

Scale Drawings and Maps

For AQA GCSE Mathematics (8300) • Foundation tier

Name _____

Total marks: **27**

Answer **all** questions in the spaces provided. Show your working: marks are given for correct method. You will need a ruler. Maps and scale drawings are drawn accurately: print at 100%.

- 1** A map has a scale of 1 : 20 000
Circle the real distance that 1 cm on the map represents.

[1 mark]

20 m

200 m

2 km

20 km

- 2** On a map with a scale of 1 : 40 000 a footpath is 9.5 cm long.
How long is the real footpath?
Give your answer in kilometres.

[2 marks]

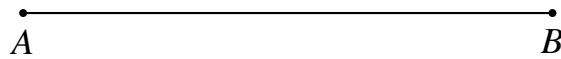
Answer _____ km

- 3** A scale drawing uses a scale of 1 cm to 5 m.
A wall is 32 m long.
How long is the wall on the scale drawing?

[1 mark]

Answer _____ cm

- 4 The line AB is part of a scale drawing.
The scale is 1 cm represents 20 m.



Work out the real distance from A to B .

[2 marks]

Answer _____ m

- 5 A real bus is 10.8 m long.
A toy model of the bus is made using a scale of 1 : 36
Work out the length of the toy bus in centimetres.

[2 marks]

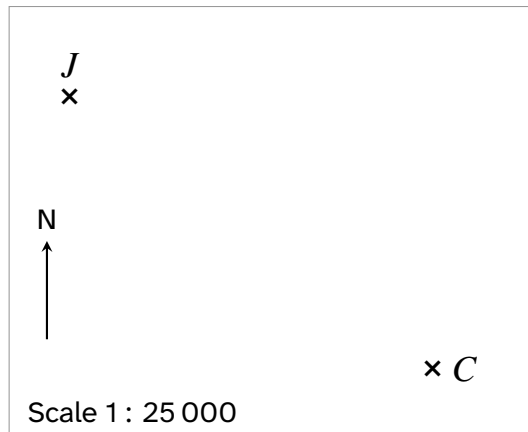
Answer _____ cm

- 6 Two towns are 36 km apart.
On a map, the towns are 9 cm apart.
Write the scale of the map in the form 1 : n

[3 marks]

Answer _____

- 7 Here is a map of a lake. It shows a jetty, J , and a café, C .



- (a) Work out the real distance from the jetty to the café.
Give your answer in kilometres.

[2 marks]

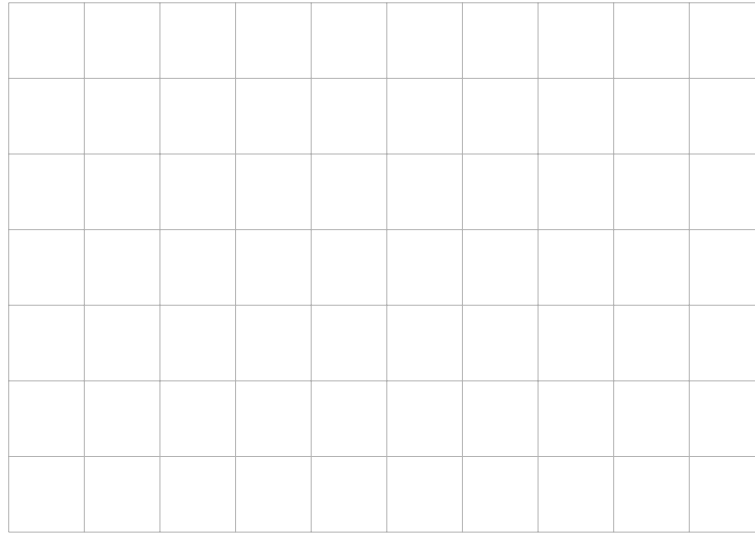
Answer _____ km

- (b) A boathouse, B , is 1 km due North of the café.
Mark B on the map.

[2 marks]

- 8** A garden is a rectangle 12 m long and 8 m wide.

On the centimetre grid, draw an accurate scale drawing of the garden.
Use a scale of 1 cm to 2 m.



[2 marks]

- 9** A scale drawing of a park shows two paths.
On the drawing, the path from the gate to the pond is 4.5 cm long
and the path from the pond to the café is 3.5 cm long.

The two real paths have a total length of 240 metres.
Work out the real length of the path from the gate to the pond.

[3 marks]

Answer _____ metres

- 10** A map has a scale of 1 : 2000
On the map, a field is a rectangle 4 cm by 3 cm.
Work out the real area of the field.
Give your answer in m^2

[3 marks]

Answer _____ m^2

- 11** A plan of a sports hall is drawn to a scale of 1 : 200
On the plan, the floor of the hall is a rectangle 16 cm by 9 cm.
The floor is going to be varnished.
One tin of varnish covers 60 m^2
How many tins of varnish are needed?
You must show your working.

[4 marks]

Answer _____