

Scale Drawings and Maps

For Pearson Edexcel GCSE Mathematics (1MA1) • Foundation tier

Name _____

Total marks: **24**

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

- 1** Anwen draws a plan of a school field.
On her plan, 2 cm represents 15 m.

- (a) On the plan, the running track is 8 cm long.
Work out the real length of the running track.

..... m
(1)

- (b) The real width of the field is 45 m.
How wide is the field on the plan?

..... cm
(1)

(Total for Question 1 is 2 marks)

- 2** A canal is shown on a map with a scale of 1 : 60 000
The canal is 4.5 cm long on the map.
Work out the real length of the canal.
Give your answer in kilometres.

..... km
(2)

(Total for Question 2 is 2 marks)

- 5** The real distance between two schools is 4.5 km.
A map has a scale of 1 : 50 000
Work out the distance between the schools on the map.
Give your answer in centimetres.

..... cm
(2)

(Total for Question 5 is 2 marks)

- 6** A room is a rectangle 5.2 m long and 3.6 m wide.
Jo makes a scale drawing of the room using a scale of 1 : 40
Work out the length and the width of the room on Jo's scale drawing.

length cm width cm
(3)

(Total for Question 6 is 3 marks)

- 7** A model boat is 45 cm long.
The real boat is 13.5 m long.
Write the scale of the model in the form 1 : n

.....
(2)

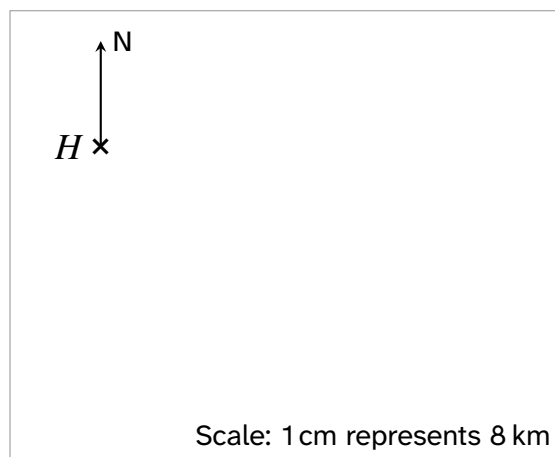
(Total for Question 7 is 2 marks)

- 8 A plan of a car park is drawn to scale.
The real car park is 75 m long. On the plan, it is 15 cm long.
Each parking space is 2.5 m wide in real life.
Work out the width of a parking space on the plan.
Give your answer in millimetres.

..... mm
(3)

(Total for Question 8 is 3 marks)

- 9 A lifeboat, L , is 32 km from a harbour, H , on a bearing of 125°
Use a scale of 1 cm to 8 km.
Mark the position of the lifeboat with a cross ($\times$) and label it L .



(2)

(Total for Question 9 is 2 marks)

- 10** A map has a scale of 1 : 200 000
A road on the map is 7.5 cm long.
A car travels along the road at an average speed of 50 km/h.

Work out how long it takes the car to travel along this road.
Give your answer in minutes.

..... minutes

(4)

(Total for Question 10 is 4 marks)
