

Reverse Percentages

For AQA GCSE Mathematics (8300) • Foundation tier

Name _____

Total marks: **25**

Answer **all** questions in the spaces provided. Show your working: marks are given for correct method.

- 1** After a 20% increase, a price is £60
Which calculation gives the price before the increase?
Circle your answer.

[1 mark]

60×0.8

$60 \div 1.2$

$60 \div 0.8$

60×1.2

- 2** 125% of a number is 450
Work out 80% of the number.

[3 marks]

Answer _____

- 3** At the end of the summer, a garden centre takes 35% off the price of every plant.
A rose bush now costs £7.80

Work out the price of the rose bush before the reduction.

[3 marks]

Answer £ _____

- 4** After a 15% increase, the price of a game is £92
Work out the price before the increase.

[3 marks]

Answer £ _____

- 5** The price of a lamp, including VAT at 20%, is £54
Work out the price of the lamp before VAT is added.

[2 marks]

Answer £ _____

- 6** The population of a village increased by 4%
The population is now 12 480
Work out the population before the increase.

[2 marks]

Answer _____

- 7 The price of a coat is reduced by 25%
The price is now £45
Max says,
‘The original price was $\text{£}45 + 25\% \text{ of } \text{£}45 = \text{£}56.25$ ’

Is Max correct? Tick a box.
Show working to support your answer.

[2 marks]

☐ Yes

☐ No

- 8 After a 3% pay rise, Kay’s salary is £25 750 per year.

How much was the pay rise?

[3 marks]

Answer £ _____

- 9 672 000 electric bikes were sold this year.
This is 12% more than last year.

How many were sold last year?

[3 marks]

Answer _____

- 10** The mass of a block of ice is 4 950 000 kg
This value is a 10% reduction from the original mass of the block of ice.

Work out the original mass of the block of ice.
Give your answer in standard form.

[3 marks]

Answer _____ kg