

Proportion

1) 300 grams of flour is used to make 6 cakes. How much flour is needed to make :

- a.) 12 cakes b) 3 cakes c) 9 cakes ?

(Hint - first calculate flour needed for 1 cake)

2) A stack of six identical books weighs 1.38 kg.

How much would a stack of 10 books weigh ?

3) a. The weight of 3 baskets of fruit is 5.4 kg.

Calculate the weight of 5 baskets.

b. 4 cakes cost £3.12. Find the cost of 9 cakes.

4) Four CDs cost £35.92 and three cassettes cost £15.78.

Find the total cost of :

- a. 3 CDs and 5 cassettes b. 7 CDs and 2 cassettes

5) A bedroom carpet measuring 4m by 7m costs £180.60

How much would the same carpet measuring 5m by 8m cost ?

(Hint : first calculate cost of one square metre)

6) 15 books cost £123. How many books could you buy for £73.80 ?

7) 5 bottles of lemonade can fill 35 glasses.

How many bottles of lemonade would you need to fill 49 glasses ?

8) A car uses 15 litres of petrol to travel 210 miles.

How much petrol would the car use for a journey of 378 miles ?

9) A restaurant can buy long grain rice in two sizes of bags.

- A 9kg bag costs £25.65
- A 20kg bag costs £57.20

Which size of bag is better value ?

Use your working to justify your answer (2016 P1)

10) At an airport check in desk, it takes 30 minutes for passengers to be checked in by 10 staff.

How long would it take to check in the same number of passengers with 6 staff working ?

(remember it will take longer for 1 staff working !!

*10 x 30 mins. Then for 6 staff divide by 6 - **Indirect Proportion**)*

11) A town with a population of 144 is under seige.

It has enough food to last the people 24 days.

If they take in an extra 48 people, how long will the food supply now last ?

12) It takes 5 bakers 3 hours to decorate a tray of cupcakes.

All the bakers work at the same rate.

Calculate the time taken for 4 bakers working at this rate to decorate the same number of cupcakes.

Give your answer in **hours and minutes**.

Mrs McLaughlin

Mr Mailley