}$$

Reduce 3 Oct 0 grs 7 lb 8 oz to the decimal of a ton

$$\begin{array}{r} 1680 \\ 2835 \\ 40267857 \\ 20 \\ \hline 15334825 \end{array}$$

Reduce 1/5 to a decimal fraction

$$\begin{array}{r} 480 \\ 600 \\ \hline 4800 \\ 1200 \\ \hline 960 \\ 2400 \\ 2400 \end{array}$$

Federal Money

Federal Money is the coin of the United States established by Congress at D 1786 of all coins this is the most simple and the operation in it the most easy. The denomination are in a decimal proportion as exhibited in the following.

Table			
10 Mills	Cent	D	€
10 Cents	Make one Dime	59	
10 Dimes	Make one Dollar marked thus \$	112	98
10 Dollars	Eagle	113	15
		15	
		21	50
		200	
		73	17
		35	
		35	
		20	33
		40	
		16	
		10781	13

681
5743
\$23,37

Multiplication of Federal Money

7635
3746
45810
30540
53445
22905
28600710

24675
1363
74025
143080
74025
24675
33432025

Division of Federal Money

13) 3756 (288923
26
118
104
116
104
1020
117
11730
26
40
34
4

27) 1675 (62
162
55
54

Federal Money

A man dies leaving an estate of \$716.00 there are demands against the estate of \$3937674 the residue is to be divided between 7 sons what will each one receive.

71600.00
3937674
7) 3162326
453189

What will 3 hogheads of sugar cost each weighing 3 cwt 2 lbs 7 lb at 16cts 7 mills per lb

3 cwt 2 lb 7
14
28
112
28
399
167
2793
2394
399
66633
199899

A man sells 1225 bushels of wheat at \$1.53 per bushel and receives \$2576 for transportation what does he receive in the whole

1225
133
3175
3175
1228
151925
9376
172301

Divide seven thousand six hundred dollars one cent and three mills by five hundred seventy six dollars thirty four cents and two mills

176342) 7006013 (12155+
576342
1242593
1152684
899090
576342
3227480
2881710
3457700
2881710
578990

Simple Interest.

Interest is the allowance given for the use of money by the borrower to the lender it is computed at so many dollars for each hundred lent for a year (per annum) and a like proportion for a greater or less time. the highest rate is limited by our laws to 6 per cent that is 6 dollars for a hundred dollars 6 cents for a hundred cent £6 for a £100 &c this is called legal interest and is always understood when no other rate is mentioned.

There are three things to be noticed in Interest

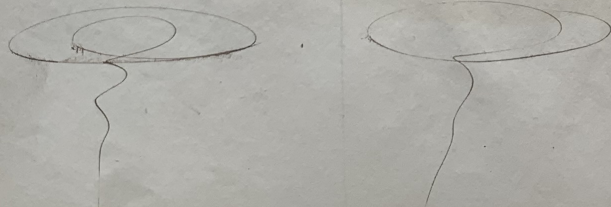
The Principal or money lent

The Rate or sum per cent agreed on

The Amount or principal and interest added together

General Rule.

For one year multiply the principal by the rate from the product cut off the two right hand figures of the dollars which will be cents those to the left hand will be dollars which is the same thing remove the separator from its natural place two figures towards the left hand then all those figures to the left hand will be dollars and those to the right hand will be cents, mills and parts of a mill.



Simple Interest.

Method

Write down half the greatest even number of months for a multiplier of three be and add months it must be reckoned 30 days for each month and the given sum it and ask how many times you can

figure for a decimal at

of months already found

adding in pointing off

to or separator two figures

to the hand that is point off

at then there will be

multiplier counted

ends of the point will be

cents and mills &c

one sixth of the days per

the aliquot parts of the

Multiplied by 6

by 3

by 2

by 3 twice

by 2 and 3



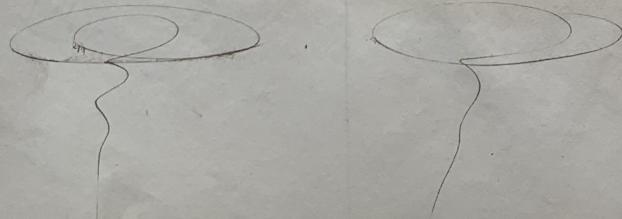
Simple Interest.

Interest is the allowance given for the use of money by the borrower to the lender it is computed at so many dollars for each hundred lent for a year (per annum) and a like proportion for a greater or less time. the highest rate is limited by our laws to 6 per cent that is 6 dollars for a hundred dollars 6 cents for a hundred cents \$6 for a \$100 &c this is called legal interest and is always understood when no other rate is mentioned.

There are three things to be noticed in Interest
 The Principal or money lent
 The Rate or sum per cent agreed on
 The amount or principal and interest added together

General Rule.

For one year multiply the principal by the rate from the product cut off the two right hand figures of the dollars which will be cents those to the left hand will be dollars which is the same thing remove the separator from its natural place two figures towards the left hand then all those figures to the left hand will be dollars and those to the right hand will be cents, mills and parts of a mill.



Simple Interest.

Method

Write down half the greatest even number of months for a multiplier of three be and add months it must be reckoned 30 days for which and the given days if any seek how many times you can have six in the sum of them place the figure for a decimal at the right hand of half the even number of months already found by which multiply the principal observing in pointing off the products to remove the decimal points or separator two figures from its natural place towards the left hand that is point off two more places for decimals in the product than there are decimals places in the multiplicand and multiplier counted together then all the figures to the left hand of the point will be dollars and those to the right hand dimes cents and mills &c which will be the interest required.

Should there be a remainder in taking one sixth of the days reduce it to a vulgar fraction for which take aliquot parts of the multiplicand.

off the remainder be 1-4 divide the multiplicand by 6
 9 - - - - - 2-1/2 - - - - - by 3
 3 - - - - - 3-1/2 - - - - - by 2
 3 - - - - - 4-2/3 - - - - - by 3 twice
 5 - - - - - 5-1/2 and 1/3 - - - - - by 2 and 3



Continued.

What is the interest of \$593 for 2 years and 8 months. What is the interest of \$6762 for 3 years and 2 months.

$$\begin{array}{r} 593 \\ 16 \\ \hline 3558 \\ 593 \\ \hline 9488 \end{array}$$

$$\begin{array}{r} 6762 \\ 19 \\ \hline 60858 \\ 6762 \\ \hline 128478 \end{array}$$

What is the interest of 91 cents for 27 years. What is the interest of \$2870 for 32 for 13 days.

$$\begin{array}{r} 91 \\ 6 \\ \hline 546 \\ 27 \\ \hline 3822 \\ 1092 \\ \hline 14842 \end{array}$$

$$\begin{array}{r} 33287032 \\ 287032 \\ \hline 95676 \\ 95676 \\ \hline 478384 \end{array}$$

What is the interest of \$13784 for 2 years and 6 months at 5 per cent. What is the interest of \$7907 for 10 months at 8 per cent.

$$\begin{array}{r} 13784 \\ 11 \\ \hline 68920 \\ 13784 \\ \hline 206760 \\ 34460 \\ \hline 6172300 \end{array}$$

$$\begin{array}{r} 7907 \\ 13 \\ \hline 39535 \\ 13178 \\ \hline 52713 \end{array}$$

What is the interest of \$2229 for 1 month 19 days at 3 percent. What is the interest of \$18 for 2 years 14 days at 7 per cent.

$$\begin{array}{r} 2229 \\ 18 \\ \hline 21837 \\ 218 \\ \hline 916 \end{array}$$

$$\begin{array}{r} 18 \\ 122 \\ \hline 36 \\ 36 \\ \hline 186 \\ 186 \\ \hline 6202 \\ 367 \\ \hline 4569 \end{array}$$

Continued.

What is the interest of \$1600 for 1 year and 3 months. What is the interest of \$5811 for 1 year and 11 months.

$$\begin{array}{r} 1600 \\ 75 \\ \hline 8000 \\ 11200 \\ \hline 512000 \end{array}$$

$$\begin{array}{r} 5811 \\ 75 \\ \hline 29055 \\ 5811 \\ \hline 5811 \\ 8068265 \end{array}$$

What is the interest of \$1768 for 11 months and 28 days. What is the interest of \$86112 for 9 months 28 days at 7 per cent.

$$\begin{array}{r} 331768 \\ 52 \\ \hline 15912 \\ 8880 \\ 589 \\ 589 \\ \hline 8105490 \end{array}$$

$$\begin{array}{r} 1086112 \\ 19 \\ \hline 755008 \\ 344448 \\ 14352 \\ \hline 164233840 \\ 705840 \\ \hline 4839480 \end{array}$$

What is the interest of \$105 for 1 year 7 months and 6 days. What is the interest of \$86 for 9 months.

$$\begin{array}{r} 10561 \\ 96 \\ \hline 63366 \\ 95049 \\ \hline 81013856 \end{array}$$

$$\begin{array}{r} 86 \\ 15 \\ \hline 430 \\ 344 \\ \hline 83870 \end{array}$$

What is the interest of \$815 for 5 years 10 months and 3 days. What is the interest of \$812 for 3 years 8 months and 4 days.

$$\begin{array}{r} 27836 \\ 350 \\ \hline 391800 \\ 23508 \\ 3918 \\ \hline 2740518 \end{array}$$

$$\begin{array}{r} 3381230 \\ 160 \\ \hline 4873800 \\ 81230 \\ 27076 \\ 27076 \\ \hline 81369952 \end{array}$$

Continued

What is the interest of \$91.72 for 1 year and 4 months
What is the interest of \$93.17 for 11 days

$$\begin{array}{r} 91.72 \\ 8.1 \\ \hline 1333.76 \end{array}$$

$$\begin{array}{r} 2.59317 \\ 93.17 \\ 3108 \\ 4658 \\ \hline 17080 \end{array}$$

What is the interest of \$88.12 for 7 months
What is the interest of 107 for 3 years 6 months and 15 days

$$\begin{array}{r} 88.12 \\ 25 \\ \hline 2595 \\ 1558 \\ \hline 181.65 \end{array}$$

$$\begin{array}{r} 2.107 \\ 107 \\ 212 \\ 214 \\ 107 \\ 21453 \\ \hline 22537 \end{array}$$

What is the interest of two hundred dollars and six cents 45 years 7 months and 11 days

$$\begin{array}{r} 33.2006 \\ 6682 \\ 6682 \\ \hline 133.6 \end{array}$$

$$\begin{array}{r} 45.7 \\ 12 \\ 97 \\ 45 \\ 2547 \\ 2730 \\ \hline 41.6 \\ 36 \\ \hline 5 \end{array}$$

$$\begin{array}{r} 2.30009 \\ 2736 \\ 54 \\ 273 \\ 63 \\ 184 \\ \hline 24631 \end{array}$$

Compound Multiplication

Compound Multiplication is when the Multiplicand consists of several denominations It is particularly useful in finding the value of Goods.

Case 1

When the quantity does not exceed 12 yards, pounds & so down to the price of one yard or pound and place the quantity underneath the lowest denomination for a multiplier.

Begin by multiplying the lowest denomination and carry by the same rules from one denomination to another as in Compound Addition.

What will 9 pounds of sugar cost at 10d per lb. What will 9 pounds of sugar cost at \$0.139 per lb.

$$\begin{array}{r} 9 \\ 10 \\ \hline 90 \end{array}$$

$$\begin{array}{r} 9 \\ 0.139 \\ \hline 1.251 \end{array}$$

What will 6 yards of cloth cost at £1-10-8 per yard What will 6 yards of cloth cost at \$5.07 per yard.

$$\begin{array}{r} 6 \\ 1-10-8 \\ \hline 6-10-0 \end{array}$$

$$\begin{array}{r} 6 \\ 5.07 \\ \hline 30.42 \end{array}$$

Case 2

When the quantity exceeds 12 and is any number within the multiplication table multiply by two such numbers as when multiplied together will produce the given quantity If two numbers will not do this exactly multiply by two such numbers as come the nearest to it and by the deficiency or excess multiply the multiplicand and this product added to or subtracted from the first product as the case may require gives the answer.

Continued.

What with 125 yards of cloth What with 125 yards of cloth
cost at 55 7d per yard cost at 93 2s per yard.

$$\begin{array}{r} £ 5 2 \\ 0-5-7 \\ 11 \\ 3-1-5 \\ 11 \\ 33-15-7 \\ 1-2-4 \\ £ 34-17-11 \end{array}$$

What with 51 pound of tea
cost at 35 6d per lb.

$$\begin{array}{r} £ 5 2 \\ 3-6 \\ 7 \\ 1-4-6 \\ 7 \\ 8-11-6 \\ 7-0 \\ 8-18-6 \end{array}$$

What with 150 yards of cloth
cost at 52-35-2d per yard

$$\begin{array}{r} £ 5 0 \\ 2-3-9 \\ 11 \\ 24-1-3 \\ 11 \\ 264 = 13-9 \\ 19 = 13-9 \\ 284 = 7-2-6 \end{array}$$

$$\begin{array}{r} £ 5 2 \\ 0-5-7 \\ 11 \\ 3-1-5 \\ 11 \\ 33-15-7 \\ 1-2-4 \\ £ 34-17-11 \end{array}$$

What with 51 pounds of tea
cost at 80 58 3 per lb.

$$\begin{array}{r} 2 2 5 \\ 21-8-3 \\ 51 \\ 0 5 8 3 \\ 2 9 1 5 \\ 82 97 3 3 \end{array}$$

What with 150 yards of cloth
cost at 87 2s per yard.

$$\begin{array}{r} 2 2 5 \\ 7 1 5 0 \\ 21 7 5 0 \\ 52 5 \\ 80 4 35-0 \end{array}$$

Continued

Case 2

When the multiplier that is the quantity exceeds 144 multiply first by 10 and this product again by 10 which will give the price of 100 yards &c and if the quantity be even hundreds multiply the price of 100 by the number of hundreds in the question and the product will be the answer if there be odd numbers multiply the price of 10 by the number of tens and the price of unity or 1 by the number of tens then these several products added together will be the answer

What with 328 yards of cloth What with 328 yards of cloth
cost at 105-6 7d per yard cost at 84 7s 7 per yard

$$\begin{array}{r} \text{yards} \\ 328 \\ 500 \\ 1908 \\ 1640 \\ 4168968 \\ 1241492 \\ 1721718 \end{array}$$

$$\begin{array}{r} 2 2 5 \\ 16-6-2 \\ 120 \\ 14080 \\ 3814 \\ 5271 \\ 576290 \end{array}$$

What with 624 yards of cloth What with 624 yards of cloth
cost at 125-8d per yard cost at 82 11 per yard.

$$\begin{array}{r} \text{yard} \\ 624 \\ 152 \\ 1248 \\ 3120 \\ 524 \\ 124848 \\ 84 \\ 108 \\ 108 \end{array}$$

$$\begin{array}{r} 2 2 5 \\ 2 11 \\ 624 \\ 5444 \\ 4222 \\ 120000 \\ 1317206 \end{array}$$

Supplement to Compound Multiplication Exercises

A man has 38 silver cups each. If a man travel 34 miles 3 furlongs weighing 1 or 3 put 16 grs how much rags and 17 mads in one day silver do they all contain how far will he travel in 62 days

$$\begin{array}{r} \text{oz. pint. grs.} \\ 1 \text{ } 3 \text{ } 16 \\ 7 \text{ } 2 \text{ } 0 \\ \hline 3 \text{ } 6 \text{ } 12 \text{ } 0 \\ 2 \text{ } 7 \text{ } 5 \\ \hline 5 \text{ } 8 \text{ } 19 \text{ } 5 \end{array}$$

$$\begin{array}{r} \text{mils. fms. rods.} \\ 34 \text{ } 3 \text{ } 17 \\ 8 \\ \hline 27 \text{ } 8 \\ 40 \\ \hline 110 \text{ } 17 \\ 62 \\ \hline 220 \text{ } 34 \\ 661 \text{ } 02 \\ \hline 406 \text{ } 830 \text{ } 54 \\ 81707 \text{ } 614 \\ \hline 2154 \text{ } 414 \end{array}$$

What will 235 yards of cloth cost If a horse run a mile in 12 come to at £1-2s 8th per yard minutes 16 seconds in what time would he go 176 miles

$$\begin{array}{r} \text{£. s. d. grs.} \\ 1 \text{ } 2 \text{ } 5 \text{ } 2 \\ 10 \times 5 \\ \hline 11 \text{ } 4 \text{ } 7 \text{ } 0 \\ 10 \times 5 \\ \hline 112 \text{ } 5 \text{ } 10 \text{ } 0 \\ 2 \\ \hline 224 \text{ } 11 \text{ } 8 \text{ } 2 \\ 33 \text{ } 13 \text{ } 9 \text{ } 0 \\ 5 \text{ } 12 \text{ } 3 \text{ } 2 \\ \hline 263 \text{ } 17 \text{ } 8 \text{ } 2 \end{array}$$

$$\begin{array}{r} 1 \text{ } 12 \text{ } 16 \text{ } 176 \\ 60 \\ \hline 736 \\ 176 \\ \hline 4416 \\ 5052 \\ 736 \\ \hline 60 \text{ } 129536 \\ 60 \text{ } 215856 \\ \hline 355888 \end{array}$$

Compound Division

Compound Division is the dividing of different denomination?

Case 1.

When the divisor that is the the highest denomination and in the manner of short division find how many times the divisor is contained in its place the quotient under its own denomination and if any thing remain reduce it to the next less denomination and divide as before so proceed through all the denomination If the quantity exceed 12 and there be any two numbers which multiplied together will produce it divide the price first by one of these numbers and this quotient by the other

If 48 yards of cloth cost £4-18s 3rd If 48 yards of cloth cost £100 6th and what is that per yard. what is that per yard.

$$\begin{array}{r} \text{£. s. d. grs.} \\ 4 \text{ } 18 \text{ } 3 \\ 48 \overline{) 180 \text{ } 6} \\ 144 \\ \hline 36 \text{ } 6 \\ 36 \\ \hline 0 \end{array}$$

$$\begin{array}{r} 48 \overline{) 100 \text{ } 6} \\ 96 \\ \hline 46 \\ 44 \\ \hline 2 \end{array}$$

If 14 lb^o of tea cost £2-7-2⁴ If 24 lb^o of tea cost £3-7-4⁴ what is that per lb. is that per lb.

$$\begin{array}{r} \text{£. s. d. grs.} \\ 2 \text{ } 7 \text{ } 2 \text{ } 4 \\ 14 \overline{) 28 \text{ } 7 \text{ } 2 \text{ } 4} \\ 28 \\ \hline 7 \text{ } 2 \text{ } 4 \\ 70 \\ \hline 11 \text{ } 11 \text{ } 1 \\ 110 \\ \hline 1 \end{array}$$

$$\begin{array}{r} 24 \overline{) 37 \text{ } 4} \\ 24 \\ \hline 13 \text{ } 4 \\ 12 \\ \hline 14 \text{ } 0 \\ 120 \\ \hline 20 \text{ } 0 \\ 180 \\ \hline 20 \end{array}$$

If 35 yards of cloth cost £42-6s 7th If 35 yards of cloth cost £146-10s 7th what is that per yard. what is that per yard.

$$\begin{array}{r} \text{£. s. d. grs.} \\ 42 \text{ } 6 \text{ } 7 \text{ } 2 \\ 35 \overline{) 426 \text{ } 7 \text{ } 2} \\ 35 \\ \hline 76 \text{ } 7 \text{ } 2 \\ 70 \\ \hline 67 \text{ } 2 \\ 63 \\ \hline 42 \text{ } 4 \text{ } 2 \end{array}$$

$$\begin{array}{r} 35 \overline{) 146 \text{ } 10 \text{ } 7} \\ 105 \\ \hline 41 \text{ } 10 \text{ } 7 \\ 35 \\ \hline 66 \text{ } 7 \\ 63 \\ \hline 37 \text{ } 7 \\ 35 \\ \hline 27 \end{array}$$

Continued.

Case 2.

Having the price of a hundred weight (100) to find the price of 1 lb divide the given price by 8 that quotient by 7 and the quotient by 2 and the last quotient will be the price of 1 lb ^{required}

If the number of hundred weight be more **than** one first divide the whole price by the number of hundred then proceed as before

If 8 but of record cost £15-7s 4d If 8 but of record cost. 8 5s, 4d.
 what is that paid for the what is that paid for the

$$\begin{array}{r} 152 \\ 8 \overline{) 1216} \\ \underline{80} \\ 416 \\ \underline{400} \\ 160 \\ \underline{160} \\ 0 \end{array}$$

Supplement to Compound Division

If 10 sheep cost £4-5-7 what is the price of each?

$$\begin{array}{r} 457 \\ 10 \overline{) 457} \\ \underline{40} \\ 57 \\ \underline{50} \\ 70 \\ \underline{70} \\ 0 \end{array}$$

If 84 cows £25-3-13 what is the price of each?

$$\begin{array}{r} 25313 \\ 84 \overline{) 25313} \\ \underline{168} \\ 851 \\ \underline{672} \\ 1791 \\ \underline{1680} \\ 1110 \\ \underline{1120} \\ 0 \end{array}$$

If 121 pieces of cloth measure 28-9-6 yard 1 gr 3 na what does each other measure?

$$\begin{array}{r} 289613 \\ 121 \overline{) 289613} \\ \underline{242} \\ 476 \\ \underline{363} \\ 113 \\ \underline{113} \\ 0 \end{array}$$

$$\begin{array}{r} 4533 \\ 121 \overline{) 4533} \\ \underline{363} \\ 90 \\ \underline{90} \\ 0 \end{array}$$

$$\begin{array}{r} 3633 \\ 121 \overline{) 3633} \\ \underline{363} \\ 0 \end{array}$$

Price of 1 sheep £14-2-6

$$\begin{array}{r} 1426 \\ 3 \overline{) 1426} \\ \underline{9} \\ 52 \\ \underline{48} \\ 40 \\ \underline{39} \\ 10 \end{array}$$

Price of 1 Cow £10-0-6

$$\begin{array}{r} 1006 \\ 3 \overline{) 1006} \\ \underline{9} \\ 10 \\ \underline{9} \\ 10 \\ \underline{9} \\ 10 \end{array}$$

If 66 tea spoons weight

all 10 or 14 parts what is the weight of each?

$$\begin{array}{r} 1014 \\ 66 \overline{) 1014} \\ \underline{66} \\ 354 \\ \underline{330} \\ 24 \\ \underline{24} \\ 0 \end{array}$$

$$\begin{array}{r} 63410 \\ 66 \overline{) 63410} \\ \underline{66} \\ 34 \\ \underline{34} \\ 0 \end{array}$$

$$\begin{array}{r} 63410 \\ 66 \overline{) 63410} \\ \underline{66} \\ 34 \\ \underline{34} \\ 0 \end{array}$$

$$\begin{array}{r} 2417 \\ 2 \overline{) 2417} \\ \underline{2} \\ 4 \\ \underline{4} \\ 0 \end{array}$$

$$\begin{array}{r} 4 \\ 4 \overline{) 4} \\ \underline{4} \\ 0 \end{array}$$

Continued

If 1 pint of pice cost £2-11-8

what is that per th

$$\begin{array}{r} 21162 \\ 8 \overline{) 21162} \\ \underline{16} \\ 51 \\ \underline{48} \\ 32 \\ \underline{32} \\ 0 \end{array}$$

If 47 bags of indigo weight

all 10 or 14 parts what does each weight?

$$\begin{array}{r} 121264 \\ 47 \overline{) 121264} \\ \underline{4} \\ 28 \\ \underline{4} \\ 18 \\ \underline{4} \\ 1398 \\ \underline{1398} \\ 0 \end{array}$$

$$\begin{array}{r} 8392 \\ 47 \overline{) 8392} \\ \underline{4} \\ 28 \\ \underline{4} \\ 18 \\ \underline{4} \\ 1398 \\ \underline{1398} \\ 0 \end{array}$$

$$\begin{array}{r} 22372 \\ 47 \overline{) 22372} \\ \underline{188} \\ 357 \\ \underline{329} \\ 282 \\ \underline{282} \\ 0 \end{array}$$

If 8 horses eat 900 bushels and

pack of oats in 1 year how much will each horse eat per day?

$$\begin{array}{r} 90000 \\ 112 \overline{) 90000} \\ \underline{112} \\ 788 \\ \underline{788} \\ 0 \end{array}$$

$$\begin{array}{r} 36544 \\ 365 \overline{) 36544} \\ \underline{365} \\ 44 \\ \underline{44} \\ 0 \end{array}$$

$$\begin{array}{r} 36544 \\ 365 \overline{) 36544} \\ \underline{365} \\ 44 \\ \underline{44} \\ 0 \end{array}$$

$$\begin{array}{r} 36544 \\ 365 \overline{) 36544} \\ \underline{365} \\ 44 \\ \underline{44} \\ 0 \end{array}$$

$$\begin{array}{r} 36544 \\ 365 \overline{) 36544} \\ \underline{365} \\ 44 \\ \underline{44} \\ 0 \end{array}$$

Divide £39-12-5 among 4 men

6 women and 9 boys give

each man double to a woman

each woman double to a boy

$$\begin{array}{r} 39125 \\ 3 \overline{) 39125} \\ \underline{3} \\ 9 \\ \underline{9} \\ 12 \\ \underline{12} \\ 5 \\ \underline{5} \\ 0 \end{array}$$

$$\begin{array}{r} 39125 \\ 3 \overline{) 39125} \\ \underline{3} \\ 9 \\ \underline{9} \\ 12 \\ \underline{12} \\ 5 \\ \underline{5} \\ 0 \end{array}$$

$$\begin{array}{r} 39125 \\ 3 \overline{) 39125} \\ \underline{3} \\ 9 \\ \underline{9} \\ 12 \\ \underline{12} \\ 5 \\ \underline{5} \\ 0 \end{array}$$

Single Rule of Three

The Single Rule of Three sometimes called the Rule of Proportion is known by having three terms given to find the fourth. It is of two kinds Direct and Inverse or Inverse.

Single Rule of Three Direct

The Single Rule of Three Direct teaches by having three numbers given to find a fourth which shall bear the same proportion to the third that the second does to the first.

It is evident that the value weight and measure of any commodity is proportionate to its quantity that the amount of work or consumption is proportion to the time.

If more require more or less required less the question is always known to belong to the Rule of Three Direct.

More requiring more is when the third term is greater than the first and requires the fourth term to be greater than the second. Less requiring less is when the third term is less than the first and requires the fourth term to be less than the second.

If 6 horses eat 21 bushels of oats in 3 weeks how many bushels will 20 horses eat in the same time.

$$6 :: 21 :: 20$$

$$\begin{array}{r} 21 \\ 6 \overline{) 420} \\ \underline{42} \end{array}$$

If 20 horses eat 70 bushels of oats in 3 weeks how many bushels will 6 horses eat in the same time.

$$20 :: 70 :: 6$$

$$\begin{array}{r} 70 \\ 20 \overline{) 420} \\ \underline{40} \end{array}$$

Continued

A pound of silver weight 36 or 10 to Goldsmiths sold at tankard for what is it worth at 12 per £10.12 at the rate of 5.42 per ounce. I demand the weight of it.

$$\begin{array}{r} \text{oz. part} \\ 11 :: 36.10 \\ 20 \\ 730 \\ 20 \overline{) 3610} \\ \underline{16} \\ 16 \end{array}$$

$$\begin{array}{r} 5.42 \\ 12 :: 10.12 \\ 64 \\ 272 \\ 12 \\ 64 \overline{) 272} \\ \underline{192} \\ 80 \\ 64 \overline{) 80} \\ \underline{64} \\ 16 \end{array}$$

If the moon move 12 deg 10 min 35 sec in one day in what time does it perform one revolution.

$$\begin{array}{r} \text{deg min sec} \\ 12.10.35 \\ 790 \\ 60 \\ 47435 \\ 5800 \\ 21600 \\ 1296000 \end{array}$$

$$\begin{array}{r} 47435 :: 1 :: 1296000 \\ 47435 \overline{) 1296000} \\ \underline{94870} \\ 347300 \\ 332045 \\ \underline{15255} \\ 11220 \\ 30510 \\ 47435 \overline{) 11220} \\ \underline{332045} \\ 34275 \\ 47435 \overline{) 34275} \\ \underline{189740} \\ 153010 \\ 142305 \\ \underline{10795} \end{array}$$

Continued

If a family of 10 persons spend 3 bushels of malt in a month how many bushels will serve them when there are 30 in the family

$$\begin{array}{r} \text{person} \quad \text{bush} \\ 10 :: 3 :: 30 \\ \hline 10 \overline{) 90} \\ 9 \end{array}$$

If a family of 30 persons spend 9 bushels of malt in a month how many bushels will serve a family of 10 persons the same time

$$\begin{array}{r} \text{person} \quad \text{bush} \\ 30 :: 9 :: 10 \\ \hline 30 \overline{) 90} \\ 3 \end{array}$$

If 12 acres of reeds produce 78 quarters of peck how much will 25 acres of reeds produce

$$\begin{array}{r} \text{acres} \quad \text{quarters} \\ 12 :: 78 :: 25 \\ \hline 12 \overline{) 780} \\ 65 \end{array}$$

If 5 acres of reeds produce 21 quarters of peck how many acres will be required to produce 47 quarters of peck

$$\begin{array}{r} \text{acres} \quad \text{quarters} \\ 5 :: 21 :: 47 \\ \hline 5 \overline{) 210} \\ 41 \end{array}$$

$$\begin{array}{r} 210 :: 21 :: 380 \\ \hline 21 \overline{) 380} \\ 180 \end{array}$$

$$\begin{array}{r} 210 \overline{) 7980} \\ 420 \\ \hline 3780 \end{array}$$

Continued

365 men consume 75 barrels of provisions in 9 months how much will 500 more consume in the same time

$$\begin{array}{r} 365 :: 75 :: 500 \\ \hline 365 \overline{) 7500} \\ 10245 \end{array}$$

How much will 4 pieces of linen containing pica 38.36.37.38 yards come to at 76 cents per yard

$$\begin{array}{r} 38 \frac{1}{2} \\ 36 \\ 37 \frac{1}{2} \\ 38 \\ \hline 147 \\ 19 \\ \hline 166 \\ 1029 \\ \hline \text{Ans } \$16.13 \end{array}$$

If I give \$6 for the use of \$100 for 12 months what must I give for \$1782 the same time

$$\begin{array}{r} 100 :: 6 :: 1782 \\ \hline 100 \overline{) 214692} \\ 214692 \end{array}$$

How many tiles of 8 inches square will lay a floor 20 feet long and 16 feet broad

$$\begin{array}{r} 8 :: 1 :: 16 \\ \hline 8 \overline{) 128} \\ 16 \end{array}$$

If 2 lb of sugar cost 28 cents what will 10 lb of coffee cost if 8 lb of sugar are worth 8 lb of coffee

$$\begin{array}{r} 5 :: 8 :: 10 \\ \hline 5 \overline{) 80} \\ 160 \end{array}$$

$$\begin{array}{r} 2 :: 25 :: 160 \\ \hline 2 \overline{) 1600} \\ 800 \end{array}$$

If £3 sterling be equal to £4 of England currency how much of England currency will be equal to £1000 sterling

$$\begin{array}{r} 3 :: 4 :: 1000 \\ \hline 3 \overline{) 4000} \\ 1333-6-8 \end{array}$$

Continued.

If I buy 7th of sugar for 75 cents
how much can I buy for 6 dolls

$$\begin{array}{r} 75 : 7 :: 600 \\ 75 \overline{) 4200} \\ \underline{375} \\ 450 \\ \underline{450} \end{array}$$

A man spends \$3.25 per week
what is that per annum?

$$\begin{array}{r} 7 : 325 :: 365 \\ 7 \overline{) 118625} \\ \underline{140} \\ 165 \\ \underline{195} \\ 175 \\ \underline{215} \\ 160 \\ \underline{160} \\ 45 \\ \underline{42} \\ 32 \\ \underline{28} \\ 45 \\ \underline{42} \\ 30 \\ \underline{28} \end{array}$$

For 4 pint 16grs for £3 2s 3d 38gr what was that per ounce

$$\begin{array}{r} 2 \text{ pt } 16 \text{ grs} : 1 :: 3 \text{ s } 2 \text{ s } 3 \text{ d } 38 \text{ gr} \\ 2 \text{ pt } 16 \text{ grs} : 1 :: 3 \text{ s } 2 \text{ s } 3 \text{ d } 38 \text{ gr} \\ 2 \text{ pt } 16 \text{ grs} : 1 :: 3 \text{ s } 2 \text{ s } 3 \text{ d } 38 \text{ gr} \\ 2 \text{ pt } 16 \text{ grs} : 1 :: 3 \text{ s } 2 \text{ s } 3 \text{ d } 38 \text{ gr} \\ 2 \text{ pt } 16 \text{ grs} : 1 :: 3 \text{ s } 2 \text{ s } 3 \text{ d } 38 \text{ gr} \\ 2 \text{ pt } 16 \text{ grs} : 1 :: 3 \text{ s } 2 \text{ s } 3 \text{ d } 38 \text{ gr} \\ 2 \text{ pt } 16 \text{ grs} : 1 :: 3 \text{ s } 2 \text{ s } 3 \text{ d } 38 \text{ gr} \\ 2 \text{ pt } 16 \text{ grs} : 1 :: 3 \text{ s } 2 \text{ s } 3 \text{ d } 38 \text{ gr} \\ 2 \text{ pt } 16 \text{ grs} : 1 :: 3 \text{ s } 2 \text{ s } 3 \text{ d } 38 \text{ gr} \\ 2 \text{ pt } 16 \text{ grs} : 1 :: 3 \text{ s } 2 \text{ s } 3 \text{ d } 38 \text{ gr} \end{array}$$

If I buy 76 yards of cloth for \$113
what did it cost per Ell
English.

$$\begin{array}{r} 76 : 11317 :: 4 \\ 76 \overline{) 45268} \\ \underline{304} \\ 368 \\ \underline{304} \\ 64 \\ \underline{64} \\ 8 \\ \underline{8} \\ 0 \end{array}$$

If horses and 4 oxen be worth
9 cows how many cows will 6
horses and 5 oxen be worth

$$\begin{array}{r} 9 : 4 :: 6 \\ 9 \overline{) 24} \\ \underline{18} \\ 6 \end{array}$$

Bought a silver cup weighing

Continued.

Merchant bought 270 quintals of a stuff 8 ft 8 in in length
and fish for \$180 freight \$32.70 a shadow of 6 feet how high is
and other charges \$32.10 that steep pole shadow measure
is 15.3 feet.

$$\begin{array}{r} 270 : 991.30 :: 1 \\ 270 \overline{) 99130} \\ \underline{270} \\ 721 \\ \underline{720} \\ 10 \\ \underline{10} \\ 0 \end{array}$$

Bought 12 pieces of cloth each 10 yds
at \$1.75 per yard what came
they to

$$\begin{array}{r} 10 : 175 :: 12 \\ 10 \overline{) 2100} \\ \underline{200} \\ 100 \\ \underline{100} \\ 0 \end{array}$$

36 2 grs 21 lb at £4 9s per cwt what came they to

$$\begin{array}{r} 36 : 21 :: 4 \\ 36 \overline{) 84} \\ \underline{72} \\ 12 \end{array}$$

Bought 4 pieces of Holland each
containing 24 Ells English for \$96
how much was that per yard

$$\begin{array}{r} 24 : 96 :: 4 \\ 24 \overline{) 96} \\ \underline{96} \\ 0 \end{array}$$

Bought 9 chests of tea weighing

$$\begin{array}{r} 112 : 708 :: 3717 \\ 112 \overline{) 70800} \\ \underline{784} \\ 240 \\ \underline{224} \\ 160 \\ \underline{168} \\ 20 \\ \underline{20} \\ 0 \end{array}$$

Continued.

$\frac{2 \text{ lbs}}{97.2} = \frac{2 \text{ lbs}}{607.5} :: \frac{2 \text{ lbs}}{11.3.33}$

[illegible]

$$\begin{array}{r} 75:110:110 \\ 75 \overline{)110} \quad 142 \frac{2}{3} \\ \underline{75} \\ 350 \\ \underline{300} \\ 500 \\ \underline{450} \\ 50 \\ 21 \overline{)756} \end{array}$$

$$\begin{array}{r} 1 : 3475 :: 13-4 \\ \quad \quad \quad 160 \\ \hline 208500 \\ 3475 \\ \hline 12 \overline{) 556000} \\ \underline{2046335} \quad 4 \\ 2316134 \end{array}$$

If a person, whose sent is \$145
pays \$12.63 of parish taxes how
much should a person pay whose
sent is \$378.

$$\begin{array}{r} 145 \cdot 1263 : 378 \\ \underline{1098} \\ 885 \\ \underline{329} \\ 145 \overline{) 4774.14} \quad (3292.5) \\ \underline{435} \\ 424 \\ \underline{290} \\ 1341 \\ \underline{1305} \\ 364 \\ \underline{290} \\ 740 \\ \underline{705} \\ 35 \end{array}$$

Inverse Proportion.

The Single Rule of three Inverse teaches by having three numbers given to find a fourth having the same proportion to the second as the first has to the third

More, requiring less is, when the third term is greater than the first and requires the fourth term to be less than the second.
Less, requiring more is when the third term is less than the first and requires the fourth term to be greater than the second.

Rule.

State and reduce the terms as in the rule of three direct then multiply the first and second terms together divide the produce by the third and the quotient will be the answer in the same denomination with the second term.

1 :: 144 :: 9
 9 | 144
 Just 6 acres

$$\begin{array}{r} 372 \\ 8 \overline{) 324} \\ \underline{324} \\ 0 \end{array}$$

Continued

Lent a friend 292 dollars for 6 months some time afterwards he lent me 806 dollars how long may I keep it to balance the debt

$$6 :: 292 :: 806$$

$$\begin{array}{r} 806 \overline{) 1752} \\ \underline{1612} \\ 140 \\ 30 \\ \underline{60} \\ 0 \end{array}$$

A garrison of 1200 has provisions for 9 months at the rate of 14 ounces per day how long will the provisions last at the same allowance if the garrison be reinforced by 400 men

$$1200 :: 9 :: 1200$$

$$\begin{array}{r} 1200 \overline{) 10800} \\ \underline{9000} \\ 1800 \\ 1800 \\ \underline{0} \end{array}$$

How much land at \$2.50 per acre should be given in exchange for 360 acres at \$3.75 per acre

$$\begin{array}{r} 360 \times 3.75 = 1350 \\ 1350 \div 2.50 = 540 \end{array}$$

A garrison had provisions for 8 months at the rate of 15 ounces to each man per day how much must be allowed per day in order that the provision may last 9 months

$$8 :: 15 :: 9$$

How much must the daily allowance be in order that the provisions may last 9 months after the garrison is reinforced

$$1200 :: 14 :: 1600$$

$$\begin{array}{r} 1600 \overline{) 16800} \\ \underline{11200} \\ 5600 \\ 5600 \\ \underline{0} \end{array}$$

What sum should be put to interest to gain as much in 12 months as \$127 would gain in 12 months

$$12 :: 127 :: 1$$

General Rule

For stating all questions whether direct or inverse

If a man perform a journey in 10 days when the day is 12 hours long in how many will he do it when the day is but 10 hours

$$10 :: 12 :: 10$$

There was a certain building raised in 5 months by 120 workmen but the same being demolished it is required to be built in two months it demands how many men must be employed about it

$$8 :: 120 :: 2$$

There is a cistern having 1 pipe which will empty it in 10 hours how many pipes of the same capacity will empty it in 20 minutes

$$10 :: 1 :: 24$$

If a piece of land 40 rods in length 3 inches broad will make a square how 48 rods

$$3 :: 144 :: 1$$

If a field will feed 6 cows 21 days how long will it feed 21 cows

$$21 :: 21 :: 6$$

Continued

A garrison had provisions for 8 months

Continued

If the quartered loaf weights 4 lb
pounds what is 8 lb per bushel
of wheat must it weight per bushel
wheat is 8 lb 2 the bushel

$$\begin{array}{r} 180 : 4 \frac{1}{2} :: 200 \\ 800 \\ 100 \\ \hline 1800 \end{array}$$

If a quarter of wheat afford 60
penny leaves how many eight
penny leaves may be obtained from
it

$$\begin{array}{r} 8 : 60 :: 10 \\ 800 \\ 56 \\ \hline 40 \\ 40 \\ \hline \end{array}$$

How many yards of horse 3 yards
long wide will line a road
which has in it 12 yards of comb
half yard wide

$$\begin{array}{r} 3 : 12 :: 2 \\ 3748 \\ \hline 24 \end{array}$$

If in 12 months 100 dollars gain
6 dollars interest what will gain
the same sum in 8 months

$$\begin{array}{r} 5 : 100 :: 12 \\ 51200 \\ \hline 240 \end{array}$$

General Rule

For stating all questions either direct or inverse
Place that number for the third term which signifies the same kind
of thing with what is sought and consider whether the number
sought will be greater or less If greater place the least of the other
terms for the first but if less place the greater for the first
and the remaining one for the second term
Multiply the second and third terms together divide the product by
the first and the quotient will be the answer

If my horse and saddle are worth 18 guineas and my horse be
worth six times so much as the saddle pray what is the value
of my horse

$$\begin{array}{r} 18 \\ 28 \\ \hline 144 \\ 36 \\ \hline 6504 \\ 784 \\ \hline 72 \end{array}$$

How many yards of matting that
is half a yard wide will cover a
room that is 18 feet wide and 30 long

$$\begin{array}{r} 2 : 18 :: 30 \\ 2 \\ 3036 \\ \hline 6 \end{array}$$

Suppose 800 soldiers were placed
in a garrison and their provisions
were computed sufficient
for two months how many sol-
diers must depart that the provision
may serve them 8 months

$$\begin{array}{r} 5 : 800 :: 2 \\ 51776 \\ \hline 320 \end{array}$$

continued.

If Borrowed 185 quarters of corn when the price was 19s here
much must I pay to indemnify the lender when the price is 17s 6d

$$\begin{array}{r}
 19 :: 185 :: 17.5 \\
 \hline
 12 \quad 228 \\
 228 \quad 1480 \quad 108 \\
 \hline
 370 \\
 370 \\
 208 \overline{) 42180} \quad 202.41 \\
 \underline{416} \\
 580 \\
 \underline{516} \\
 640 \\
 \underline{608} \\
 320
 \end{array}$$

Bought 45 barrels of beef at 8s 50 per barrel among which are 15
barrels whereof 4 are worth no more than 5 of the others how much
must I pay.

$$\begin{array}{r}
 45 \\
 \hline
 45 \\
 350 \\
 2050 \\
 123 \\
 \hline
 14314
 \end{array}$$

A and B depart for the same place and travel the same road
but A goes 5 days before B at the rate of 20 miles per day B follows
at the rate of 25 miles per day in what time and distance will
he overtake A.

$$\begin{array}{r}
 25 \\
 \hline
 500 \\
 500 \quad 5 \text{ at } 25 :: 20 \\
 \hline
 5000 \\
 1000
 \end{array}$$

$$\begin{array}{r}
 25 :: 100 :: 5 \\
 \hline
 5 \\
 25 \overline{) 1000} \\
 \underline{20}
 \end{array}$$

Double Rule of Three

This Double Rule of Three sometimes called Compound Proportion
trades by having five numbers given to find a sixth which if the
proportion be direct must bear the same proportion to the fourth and
fifth as the third does to the first and second. But if the proportion
be inverse the sixth number must bear the same proportion to
the fourth and fifth as the first does to the second and third.

Rule

1. State the question by placing the three conditional terms in such
order that that number which is the cause of gain less or action
may possess the first place that which denotes space of time or distance
of place the second and that which is the gain less or action the third.
2. Place the other two terms which move the question under those
of the same name.
3. Then if the blank place or term sought fall under the third
place the proportion is direct therefore multiply the three last terms
together for a dividend and the other two for a divisor then the
quotient will be the answer.
4. But if the blank fall under the first or second place the proportion
is inverse, therefore multiply the first second and last terms together
for a dividend and the other two for a divisor the quotient
will be the answer.

Continued

If Farmer sells 204 bushels worth of grain in 5 years when it is sold at 60 cents per bushel, what is it per bushel when he sells 1000 dollars per bushel in 18 years if he sell the same quantity yearly.

$$\begin{array}{r} 204 \\ 18 \\ \hline 1132 \\ 214 \\ \hline 3672 \end{array} \quad \begin{array}{r} 204 \\ 18 \\ \hline 1000 \\ 50000 \\ \hline 3672 \end{array} \quad \begin{array}{r} 3672 \end{array}$$

If a family of 2 persons spend 40 dollars in 8 months how much would be sufficient to maintain them 8 months if 5 persons more were added to the family.

$$\begin{array}{r} 2 \\ 16 \\ \hline 172 \\ 480 \\ \hline 5600 \\ 448 \\ \hline 1510400 \\ 45 \\ \hline 14 \\ 45 \\ \hline 90 \\ 90 \\ \hline 180 \end{array}$$

$$\begin{array}{r} 7 :: 12 :: 84 \\ 5 :: 100 \\ 84 \\ 420 \end{array} \quad \begin{array}{r} 1200 \\ 8400 \\ \hline 20 \end{array}$$

Supplement to the Double Rule of Three

If 6 men build a wall 20 feet long 8 feet high and 4 feet wide in 16 days in what time will 24 men build one 200 feet long 8 feet high and 8 thick.

$$\begin{array}{r} \text{feet} \\ 200 \\ \hline 1200 \\ 1200 \\ \hline 4800 \end{array} \quad \begin{array}{r} \text{men} \\ 6 \\ 24 \\ \hline 480 \\ 1200 \\ \hline 11520 \end{array} \quad \begin{array}{r} \text{days} \\ 16 \\ 10 \\ \hline 160 \\ 9600 \\ \hline 11520 \end{array} \quad \begin{array}{r} \text{feet} \\ 480 \\ 9600 \\ \hline 11520 \end{array}$$

If 40 lb at Boston make 36 at Amsterdam and 20 lb at Amsterdam make 116 at Dantrick how many lb at Boston are equal to 200 lb at Dantrick?

$$\begin{array}{r} 30 :: 96 :: 40 \\ 36 \end{array} \quad \begin{array}{r} 96 \\ 100 \end{array} \quad \begin{array}{r} 116 :: 100 :: 200 \\ 250 \\ \hline 1600 \\ 200 \\ \hline 1120000 \end{array} \quad \begin{array}{r} 2240 \end{array}$$

If the freight of 12 but 2 per lb 275 miles cost \$2775 how far may 60 but 3 per lb be shipped for \$23475?

$$\begin{array}{r} 12 :: 2 :: 6 \\ 4 \\ \hline 50 \\ 28 \\ \hline 406 \\ 1006 \\ \hline 1406 \end{array} \quad \begin{array}{r} 60 :: 3 \\ 24 \\ \hline 120 \\ 1204 \\ \hline 6804 \end{array} \quad \begin{array}{r} 275 :: 275 \\ 1406 \\ \hline 14431 \\ 4725 \\ \hline 16434 \\ 16434 \\ \hline 14431 \\ 16434 \\ \hline 3873820 \\ 258258000 \\ 6456450 \end{array} \quad \begin{array}{r} 18901512 \end{array}$$

Continued

an usurer put out 75 dollars at 7 men can make 84 rods of wall
interest and at the end of eight in 6 days in what time will 10
months received for principal and men make 180 rods.

interest 75 dollars demand at
what rate percent he received
interest 7 months

75 : 8 :: 4 : 75
100 : 12 :: 600 : 1200

1200 : 1200 :: 1200 : 1200

If the freight of 9 bbls of sugar each weighing 12 but 20 leagues
cost £16 what must be paid for the freight of 50 bbls ditto
each weighing 24 but 100 leagues.

12 : 108 :: 16 : 180
108 : 16 :: 12 : 108

108 : 16 :: 12 : 108

108 : 16 :: 12 : 108

108 : 16 :: 12 : 108

108 : 16 :: 12 : 108

108 : 16 :: 12 : 108

108 : 16 :: 12 : 108

108 : 16 :: 12 : 108

108 : 16 :: 12 : 108

108 : 16 :: 12 : 108

108 : 16 :: 12 : 108

108 : 16 :: 12 : 108

Practice Practice

Practice is a contraction of the Rule of Three Direct when the first
term happens to be an unit or one it has its name from its daily
use among Merchants and Tradersmen being an easy and concise
method of working most questions which occur in trade and
business

Case 1

When the price of 1 yard pound be consists of farthings only If it
be one farthing take a fourth part of the quantity if a half penny
take a half of three farthings take a half and a fourth of the quantity
and add them this gives the value in pence which must be
reduced to pounds.

What will 263 yards cost at 3gr
per yard Ans 16s 5 1/2d

263 : 3 :: 1 : 789
789 : 16s 5 1/2d :: 1 : 16s 5 1/2d

What will 816 yards cost at 1gr
per yard Ans 17s

816 : 1 :: 1 : 816
816 : 17s :: 1 : 17s

What will 27 yards cost at 3gr
per yard Ans 2s 0 3/4d

27 : 3 :: 1 : 81
81 : 2s 0 3/4d :: 1 : 2s 0 3/4d

What will 263 yards cost at
1 cent per yard Ans 2s 6d

263 : 1 :: 1 : 263
263 : 2s 6d :: 1 : 2s 6d

What will 816 yards at 5 mills
per yard Ans 4s 4 1/2d

816 : 5 :: 1 : 4080
4080 : 4s 4 1/2d :: 1 : 4s 4 1/2d

What will 120 yards cost
7 mills per yard Ans 8s 8 1/2d

120 : 7 :: 1 : 840
840 : 8s 8 1/2d :: 1 : 8s 8 1/2d

Continued.

What will 121 yards cost at 9d per yard. Ans £3.5d
What will 171 yards cost at 13d per yard. Ans £5.5d

$$\begin{array}{r} 121 \\ 9 \overline{) 1089} \\ \underline{108} \\ 9 \end{array}$$

$$\begin{array}{r} 171 \\ 13 \overline{) 2223} \\ \underline{222} \\ 3 \end{array}$$

Case 2

When the price of 1 yd is consists of pence or of pence and farthings if it be an even part of a shilling find the value of the given quantity at 1s per yard the quantity itself expresses the price at 1s per yard if there are quarters he write for 1/4 sd for 1/2 sd for 3/4 sd and divide by that even part which the price is of 1 shilling if the price be not an aliquot or even parts of one shilling it must be divided into two or more aliquot parts calculate for these separately and add the values the answer will be obtained in shillings which must be reduced to pounds.

What will 128 1/2 yards cost at 7d per yard. Ans £16.11s 5 3/4

$$\begin{array}{r} 128.5 \\ 7 \overline{) 900} \\ \underline{900} \\ 0 \end{array}$$

What will 68 1/2 yards come to at 2 1/2 d per yard. Ans £7.2s 10d

$$\begin{array}{r} 68.5 \\ 2.5 \overline{) 171.25} \\ \underline{171} \\ 25 \end{array}$$

What will 6 1/2 yards cost at 10 d per yard. Ans £2.1s 5 3/4

$$\begin{array}{r} 6.5 \\ 10 \overline{) 65} \\ \underline{65} \\ 0 \end{array}$$

What will 88 1/2 yards cost at 8 1/2 d per yard. Ans £13.10s 0 1/2

$$\begin{array}{r} 88.5 \\ 8.5 \overline{) 752.25} \\ \underline{752} \\ 25 \end{array}$$

Continued. C D

Case 3

If the price of 1 yd is shillings and pence and an even part of 1s Divide the value of the given quantity at 1s per yard by that even part which the price is of 1s the quotient will be the answer.

What will 248 yards cost at 1s 4d per yard. Ans £54

$$\begin{array}{r} 248 \\ 1.5 \overline{) 372} \\ \underline{372} \\ 0 \end{array}$$

What will 167 1/2 yards cost at 3s 4d per yard.

$$\begin{array}{r} 167.5 \\ 3.5 \overline{) 586.25} \\ \underline{586} \\ 25 \end{array}$$

Case 4

When the price of 1 yd is shillings pence and farthings and not an even part of 1s Multiply the value of the quantity at 1s per yard by the number of shillings for the pence and farthings take parts as in case 2. the results added will give the answer which must be reduced to pounds.

If the price be shillings only and an even number multiply by half the price or even number of shillings for one yard double the unit figure of the product for shilling the remaining figure will be pence.

What will 176 yards cost at 12s per yard. Ans £105.12s

$$\begin{array}{r} 176 \\ 12 \overline{) 2112} \\ \underline{2112} \\ 0 \end{array}$$

What will 56 yards cost at 7s 6d per yard.

$$\begin{array}{r} 56 \\ 7.5 \overline{) 420} \\ \underline{420} \\ 0 \end{array}$$

Continued.

What will 121 yards cost at 9d. What will 176 yards cost at 13d.
per yard. Ans 5s 3d. 2 mils per yard.

$$\begin{array}{r} 121 \\ 9 \overline{) 1089} \\ \underline{1089} \\ 0 \end{array}$$

$$\begin{array}{r} 176 \\ 13 \overline{) 2288} \\ \underline{2288} \\ 0 \end{array}$$

Case 2

When the price of 1 yd is consists of pence and farthings if it be an even part of a shilling find the value of the given quantity at 1s per yard the quantity itself expresses the price at 1s per yard. if there are quarters he write for $\frac{1}{4}$ sh for $\frac{1}{2}$ sh for $\frac{3}{4}$ sh and divide by that even part which the price is of 1 shilling if the price be not an aliquot or even parts of one shilling it must be divided into two or more aliquot parts calculate for those separately and add the values the answer will be obtained in shillings which must be reduced to pounds.

What will 168 $\frac{1}{2}$ yards cost at 7d per yard. Ans £10-11s 8 $\frac{1}{2}$ d

$$\begin{array}{r} 168.5 \\ 7 \overline{) 1179.5} \\ \underline{1179.5} \\ 0 \end{array}$$

What will 685 $\frac{1}{2}$ yards come to at 2 $\frac{1}{2}$ d per yard. Ans £7-2s 10 $\frac{1}{2}$ d

$$\begin{array}{r} 685.5 \\ 2.5 \overline{) 1713.75} \\ \underline{1713.75} \\ 0 \end{array}$$

What will 648 $\frac{1}{2}$ yards cost at 10d per yard. Ans £21-1s 8 $\frac{1}{2}$ d

$$\begin{array}{r} 648.5 \\ 10 \overline{) 6485} \\ \underline{6485} \\ 0 \end{array}$$

What will 885 $\frac{1}{2}$ yards cost at 8 $\frac{1}{2}$ d per yard. Ans £23-10s 0 $\frac{1}{2}$ d

$$\begin{array}{r} 885.5 \\ 8.5 \overline{) 7526.75} \\ \underline{7526.75} \\ 0 \end{array}$$

Continued. C D

Case 3

If the price of 1 yd be shillings and pence and an even part of £1 Divide the value of the given quantity at £1 per yard by that even part which the price is of £1 the quotient will be the answer.

What will 648 yards cost at 1s 8d per yard. Ans £54

$$\begin{array}{r} 648 \\ 1.8 \overline{) 1166.4} \\ \underline{1166.4} \\ 0 \end{array}$$

What will 167 $\frac{1}{2}$ yards cost at 3s 4d per yard.

$$\begin{array}{r} 167.5 \\ 3.6 \overline{) 603} \\ \underline{603} \\ 0 \end{array}$$

Case 4

When the price of 1 yd be shillings pence and farthings and not an even part of £1 Multiply the value of the quantity at 1s per yard by the number of shillings for the pence and farthings take parts as in case 2 the results added will give the answer which must be reduced to pounds.

If the price be shillings only and an even number multiply by half the price or even number of shillings for one yard double the unit figure of the product for shilling the remaining figure will be pence.

What will 176 yards cost at 12s per yard. Ans £105-12s

$$\begin{array}{r} 176 \\ 12 \overline{) 2112} \\ \underline{2112} \\ 0 \end{array}$$

What will 56 yards cost at 7s 6d per yard.

$$\begin{array}{r} 56 \\ 7.5 \overline{) 420} \\ \underline{420} \\ 0 \end{array}$$

What will 105 yards cost at 12s 6d per yard.

$$\begin{array}{r} 105 \\ 12.5 \overline{) 1312.5} \\ \underline{1312.5} \\ 0 \end{array}$$

Practice

Case 3

When the price of 1yd. is in pence shillings and pence multiply the quantity by the pence and if the shillings and pence are even part of a pound divide the given quantity by that even part and add the quotient to the pence for the answer but if they are not an even part of £1 take parts of parts and add them together. Or you may reduce the pound in the price of 1yd. to shillings and pence as in the case before.

What will 163 yards cost at £2 8s per yard. Observe £391-4s

$$\begin{array}{r} 163 \\ \times 28 \\ \hline 1304 \\ 3260 \\ \hline 4584 \end{array}$$

What is the value of 84 yards at £2-14s per yard

$$\begin{array}{r} 84 \\ \times 214 \\ \hline 336 \\ 1680 \\ \hline 1816 \end{array}$$

Supplement to Practice

What will 745 3/4 yards cost at 11d per yard

$$\begin{array}{r} 745 \frac{3}{4} \\ \times 11 \\ \hline 8197 \frac{3}{4} \end{array}$$

What will 35 1/4 yards cost at 11d per yard

$$\begin{array}{r} 35 \frac{1}{4} \\ \times 11 \\ \hline 388 \frac{1}{4} \end{array}$$

What will 964 yards cost at 12s 6d per yard

$$\begin{array}{r} 964 \\ \times 126 \\ \hline 12132 \\ 19280 \\ 9640 \\ \hline 121320 \end{array}$$

What will 316 yards cost at 37d per yard

$$\begin{array}{r} 316 \\ \times 37 \\ \hline 2212 \\ 10912 \\ \hline 11788 \end{array}$$

Continued.

What will 567 1/2 yards cost at 11d per yard

$$\begin{array}{r} 567 \frac{1}{2} \\ \times 11 \\ \hline 6243 \frac{1}{2} \end{array}$$

What will 912 1/2 yards cost at 2d per yard

$$\begin{array}{r} 912 \frac{1}{2} \\ \times 2 \\ \hline 1825 \end{array}$$

What will 845 yards cost at 8s per yard

$$\begin{array}{r} 845 \\ \times 8 \\ \hline 6760 \end{array}$$

What will 154 1/2 yards come to at 2s 4d per yard

$$\begin{array}{r} 154 \frac{1}{2} \\ \times 24 \\ \hline 3708 \end{array}$$

What will 67 1/2 yards cost at 12s 2d per yard

$$\begin{array}{r} 67 \frac{1}{2} \\ \times 122 \\ \hline 8235 \end{array}$$

What will 913 1/2 yards cost at 6d per yard

$$\begin{array}{r} 913 \frac{1}{2} \\ \times 6 \\ \hline 5481 \end{array}$$

What will 76 yards cost at 2s per yard

$$\begin{array}{r} 76 \\ \times 2 \\ \hline 152 \end{array}$$

What will 91 yards come to at 16s per yard

$$\begin{array}{r} 91 \\ \times 16 \\ \hline 1456 \end{array}$$

What will 96 yards cost at 10s 1d per yard

$$\begin{array}{r} 96 \\ \times 101 \\ \hline 9696 \end{array}$$

What will 845 yards cost at 8s per yard

$$\begin{array}{r} 845 \\ \times 8 \\ \hline 6760 \end{array}$$

Continued

What will 75 yards cost at £3 4s per yard
What will 59 yards come to at £6 7s 6d per yard

$$\begin{array}{r} 3-3-4 \\ 20 \\ 63 \\ 12 \\ 760 \\ 75 \\ 5800 \\ 53200 \\ 12157000 \\ 204750 \\ 237-10 \end{array}$$

What will 59 1/2 yards come to at £3 6s 8d per yard

$$\begin{array}{r} 800 \\ 3 \\ 47200 \\ 600 \\ 1247800 \\ 103987-4 \\ 199-3-4 \end{array}$$

What will 14 yards of flannel at 2s 6d per yard come to

$$\begin{array}{r} 130 \\ 12530 \\ 227 \\ 1-7-6 \end{array}$$

$$\begin{array}{r} 1-7-6 \\ 22 \\ 24 \\ 113300026 \\ 330 \\ 330 \end{array}$$

$$\begin{array}{r} 6-7-6 \\ 20 \\ 1246 \\ 1530 \\ 59 \\ 13770 \\ 7650 \\ 1240070 \\ 207522-6 \\ 376-2-6 \end{array}$$

What will 18 yards cost at £4 6s per yard

$$\begin{array}{r} 4-6 \\ 20 \\ 86 \\ 80 \\ 688 \\ 518 \\ 205848 \end{array}$$

What will 13 1/2 yd of cotton cost at 3s 4d per yd

$$\begin{array}{r} 13 \\ 40 \\ 12520 \\ 2043-4 \\ 2-3-4 \end{array}$$

$$\begin{array}{r} 2-3-4 \\ 20 \\ 43 \\ 13520 \\ 1240 \\ 3-4 \end{array}$$

Extraction of the Square Root

To extract the square root of any number is to find another number which multiplied by or into itself would produce the given number and after the root is found such a multiplication is a proof of the work!

Rule

1. Distinguish the given number into periods of two figures each by putting a point over the place of units another over the place of hundreds and so on which points show the number of figures the root will consist.
2. Find the greatest square number in the first or left hand period place the root of it at the right hand of the given number after the manner of a quotient in division for the first figure of the root and the square number under the period and subtract it therefrom and to the remainder bring down the next period for a dividend.

3. Place the double of the root already found on the left hand of the dividend for a divisor.

4. Seek how often the divisor is contained in the dividend except the right hand figure and place the answer in the root for the second figure of it and likewise on the right hand of the divisor.

What is the square root of 103426

$$\begin{array}{r} 103426 \\ 326 \\ 62134 \\ 124 \\ 1411026 \\ 171 \\ 142638556 \end{array}$$

What is the square root of 43264

$$\begin{array}{r} 43264 \\ 208 \\ 43264 \end{array}$$

Continued.

What is the square root of 9645192360241

$$\begin{array}{r} 9645192360241 (3125671 \\ 61 \overline{) 64} \\ \underline{6205} 35194 \\ 9 \overline{) 2100} 416736 \\ \underline{3725} 36 \\ 21127 \overline{) 4410000} \\ \underline{4347889} \\ 211241 \overline{) 6211341} \\ \underline{211341} \end{array}$$

What is the square root of 998001

$$\begin{array}{r} 998001 (999 \\ 81 \overline{) 81} \\ 189 \overline{) 882} \\ \underline{17} 01 \\ 1989 \overline{) 17901} \\ \underline{17901} \end{array}$$

What is the square root of 23409

$$\begin{array}{r} 23409 (153 \\ 25 \overline{) 25} \\ \underline{1} 34 \\ 305 \overline{) 309} \\ \underline{309} \end{array}$$

What is the square root of 10308921984001

$$\begin{array}{r} 10308921984001 (3210751 \\ 9 \overline{) 9} \\ 62 \overline{) 120} \\ \underline{124} \\ 541 \overline{) 489} \\ \underline{541} \\ 14207 \overline{) 482198} \\ \underline{449449} \\ 642145 \overline{) 3274940} \\ \underline{3210725} \\ 6421501 \overline{) 4421501} \\ \underline{6421501} \end{array}$$

Supplement to the Square Root

A Clergyman's glebe consists of three fields the first contains 5 acres 2 r 12 q the second 2 acres 2 r 15 q the third 1 acre 1 r 14 q in exchange for with the barons agree to give him a square field equal to all the three bought the side of the square. Ans 39 poles

A.	R.	Q.
5	2	12
2	2	15
1	1	14
8	5	41
3	9	0
15	21	39
69	6	21
6	21	

A general has an army of 4096 men how many ranks must he place in rank and file to form them into a square

$$\begin{array}{r} 4096 (64 \\ 124 \overline{) 496} \end{array}$$

There is a circle whose diameter is 4 inches what is the diameter of a circle 4 times as large.

$$\begin{array}{r} 4 \\ 4 \overline{) 16} \\ \underline{16} \\ 0 \end{array}$$

There are two circular ponds in a gentleman's pleasure ground the diameter of the less is 100 feet and the greater is three times as large. What is its diameter

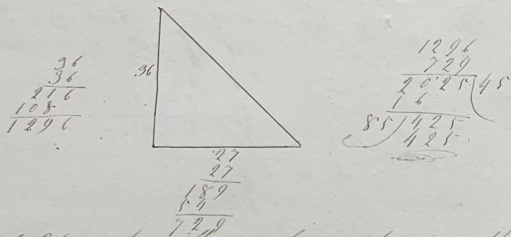
$$\begin{array}{r} 100 \\ 3 \overline{) 300} 1732 \\ 27 \overline{) 200} \\ \underline{189} \\ 343 \overline{) 1100} \\ \underline{1029} \\ 3862 \overline{) 6624} \\ \underline{3766} \\ 176 \end{array}$$

If the diameter of a circle be 12 inches what will be the diameter of another circle half so large.

$$\begin{array}{r} 12 \\ 2 \overline{) 24} 848 \\ 144 \overline{) 800} \\ \underline{856} \\ 1488 \overline{) 14400} \\ \underline{13504} \\ 896 \end{array}$$

Continued

A wall is 36 feet high and a ditch before it is 45 feet wide, what is the length of a ladder that will reach to the top of the wall from the opposite side of the ditch. Ans 51 feet



A line of 36 yards will exactly reach from the top of a fort to the opposite bank of a river known to be 45 yards broad the height of the wall is required

$$\begin{array}{r} 24 \\ 24 \\ \hline 96 \\ 48 \\ \hline 576 \end{array} \quad \begin{array}{r} 36 \\ 36 \\ \hline 108 \\ 1296 \\ 576 \\ \hline 720 \end{array} \quad \begin{array}{r} 40 \\ 320 \\ 276 \\ \hline 528 \\ 4400 \\ 4224 \\ \hline 5363 \\ 17600 \\ 16089 \end{array}$$

Glasgow is 44 miles west from Edinburgh Perth is exactly south from Edinburgh and 49 miles in a straight line from Glasgow what is the distance between Edinburgh and Perth

$$\begin{array}{r} 44 \\ 44 \\ \hline 176 \\ 176 \\ \hline 1936 \end{array} \quad \begin{array}{r} 49 \\ 49 \\ \hline 126 \\ 2401 \end{array} \quad \begin{array}{r} 2451 \\ 1936 \\ \hline 465 \\ 41 \\ \hline 41 \\ 41 \\ \hline 421 \\ 2400 \\ 2125 \\ \hline 275 \end{array}$$

Cube Root

To extract the cube root of any number is to find another number which multiplied into its square shall produce the given number

Rule Rule

1. Separate the given number into periods of three figures each by putting a point over the unit figure and every third figure before the place of units.
2. Find the greatest cube in the left hand period and put its root in the quotient.
3. Subtract the cube thus found from the said period and to the remainder bring down the next period and call this the dividend.
4. Multiply the square of the quotient by 30 calling it the triple square and the quotient by 30 calling it the triple quotient and the sum of these call the divisor.
5. Seek how often the divisor may be had in the dividend and place the result in the quotient.
6. Multiply the triple square by the last quotient figure and write the product under the dividend multiply the square of the last quotient figure by the triple quotient and place this product under the last under all set the cube of the last quotient figure and call their sum the subtrahend.
7. Subtract the subtrahend from the dividend and to the remainder bring down the next period for a new dividend with which proceed as before and so on till the whole be finished.

Continued

What is the cube root of 21024576. Ans 276

$$\begin{array}{r} 21024576 \overline{) 276} \\ 8 \overline{) 1260} \\ 1584 \\ 840 \\ 2740 \\ 543 \\ 11683 \\ 219510 \\ 1341576 \\ 1312260 \\ 29160 \\ 216 \\ 1341576 \end{array}$$

$$\begin{array}{l} 4 \times 200 = 1200 \\ 2 \times 50 = 100 \\ 1200 \end{array}$$

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$$1212200$$

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Supplement to the Cube Root

If a bullet 6 inches in diameter weight 32 lb what will a bullet of the same metal weight whose diameter is 3 inches

$$\begin{array}{r} 6 \\ \times 32 \\ \hline 192 \\ 1920 \\ \hline 1920 \end{array}$$

What is the side of a cubical mound equal to one 288 feet long 216 broad and 48 feet high.

$$\begin{array}{r} 288 \\ \times 216 \\ \hline 1728 \\ 5760 \\ 23040 \\ \hline 62208 \end{array}$$

$$\begin{array}{l} 1 \times 1 \times 300 = 300 \\ 1 \times 30 = 30 \end{array}$$

$$\begin{array}{l} 300 \times 4 = 1200 \\ 4 \times 4 \times 30 = 480 \\ 4 \times 4 \times 4 = 64 \end{array}$$

$$\begin{array}{r} 350 \overline{) 11985} \\ 1200 \\ \hline 480 \\ 64 \end{array}$$

$$\begin{array}{r} 59220 \overline{) 241984} \\ 235200 \\ \hline 2720 \\ 64 \end{array}$$

$$\begin{array}{r} 14 \\ \times 14 \\ \hline 196 \\ 19600 \\ \hline 19800 \end{array}$$

$$\begin{array}{r} 18800 \\ \times 4 \\ \hline 75200 \end{array}$$

The Poachers.
1 When I was bound apprentice
In poor Lincolnshire
Full well I served my master
For more than seven long years
Till I first took to preaching
As you shall quickly hear
For its my delight of a shiny night
In the season of the year

2 As me and my comrade
Were setting of a snare
For there we spied a gamekeeper
For him we did not care
For we can wrestle fight my boys
Jump over any where
For its my delight

3 As me and my comrade
Were setting four or five
In taking of them up again
We caught the hair alive my boys
And through the woods did steer
For its my delight

4 We throw'd him o'er our shoulder
And then we trudged home
We took him to a neighbor's house
And sold him for a crown
We sold him for a crown my boys
But I did not tell you where
For its my delight

1 Sweet Jolly Gordon you are my darling
Sweet Jolly Gordon I do for this
And my sweet girl along with me
I wish I was in Gainsborough

2 To hang over my love and I
I wish I had some jolly headman
And neither have I wings to fly
For the sea are deep and I cannot swim

3 Where love and care would not trouble me
You sailing over the deepest waters
So far from land as one could see
I wish my love and I were sailing

4 I wish my love was one red rose
And planted down by garden wall
That in her bloom I might fall
And I myself was one drop of dew

5 I'll lean my head on a cask of brandy
When I am drinking of in drinking
When shall I gain that young lady fair
That is my fancy I do desire

6 I will fling up the whole world know it
My heart is set up in my breast
I am deep in love but I dare not show it
Why I am delighted so by this

7 And till to me the very reason
Come and you dance upon my knee
Sweet Jolly Gordon you are my darling
Sweet Jolly Gordon I do for this

Sweet Jolly Gordon

write I was in Lord's castle
the noblest of men as I do
the pretty girl they all adore me
we were until I drink

Samuel Rusk

8 Here's success to every gentleman
That lives in Leicestershire
Here's bad luck to every gamekeeper
That will not sell his deer
And here's success to poaching
For I do think it fair
For its my delight

Mr. Samuel Rusk

Butter And Cheese

1 I've just come out before you,
Content you'll hear me sing,
Although it never was in my power
All for to do any such thing;
Yet since you're inclined to hear me sing,
I'll try what I can do,
And when I come to the chorus,
Why you may join it too.

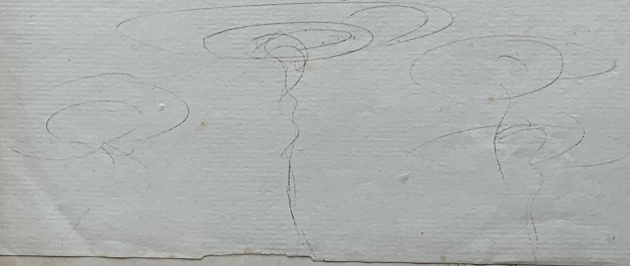
2 A cook I had for my sweetheart,
I'll tell you the reason why,
At Christmas time she baked plum pudding,
And likewise made mince pie;
She said in the cupboard she had good store;
And she did keep the keys,
One pocket I should fill with butter,
And the other should fill with cheese,
3 One pocket I filled with butter,
About a pound or more,
And cutting off the cheese, sir,
Brought the Master to the door;
I being in a quandary what to do,
She bade me the chimney fly,
So up into the chimney
Went butter and cheese and I,

4 I being up the chimney,
And seated at my ease,
The fire began to melt the butter,
Likewise to toast the cheese;
The Master being in the house,
He thought the devil was there,
For every drop that fell in the fire,
Oh Lord how it did flare,

5 I went into a tavern

As may I with myself agree,
And never covet what I see!
Content me with a humble shade,
My passions fanned, my wishes laid;
For while our wishes wildly roll,
We banish quiet from the soul.
Is thus the busy beat the air,
And misers gather wealth and care.

Be full, ye courts; be great, who will;
Search for peace with all your skill;
Open wide the lofty door;
Seek her on the marble floor;
In vain ye search, she is not there;
In vain ye search the domes of care!
Grass and flowers, quiet breads,
On the meads and mountain-heads,
Along with Pleasure close allied
Ever by each others side;
And often by the murmuring rill,
Hears the thrush while all is still,
Within the groves of Groggar Hill.



Wm. Samuel

Wm. Samuel

The Master went to the top of the house,
But the devil a word could I say,
Thinking that some worth
Should drive the devil away;
And was enough it came howling down,
Oh, Lord how it did fall!
And I came tumbling after
With buller and chace and all.

Granger Hill

A little rub, a little sway,
A sun-beam in a winter's day,
Is all the proud, the mighty have
Between the cradle and the grave.

And see the rivers how they run
Thro' woods and meads, in shade and sun;
Sometimes swift, sometimes slow;
Where succeeding wave they go
A various journey to the deep,
Like human life to endless sleep:
Thus is nature's pasture wrought
To instruct our wandering thought,
Thus she dresses green and gay,
To disperse our cares away.

See on the mountain's southern side,
Where the prospect opens wide,
Where the evening gilds the tide,
How close and small the hedges lie!
What streaks of meadows cross the eye!
A step, methinks, may pass the stream,
So little distant dangers seem.

Who we mistake the future's face,
Eyed thro' Rogers deluding glass,
As gay summits, soft and fair,
Clad in colors of the air,
Which, to those who journey near,
Barren, brown, and rough appear;
Still we tread the same coarse ways;
The present's still a cloudy day.

But the dawn is over and I say
The Master went to the top of the house

5 I went into a tavern
And there all night I stay'd
The landlady's fair laughter
Of me was not afraid
She hugged and she kiss'd me too
She held me by the hand
She whisper'd to her mamma dear
I love this Irishman.

6 O daughter dearest daughter
What do you mean to do
To save your country, through
With a man you do not know
O mamma dearest mamma
Do the best and all you can
For I mean to save my country through
With this young Irishman

7 Then I went over to Jersey
The girls they dress'd so neat
There're handsome in every feature
Their kisses are so sweet
There's handsome Jane and Sally
And fair young Betsey too
And all along with one of these maids
I'll save my country through
8 Faith she shall ride in my coach
And I will ride before her
And in spite of foes the postet crows
I always will adore her
I'll embrace her late and early
And I'll do the best I can
I'll cause her to bless the day
She wed with the Irishman

Mr Samuel Rush

I went up to Dublin county
 And there among the streets
 And as for conversation
 As I could not have much
 But I made signs and signals
 Gave the gods to understand
 That I was a poor creature
 And in this manner

I am a poor creature
 And in this manner
 I went up to Dublin county
 And there among the streets
 And as for conversation
 As I could not have much
 But I made signs and signals
 Gave the gods to understand
 That I was a poor creature
 And in this manner

The Evening
 Dublin

Green on the Cape

I am a poor creature
 And in this manner
 I went up to Dublin county
 And there among the streets
 And as for conversation
 As I could not have much
 But I made signs and signals
 Gave the gods to understand
 That I was a poor creature
 And in this manner

a young Lady

The days, the weeks, the months of bliss,
 That we, my love, have passed together,
 The impression of your loving kiss
 Shall live as bright in the summer weather.

Shall long remain fixed in my mind,
 To please me when my spirit's low
 For they still leave a joy behind,
 To often warm me of you.

Oh! Remember well how sweet
 All nature seemed when through the woods
 You trod on those bewitching feet,
 Beneath the mossy tints of moss.

But be those feet so swift, so airy,
 As when I see them glide along
 Light as the motion of a fairy,
 That take it to the giddy'son

A large, stylized, handwritten letter 'Q' in brown ink on aged, textured paper. The letter is formed with a single continuous stroke, starting with a small loop at the top left, followed by a large, open loop that curves around to the right and then down. The paper is light brown with visible fibers and some small dark spots.

[Handwritten notes:]

Van Schoorck
Schoorck
Lyssege
yford