

## Help Card 1a Estimating and Volume

### Converting feet into metres

1 foot = 30 cm 100cm = 1m

*Example*

17 feet =  $17 \times 30 \text{ cm} = 510 \text{ cm}$

$510 \text{ cm} = 510 \div 100 = 5.1 \text{ m}$

### Calculating Volume

Assume that each room or compartment is a cuboid.

Volume = length x width x height

### Calculating "cargo density"

*Example:*

200 slaves are packed into a room that is 9m long by 5m wide and is 1.5m high

Calculate the volume:  $9 \times 5 \times 1.5 = 67.5\text{m}^3$

Cargo density = number of slaves  $\div$  volume

$$200 \div 67.5 = 2.962962\dots$$

Rounding: 2.96 slaves per m<sup>3</sup>

## Help Card 1b The Cost of Shipping

### Converting old money into new money

Old money was pounds (£), shillings (s) and pence (d).

There were 20 shillings in a pound and 12 pennies in a shilling.

*Example*

Convert £2 19s

There were 20 shillings in a pound so one shilling is worth 5p ( $100 \div 20 = 5$ )

$$19 \times 5 = 95$$

So £2 19s = £2.95

### Calculating percentages

*Example*

7% of £7560

$$\frac{7}{100} \times 7560 = 529.20$$

So 7% of £7560 = £529.20

(Leave your answers in pounds and pence)

You may have your own, different method. Use the method you prefer.

**Transactions***Example*

Use            "*Traded 2 half barrels of gunpowder for:  
Men 0 Women 1 Boys 0 Girls 0*"

You give:    30 half barrels of gunpowder

You get:     15 women

*Example*

Use            "*A male slave cost ..... 12 guns*"

(You can read this on the background notes)

You want to buy 20 male slaves

You pay 20 x 12 = 240 guns.

*Remember to total up all the goods that you have exchanged for slaves and write the amounts in the cargo list.*

**Calculating the percentage of the population that were slaves.***Example*

Delaware in 1860:

Number of slaves = 1798

Total population = 112,218

$$\frac{1798}{112218} \times 100 = 1.60223.....$$

Rounding:

Percentage of Delaware that were slaves = 1.6%

**Calculating the price of rum.**

There 240 old pennies in a pound (12 pennies in a shilling and 20 shillings in a pound)

*Example*

If rum costs 6 and a half pennies a gallon to make and we need 120 gallons to buy a slave:

The price would be  $120 \times 6.5 = 780$  pennies

There are 240 pennies in a pound:

Price in pounds =  $780 \div 240 = \underline{\pounds 3.25}$

**Calculating Percentage profit***Example*

If you buy at £4.80 and sell at £15.60, what is your percentage profit?

Your profit in pounds:  $15.60 - 4.80 = 10.80$

This is then calculated as a percentage of the buying price:

$$\frac{10.80}{4.80} \times 100 = 225$$

You make 225% profit.

**Using cowry shells***Example*

A slave cost 500 lbs of cowries and cowries were worth £2.90 per hundredweight (cwt).

A hundredweight is 112 pounds

What was the price of this slave?

(Cwt is the shorthand for hundredweight.)

You need to find how many hundredweights you need:

$$500 \div 112 = 4.4642857$$

(Don't round until the end of your calculation)

The price per hundredweight is £2.90

$$\text{Total price} = 4.4642857 \times 2.90 = 12.9464\dots$$

Rounding: The price of a slave was £12.95