

Answers Sheet

Direct and Inverse Proportion

1.

2000 bottles in 4 hours

($\div 4$)

500 bottles in 1 hour

($\times 5$)

2500 bottles in 5 hours

5

2.

£0.70 for 5 bananas

($\div 5$)

£0.14 for 1 banana

($\times 8$)

£1.12 for 8 bananas

£1.12

3.

5 tins of beans costs £1.50

($\div 5$)

1 tin of beans costs £0.3

($\times 2$)

2 tins of beans costs £0.6

$2.76 - 0.6 = £2.16$

£2.16 for 3 tins of potatoes

$£2.16 \div 4 = \mathbf{£0.72}$

4.

600 sheets weight 2.4kg

($\div 10$)

60 sheets weight 0.24kg

0.24kg

5.

Inverse Proportion

More painters = less time

3 painters take 6 days

$$3 \times 6 = 18$$

So, 1 painter will need 18 days to complete the same job

6.

$$4 \times 3 = 12$$

One machine would take 12 days to produce the same batch of products

7.

$$5 \times 9 = 45$$

1 painter will take 45 days to complete the work.

So, if we have 3 painters, then:

$$3 \text{ painters} = 45/3 = 15 \text{ days}$$

Three painters would take 15 days to complete the same job

8.

$$7 \times 8 = 56 \text{ hours}$$

So, 56 hours needed by 1 machine

Hence, if we have 6 machines, then:

$$56 / 6 = 9.3$$

9.3 hours to produce 1400 LCDs

9.

$$x = 1000 / y$$

$$x = 1000 / 40$$

$$x = 25$$

10.

$$y = 0.4x$$

$$y = 0.4 (9)$$

$$y = 3.6$$

11.

$$w = 30l$$

$$88 = 30l$$

$$88/30 = l$$

$$\text{lenght} = 2.93\text{cm}$$

12.

$$F = 36 / x^2$$

$$F = 36 / 5^2$$

$$F = 36 / 25$$

$$\mathbf{F = 1.44\ N}$$

13.

Proportionally Relationship	Graph Letter
y is directly proportional to x	B
y is directly proportional to x^2	A
y is inversely proportional to x	C
y is inversely proportional to x^2	D
