

AQA - Fractions, decimals and percentages – GCSE Mathematics Paper 3

1. **No.1**

What is 6.2819 to 2 decimal places?

Circle your answer.

[1 mark]

6.2

6.28

6.29

6.3

2. **No.2**

50% of a number is 40

Circle the number.

[1 mark]

20

80

800

2000

3. No.6

Greg wants to buy a games console that costs £267.50

He already has £125

He will save £7.50 each week.

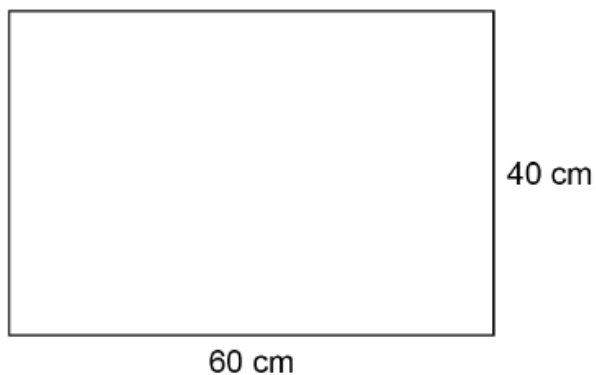
In how many weeks will he have saved enough?

[3 marks]

Answer _____

4. No.29

A rectangle has length 60 cm and width 40 cm



Not drawn
accurately

The length decreases by 15%

The width decreases by 10%

Sue says,

“The perimeter decreases by 25% because $15\% + 10\%$ is 25%”

Is she correct?

You **must** show calculations to support your answer.

[4 marks]

5. No.3

Work out 320 as a percentage of 80

Circle your answer.

[1 mark]

25%

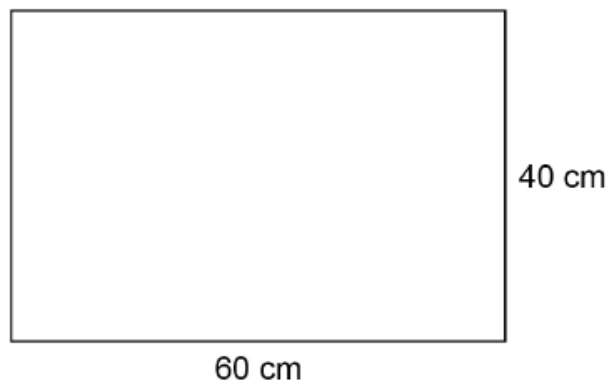
75%

300%

400%

6. No.14

A rectangle has length 60 cm and width 40 cm



Not drawn
accurately

The length decreases by 15%

The width decreases by 10%

Sue says,

“The perimeter decreases by 25% because $15\% + 10\%$ is 25%”

Is she correct?

You **must** show calculations to support your answer.

[4 marks]

7. No.5

Put these numbers in order from smallest to largest.

$$\frac{31}{40}$$

$$\frac{3}{4}$$

$$\frac{7}{10}$$

0.725

[2 marks]

Smallest _____

Largest _____

8. No.1

Work out £1.50 as a fraction of 60p

Circle your answer.

[1 mark]

$$\frac{2}{5}$$

$$\frac{1}{4}$$

$$\frac{4}{1}$$

$$\frac{5}{2}$$

9. No.10

Mia wants to borrow £6000 and repay it, with interest, after two years.
She sees two offers for loans.

Offer 1

Compound interest
3% per year

Offer 2

Compound interest
First year 1%
Second year 5%

Mia says,

“I will pay back the same amount because the average of 1% and 5% is 3%”

Is she correct?

You **must** show your working.

[3 marks]

10. No.5

- (a) Convert $\frac{47}{8}$ to a mixed number.

[1 mark]

Answer

- (b) Convert $\frac{61}{128}$ to a decimal.

Give your answer to 2 decimal places.

[2 marks]

Answer

11. No.6

George buys some food for £16.55

He pays the exact amount with two notes and four coins.

List the notes and coins.

[2 marks]

Notes

Coins

12. No.13

The cost of 5 kg of potatoes is £3.20

The cost of $\frac{1}{2}$ kg of carrots is 29p

Work out the **total** cost of 12 kg of potatoes and $1\frac{1}{2}$ kg of carrots.

[3 marks]

Answer £ _____

13. No.15

When you earn money you pay income tax.

The amount you pay depends on how much you earn that year.

You pay

0% on the first £12 500 you earn

20% on the next £37 500 you earn

40% on the next £112 500 you earn.

One year, Kim paid £9260 income tax.

Work out how much she earned that year.

[4 marks]

Answer £ _____