

FUNCTIONAL SKILLS MATHEMATICS

AQA | Edexcel | City & Guilds | Open Awards | NCFE | Highfield Level 1

Maps and Scale Drawings

Materials

You cannot use a calculator for questions with this symbol.



Instructions

- Answer all questions.
- Answer questions on separate paper.

Information and Advice

- The marks for each question are shown in brackets use this as a guide on how long to spend on each question.
- Read each question carefully before you answer it.
- Check you answers.



Q1 Part of a map is shown below. A and B are the locations of two shops.

• B

A 🔵

Scale: 1 cm = 100 m

The distance between the two shops on the map is $3.8\ \mathrm{cm}$. Find the real distance between the two shops.

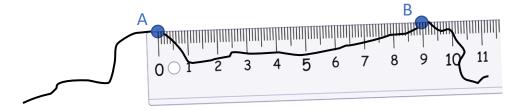
[1 mark]

In a town, a church is situated 800 m away from the train station. A map is drawn using the scale 1 cm = 250 m.

Work out the distance between the church and the train station on the map.

[1 mark]

Q3 The scale drawing below shows a section of coastline.



The drawing is drawn using a scale of 1 cm = 400 m.

A ruler is used to measure the distance between the two points on the drawing.

The ruler is measured in centimetres and millimetres.

Work out the distance between A and B in real life. Give your answer in km.

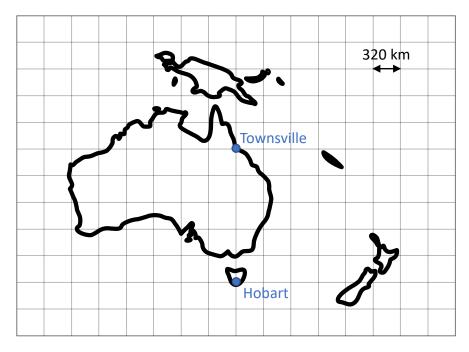
[2 marks]

Q4 On a map, Liverpool is $11.2~\rm cm$ away from Manchester. The scale used to draw the map is 1:500000. Work out the distance between Liverpool and Manchester in real life. Give your answer in km.

[2 marks]

р

Q5 Part of a map is shown below, indicating the location of two cities.

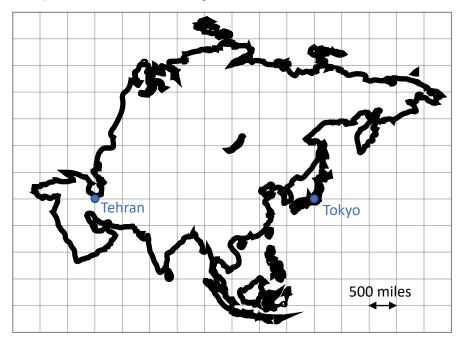


Calculate the real-life distance between Townsville and Hobart.

[1 mark]



Q6 Part of a map is shown below, indicating the location of two cities.



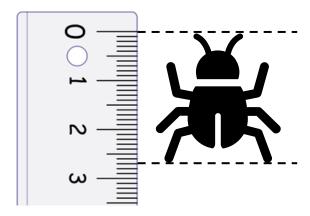
Calculate the real-life distance between Tehran and Tokyo.

[1 mark]

2

Turn over ▶

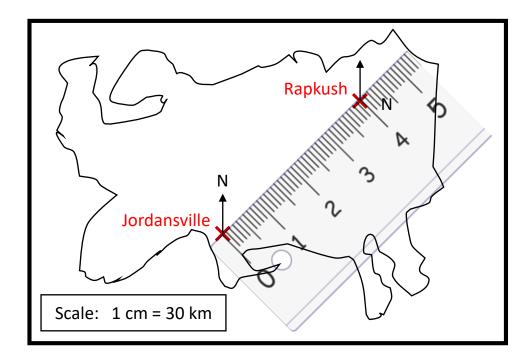
Q7 The diagram below shows a scale drawing of an insect.



The drawing has a scale of 1:0.20. A ruler has been used to measure the length of the insect in the drawing. The ruler is measured in centimetres and millimetres. Calculate the length of the ant in real life. Give your answer in mm.

[2 marks]

Q8 The scale drawing below shows the map of an island. It shows two cities: Rapkush and Jordansville.



Describe the position of Jordansville from Rapkush in terms of a distance and a bearing.

[2 marks]

4