

# Unitary method and simple direct proportion

Grade 3 | Foundation | 19 questions, 53 marks

GCSE Maths topic practice



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Name: \_\_\_\_\_ Date: \_\_\_\_\_ Score: \_\_\_\_\_ / 53

- 1 A recipe for 4 people uses 300 g of pasta.  
Work out how much pasta is needed for 10 people.

(2 marks)

Answer \_\_\_\_\_

- 2 The exchange rate is £1 = €1.14.  
Nadia changes £250 into euros.  
Work out how many euros she gets.

(2 marks)

Answer \_\_\_\_\_

- 3 Potatoes cost £1.20 per kilogram.  
Work out the cost of 3.5 kg of potatoes.

(2 marks)

Answer \_\_\_\_\_

- 4 5 pens cost £3.50  
Work out the cost of 8 of these pens.

(2 marks)

Answer \_\_\_\_\_

- 5 Rosie asked 60 students at her school to name their favourite sport.  
24 of the students said football.  
There are 900 students at the school.  
Work out an estimate for the number of students at the school whose favourite sport is football.

(2 marks)

Answer \_\_\_\_\_

**6** On holiday in France, Callum sees a jacket priced at €84.

The exchange rate is £1 = €1.20.

Work out the cost of the jacket in pounds.

(3 marks)

Answer \_\_\_\_\_

**7** 3 kg of potatoes cost £2.64.

Work out the cost of 7 kg of these potatoes.

(3 marks)

Answer \_\_\_\_\_

**8** Theo changes £320 into dollars.

The exchange rate is £1 = \$1.30.

He is given as many \$50 notes as possible, with the rest in smaller notes.

Work out the number of \$50 notes Theo is given.

(3 marks)

Answer \_\_\_\_\_

**9** 7 theatre tickets cost £52.50

Work out the cost of 12 of these tickets.

(2 marks)

Answer \_\_\_\_\_

**10** There are 380 calories in 100 g of a breakfast cereal.

There are 64 calories in 100 ml of milk.

Jess has a bowl of 45 g of the cereal with 125 ml of the milk.

Work out the total number of calories in Jess's bowl.

(3 marks)

Answer \_\_\_\_\_

- 11** Priya works for 9 hours.  
She is paid a total of £102.60  
Priya is paid the same amount for each hour she works.  
Work out how much Priya is paid per hour.

(2 marks)

Answer \_\_\_\_\_

- 12** Here is a recipe for 12 biscuits.  
12 biscuits: 180 g butter, 240 g flour, 100 g sugar  
Meg wants to make 30 biscuits.  
She has 425 g of butter, plenty of flour and plenty of sugar.  
Does Meg have enough butter to make 30 biscuits? You must show your working.

(3 marks)

Answer \_\_\_\_\_

- 13** A machine fills 240 bottles in 8 minutes.  
How many bottles does it fill in 30 minutes?

(3 marks)

Answer \_\_\_\_\_

- 14** £1 = €1.15  
a. Change £40 to euros.  
b. Change €92 to pounds.

(3 marks)

Answer \_\_\_\_\_

**15** A car park charges 6p for each minute of parking.

Dan drives into the car park at 09:40.

When he leaves, he pays £3.90.

Work out the time Dan leaves the car park.

(3 marks)

Answer \_\_\_\_\_

**16** A car uses 6 litres of petrol to travel 54 miles.

How far can the car travel on 10 litres of petrol?

(3 marks)

Answer \_\_\_\_\_

**17** A recipe for 8 flapjacks uses 240 g of oats.

Noah wants to make 30 flapjacks.

He has 850 g of oats.

Work out how many more grams of oats Noah needs.

(4 marks)

Answer \_\_\_\_\_

**18** Grass seed needs to be spread at 35 g per square metre.

Harry's rectangular lawn is 12 m long and 8 m wide.

Grass seed is sold in 1 kg boxes.

Each box costs £6.99.

Work out the total cost of the boxes of grass seed Harry needs to buy.

(5 marks)

Answer \_\_\_\_\_

19 A tap fills 15 litres of water in  $2\frac{1}{2}$  minutes.

How long does the tap take to fill a 40 litre tank?

Give your answer in minutes and seconds.

(3 marks)

Answer \_\_\_\_\_

End of questions | Total 53 marks