

Name: _____

Exam Style Questions

Scales and maps



Corbettmaths

Ensure you have: Pencil, pen, ruler, protractor, pair of compasses and eraser

You may use tracing paper if needed

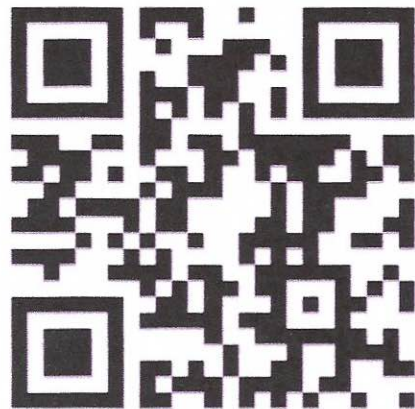
Guidance

1. Read each question carefully before you begin answering it.
2. Don't spend too long on one question.
3. Attempt every question.
4. Check your answers seem right.
5. Always show your workings

Revision for this topic

www.corbettmaths.com/contents

Video 283



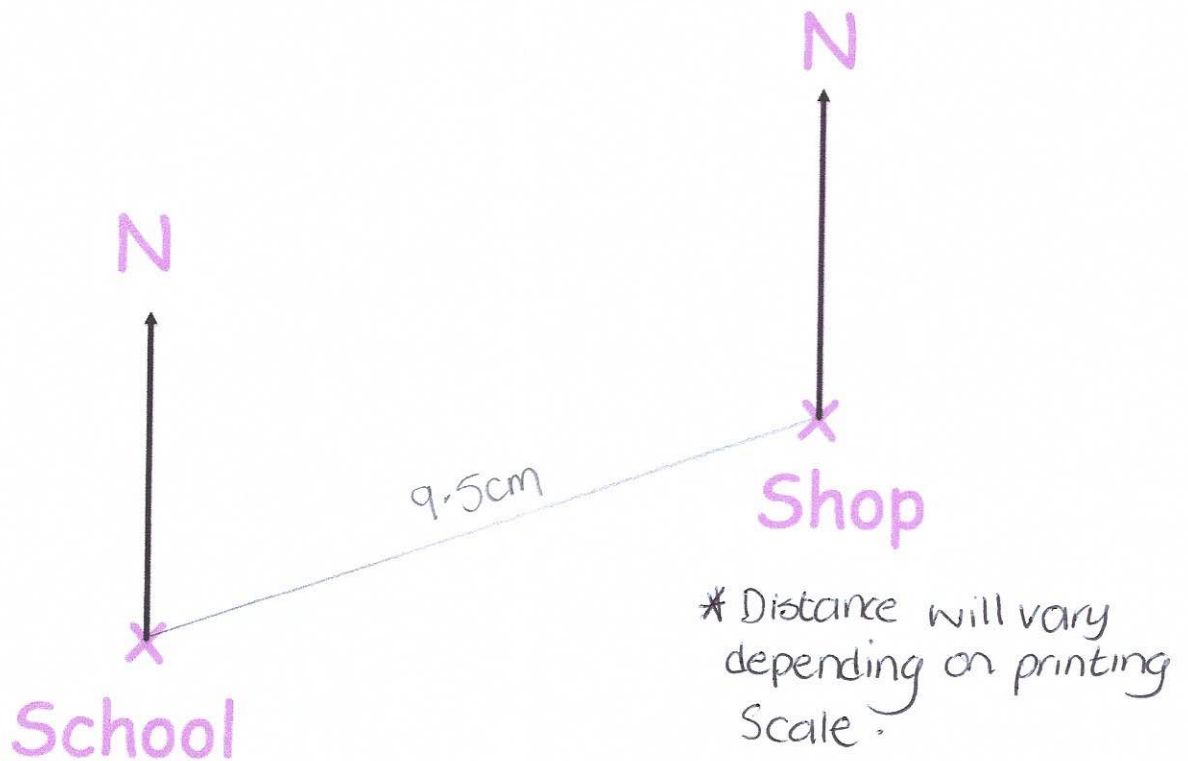
1. A map has a scale of 1 cm : 3 miles.
On the map, the distance between two towns is 7cm.

What is the actual distance between the two towns?
Include units for your answer.

$$7 \times 3 = 21$$

21 miles
(2)

2. The diagram shows part of a map.
It shows the position of a school and a shop.



The scale of the map is 1cm = 100 metres.

Work out the real distance between the school and the shop.
Give your answer in metres.

Distance: 9.5cm

$$9.5 \times 100 = 950$$

950.m
(2)

5. Here is a map.
The map shows two cities, Leek and Milton.



- (a) Use the map to calculate the actual distance from Leek to Milton.

$$10.5\text{cm} \times 30$$

$$\dots\dots\dots 315 \dots\dots \text{miles}$$

(2)

Sandville is an equal distance from Leek and Milton

- (b) How far is Sandville from Leek?

$$\begin{array}{r} 5.25\text{cm} \\ \times 30 \end{array}$$

$$\dots\dots\dots 157.5 \dots\dots \text{miles}$$

(1)

3. A map has a scale of 1 cm : 4 kilometres.
The actual distance between two cities is 52 kilometres.

What is the distance between the cities on the map?

$$52 \div 4 = 13$$

.....13.....cm
(1)

4. The diagram shows a scale drawing.

Scale: 1cm represents 100km



- (a) Use the diagram to calculate the actual distance from C to D.

$$7.3\text{cm} \times 100$$

.....730.....km
(2)

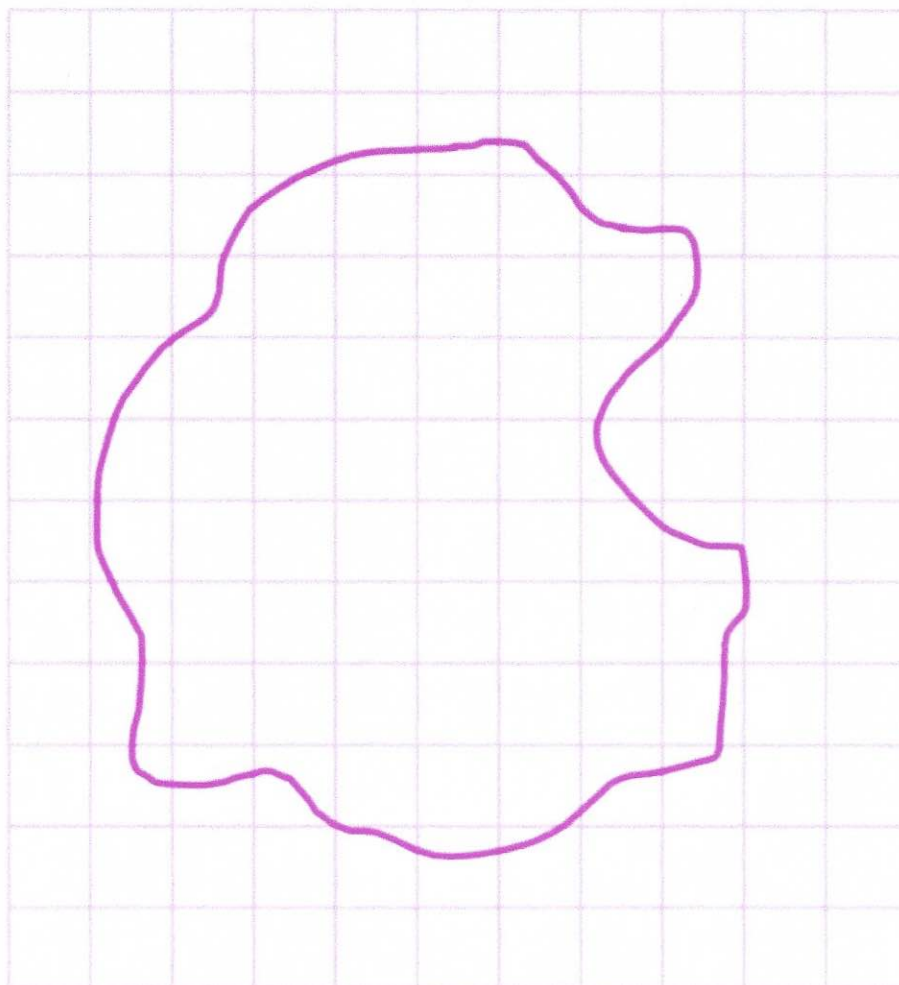
E is 300km due south of C.

- (c) Show E on the diagram.

3cm

(1)

6. Shown is a scale drawing of an island.
Each square on the grid has an area of 1cm^2



The scale is 1cm^2 represents 10km^2

Find an estimate for the area of the island.
Give your answer in km^2

.....⁴⁸⁰..... km^2
(3)

*Allow range of
 $450\text{km}^2 - 500\text{km}^2$ *

7. A map has a scale of 1cm represents 2km.

(a) Write this scale as a ratio in its simplest form.

$$\frac{1}{200,000}$$

(2)

(b) What is the actual length of a road measuring 5.5cm on the map?

$$11 \text{ Km}$$

(1)

8. A map has a scale of 1cm represents 50 metres.

(a) Put a circle around the ratio which is equivalent to this.

1:50 1:500 1:5000 1:50000 1:500000 1:5000000

(2)

The distance between two shops on the map is 4.5cm

(b) What is the actual distance between the shops?

$$225 \text{ m}$$

(2)

9. A map has a scale of 8cm to 1km.

(a) Write this scale as a ratio in its simplest form.

$$\frac{1}{12500}$$

(2)

The distance between two lakes is 4.5km

(b) How far will this be on the map?

$$36 \text{ cm}$$

(2)

10. A map has a scale of 1:4000
On the map, the distance between two houses is 9cm.

What is the actual distance between the houses?
Give your answer in metres.

$$9 \times 4000 = 36000 \text{ cm}$$

$$360 \text{ m}$$

(3)

11. A scale drawing has a scale of 1:20
In real life the length of a boat is 150m

What is the length of the boat on the scale drawing?
Give your answer in centimetres.

$$150 \div 20 = 7.5 \text{ metres}$$

$$750 \text{ cm}$$

(3)