



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

(2 marks)

$$\text{Pasta for 1 person} = 300 \div 4 = 75 \text{ g}$$

$$\text{Pasta for 10 people} = 75 \times 10 = 750 \text{ g}$$

750 g

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

(2 marks)

Each pound is worth 1.14

$$250 \times 1.14 = 285$$

Nadia gets 285

€285

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

(2 marks)

$$\text{Cost} = 3.5 \times £1.20$$

$$3.5 \times 1.20 = 4.20, \text{ so the cost is } £4.20$$

£4.20

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

(2 marks)

Find the cost of 1 pen

$$£3.50 \div 5 = £0.70$$

$$£0.70 \times 8 = £5.60$$

£5.60

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)

$$\text{Fraction saying football} = \frac{24}{60} = \frac{2}{5}$$

$$\text{Estimate} = \left(\frac{2}{5}\right) \times 900 = 360 \text{ students}$$

This assumes the sample represents the school's preferences. The result is an estimate, not a guaranteed total

360

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)

The rate means each £1 costs €1.20. Dividing €84 by €1.20 per pound finds how many pounds are equivalent

To change euros into pounds, divide by the exchange rate

$$84 \div 1.20 = 70$$

The jacket costs £70. Check

$$70 \times 1.20 = 84$$

£70

7

3 kg of potatoes cost £2.64.

Work out the cost of 7 kg of these potatoes.

(3 marks)

$$1 \text{ kg costs } 2.64 \div 3 = £0.88$$

$$7 \text{ kg costs } 7 \times £0.88 = £6.16$$

£6.16

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)

$$320 \times 1.30 = 416, \text{ so Theo gets } \$416$$

$$416 \div 50 = 8.32, \text{ so 8 whole } \$50 \text{ notes fit}$$

$8 \times \$50 = \$400$, leaving \$16 in smaller notes. Theo gets 8 fifty-dollar notes

8

9

7 theatre tickets cost £52.50

Work out the cost of 12 of these tickets.

(2 marks)

$$£52.50 \div 7 = £7.50$$

$$£7.50 \times 12 = £90$$

£90

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)

$$\text{Calories in the cereal} = 380 \times 0.45 = 171$$

$$\text{Calories in the milk} = 64 \times 1.25 = 80$$

$$\text{Total} = 171 + 80 = 251 \text{ calories}$$

251

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)

Divide the total pay by the number of hours

$$102.60 \div 9 = 11.40$$

Priya is paid £11.40 per hour

£11.40

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)

$$30 \div 12 = 2.5, \text{ so multiply the recipe by } 2.5$$

$$\text{Butter needed} = 180 \times 2.5 = 450 \text{ g}$$

425 g < 450 g, so Meg does not have enough butter. She is 25 g short

13 A machine fills 240 bottles in 8 minutes.

How many bottles does it fill in 30 minutes?

(3 marks)

Find the number in 1 minute

$$240 \div 8 = 30$$

$$30 \times 30 = 900$$

900 bottles

14 £1 = €1.15

a. Change £40 to euros.

b. Change €92 to pounds.

(3 marks)

a) Pounds to euros: multiply

$$40 \times 1.15 = 46$$

€46

b) Euros to pounds: divide

$$92 \div 1.15 = 80$$

£80

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)

$$£3.90 = 390\text{p}$$

$$\text{Minutes parked} = 390 \div 6 = 65 \text{ minutes}$$

$$09:40 + 65 \text{ minutes} = 09:40 + 1 \text{ hour } 5 \text{ minutes} = 10:45$$

10:45

- 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)

Find the distance for 1 litre

$$54 \div 6 = 9$$

$$9 \times 10 = 90$$

90 miles

- 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)

$$\text{Oats for 1 flapjack} = 240 \div 8 = 30 \text{ g}$$

$$\text{Oats for 30 flapjacks} = 30 \times 30 = 900 \text{ g}$$

$$\text{Shortfall} = 900 - 850 = 50 \text{ g}$$

50 g

- 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)

$$\text{Area of lawn} = 12 \times 8 = 96 \text{ m}^2$$

$$\text{Seed needed} = 96 \times 35 = 3360 \text{ g} = 3.36 \text{ kg}$$

$$3.36 \text{ kg needs 4 boxes (3 boxes} = 3 \text{ kg is not enough)}$$

$$\text{Cost} = 4 \times £6.99 = £27.96$$

£27.96

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)

Litres per minute

$$15 \div 2.5 = 6$$

$$40 \div 6 = 6\frac{2}{3} \text{ minutes}$$

$$\frac{2}{3} \text{ of } 60 \text{ seconds} = 40 \text{ seconds}$$

6 minutes 40 seconds