

Related Calculations and Inverse Operations

For AQA GCSE Mathematics (8300) • Foundation tier

Name _____

Total marks: **22**

Answer **all** questions in the spaces provided. Show your working: marks are given for correct method. Do not use a calculator.

1 You are given that $37 \times 64 = 2368$

Use this fact to answer each part. You do not need to do any long multiplication or long division.

(a) Work out 370×640

[1 mark]

Answer _____

(b) Work out $23.68 \div 0.64$

[1 mark]

Answer _____

(c) Work out 3.7×64

[1 mark]

Answer _____

(d) Work out $2368 \div 37$

[1 mark]

Answer _____

2 $23 \times 56 = 1288$

Circle the value of 0.23×5.6

[1 mark]

128.8

12.88

1.288

0.1288

3 Work out the missing number in each calculation.

(a) $- 38 = 67$

[1 mark]

Answer _____

(b) $8 \times$ $= 136$

[1 mark]

Answer _____

4 Work out the missing number in each calculation.

(a) $4.8 \div$ $= 0.48$

[1 mark]

Answer _____

(b) $\times 0.3 = 2.4$

[1 mark]

Answer _____

- 5 Priya works out $912 \div 24 = 38$

Show how Priya can use an inverse operation to check her answer.

[1 mark]

- 6 You are given that $64 \times 27 = 1728$
Use this to work out 64×29

[2 marks]

Answer _____

- 7 $156 \times 27 = 4212$

Tom says,

‘So $15.6 \times 2.7 = 421.2$ ’

Is Tom correct? Tick a box.

Give a reason for your answer.

[1 mark]

☐ Yes

☐ No

8 $64 \times 125 = 8000$

(a) Work out $8000 \div 12.5$

[1 mark]

Answer _____

(b) Work out 0.64×1.25

[1 mark]

Answer _____

- 9** Rhys has some money.
He spends £15 on a train ticket.
He then shares the rest of his money equally between himself and his 3 sisters.
They each get £12
How much money did Rhys have at the start?

[2 marks]

Answer £ _____

10 $612 \div 18 = 34$

Use this fact to help you answer both parts.

- (a) Circle the value of $612 \div 36$

[1 mark]

1.7

17

34

68

- (b) Work out 34×1.8

[1 mark]

Answer _____

- 11** A coach company charges £12.40 per person for a trip.
36 people go on the trip.

You are given that $124 \times 36 = 4464$

- (a) Work out the total cost for the 36 people.

[1 mark]

Answer £ _____

- (b) The coach company charges the same price per person for a different trip.
The total cost of this trip is £892.80
How many people go on this trip?

[2 marks]

Answer _____