Module 11 – Proportion

Here is a recipe for making Yorkshire Puddings.



8 Large Yorkshire Puddings

Plain Flour: 140g

Eggs: 4

Milk: 200ml

If you want to make Yorkshire puddings using 5 eggs, how much plain flour would you need?

4 eggs required for 8 Yorkshire Puddings

- 1 egg for every 2 Yorkshire Puddings
- 5 eggs can make 10 Yorkshire puddings.

140g of plain flour required for 8 Yorkshire puddings.

$$140 \div 8 = 17.5$$

17.5g of plain flour required for each Yorkshire pudding.

$$17.5 \times 10 = 175$$

175 grams of plain flour required for 10 Yorkshire Pudding.

175 grams

It takes 12 workers 6 days to tarmac 1 mile of road.



How long would it take 36 workers to tarmac 1 mile of road?

36 is 3 times 12, so divide the amount of time by 3.

$$6 \div 3 = 2$$

2 days

Gomez can run 2 km in 11.5 minutes. He can keep going at this pace for 8 km. How long will it take him to run 8 kilometres?



$$8 \div 2 = 4$$

 $4 \times 11.5 = 46$

46 minutes

Here is an incomplete table for the prices of fuel in a petrol station.



Fuel Price	£16.80		£84	
Litres	12	18		33.2

Given that the Fuel Price is proportional to the number of litres. Complete the table.

$$18 \div 12 = 1.5$$

 $1.5 \times £16.80 = £25.20$

£84 ÷ £16.80 = 5
$$5 \times 12 = 60$$

£
$$16.80 \div 12 = £1.4$$

£ $1.4 \times 33.2 = £46.48$

Fuel Price	£16.80	£25.20	£84	£46.48
Litres	12	18	60	33.2

Here is an incomplete table That shows the amount of hours it takes for different numbers of workers to cut the grass in a very large playing field.

Number of Workers	Number of Hours	
6	9	
	27	
18		
1		

Given that the number of hours it takes to cut the grass is inversely proportional to the number of workers. Complete the table.

Number of Workers	Number of Hours	
6	9	
2	27	
18	3	
1	54	