



# FUNCTIONAL SKILLS MATHEMATICS

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

Level 2

## 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.



Scale: 1 cm = 100 m

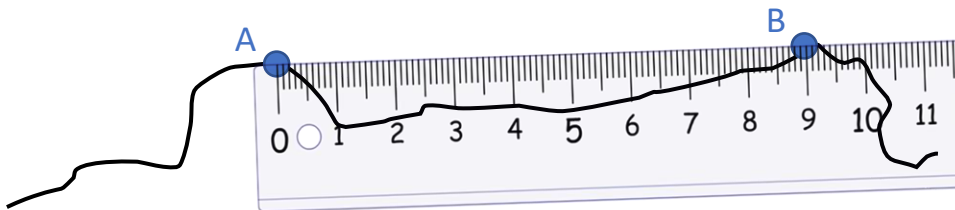
The distance between the two shops on the map is 3.8 cm.  
Find the real distance between the two shops.

[1 mark]

**Q2** 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.



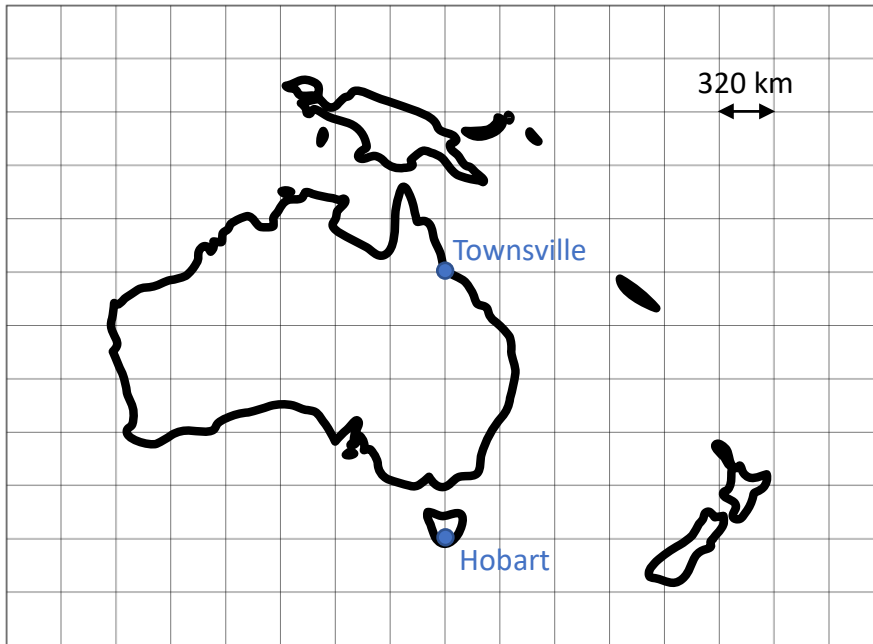
The drawing is drawn using a scale of 1 cm = 400 m.  
A ruler is used to measure the distance between the two points on the drawing.  
Work out the distance between A and B in real life. Give your answer in km.  
Note: The ruler is measured in centimetres and millimetres.

[2 marks]

**Q4** On a map, Liverpool is 11.2 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]

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

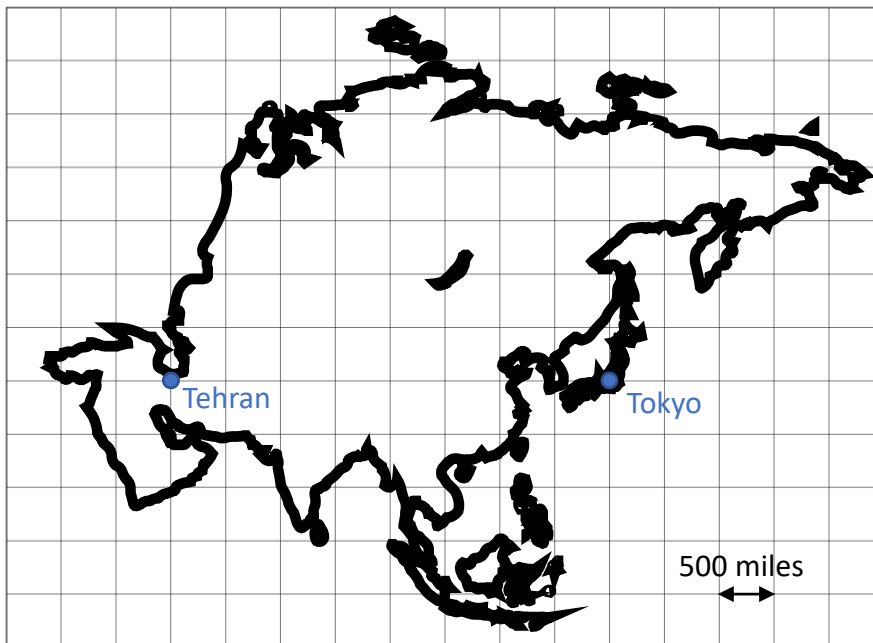


Calculate the real-life distance between Townsville and Hobart.

[1 mark]



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



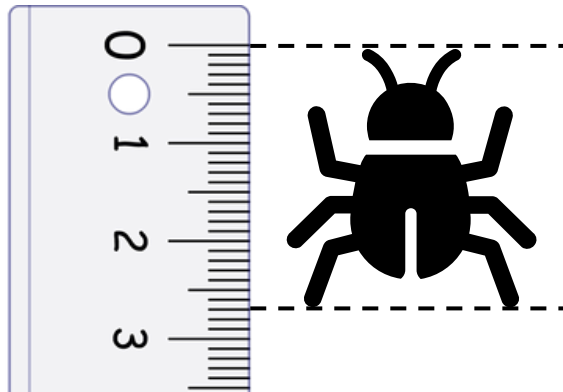
Calculate the real-life distance between Tehran and Tokyo.

[1 mark]

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Turn over ►

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



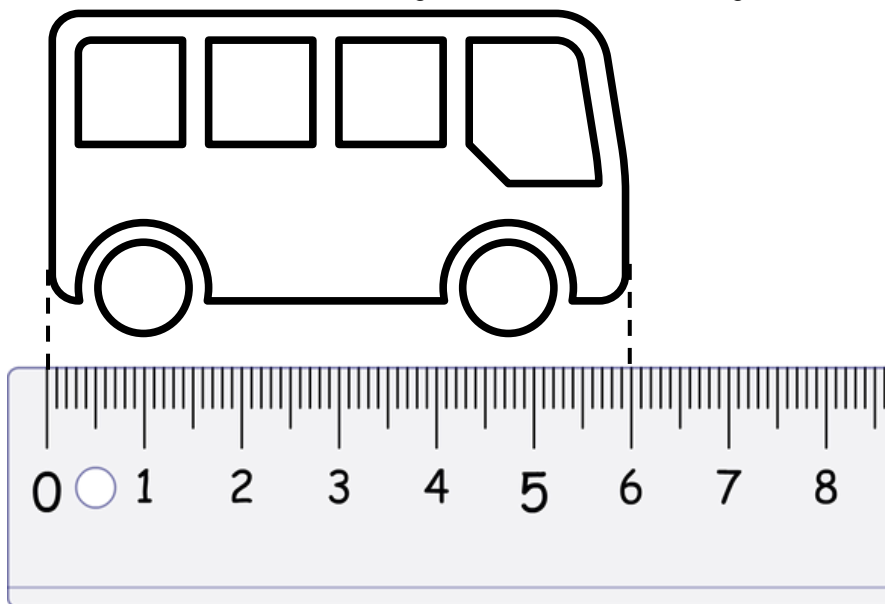
The drawing has a scale of 1:0.20. A ruler has been used to measure the length of the insect in the drawing.

Calculate the length of the ant in real life. Give your answer in mm.

Note: The ruler is measured in centimetres and millimetres.

**[2 marks]**

**Q8** The diagram below is a scale drawing of a bus. The length of the bus in real life is 12 m. A ruler is used to measure the length of the bus in the drawing.



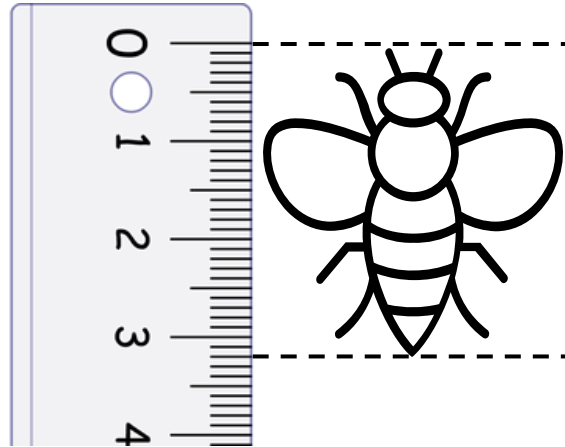
Work out the scale used in this scale drawing. Give your answer as a ratio in its simplest form.

Note: The ruler is measured in centimetres and millimetres.

**[3 marks]**

**Q9**

The diagram below shows a scale drawing of an insect. The length of the insect in real life is 1.6 cm. A ruler has been used to measure the length of the insect in the drawing.



Work out the scale used in this scale drawing. Give your answer as a ratio in its simplest form.

Note: The ruler is measured in centimetres and millimetres.

**[2 marks]**

**Q10**

A wall in the shape of a rectangle is built. The wall is 18 m wide and 8 m high. Draw a scale drawing of the wall on the grid below. One square = 1 cm<sup>2</sup>. Use the scale 1:200.



**[3 marks]**

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