



Worked answers

Level 1

Fractions

Non-Calculator Questions

1. Chester is decorating some of the rooms in his house.

He needs to know the area of a window.

The window measures 3 m wide and 1.75 m high.

Round 1.75 to the nearest whole number and use this value to estimate the answer to 3×1.75

[1 mark]

$$3 \times 2 = 6$$

Your answer:

6

2. Shaz will share money she raises between 3 charities.

She gives a local hospice $\frac{2}{5}$ of the money.

She gives Save the Children $\frac{1}{4}$ of the money.

She gives Age Concern $\frac{7}{20}$ of the money.

Which charity will get the most money?

Show how you decide.

[2 marks]

Local hospice: $\frac{2}{5} = \frac{8}{20}$
Save the Children: $\frac{1}{4} = \frac{5}{20}$
Age concern: $\frac{7}{20}$

Your answer:

Local Hospice

Calculator Questions

3. Tomas needs to mix **grit and compost** in the ratio **1:4**.

He mixes $4\frac{1}{5}$ litres of grit with $16\frac{4}{5}$ litres of compost.

Are these numbers in the correct ratio?

Show how you decide.

[2 marks]

Compost amount must be 4 x grit amount for the ratio

$$4 \times 4 = 16$$

$$\frac{1}{5} \times 4 = \frac{4}{5}$$

Your answer:

Yes

4. The world population is about **7726.5 million**.

About **1 in 9 people** in the world experience extreme hunger.

Use this information to estimate how many millions of people in the world experience extreme hunger.

Give your answer to the nearest million.

[2 marks]

$$7\,726\,500\,000 \div 9 = 858\,500\,000$$

Your answer:

859 million

5. Asmita puts 40.2 litres of fuel in her car.

The fuel costs 130.1 pence per litre.

She is charged £52.70 for the fuel.

By rounding litres of fuel and cost per litre to the nearest whole numbers, show how Asmita could check that she has been charged about the right amount.

[2 marks]

$$40 \times 130 = 5\,200$$

$$5\,200 \div 100 = \text{£}52$$

Your answer:

£52 is close to £52.70

6 (a) Natalie teaches a childcare course.

She is planning a trip with 16 students.

They have volunteered to work for two weeks abroad.

They need to raise £2000 per student to pay for the trip.

They have already raised $\frac{7}{8}$ of the money needed.

How much money have they raised so far?

[3 marks]

$$2000 \times 16 = \text{£}32\ 000 \text{ in total}$$

$$32\ 000 \div 8 = 4\ 000$$

$$4\ 000 \times 7 = 28\ 000$$

Your answer:

£ 28 000

6 (b) They have one eighth left to raise.

Write one eighth in figures.

[1 mark]

Your answer:

$\frac{1}{8}$

7. Chester needs **240 tiles**.

He buys **10% more tiles** in case some of the tiles break.

He cuts $\frac{3}{8}$ of the tiles he buys.

How many tiles does he cut?

[3 marks]

$$240 + 10\% = 264 \text{ tiles}$$

$$264 \div 8 = 33$$

$$33 \times 3 = 99$$

Your answer:

99 tiles