## Exam Style Questions

## Scales and maps



Corbettmoths

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


1. A map has a scale of $1 \mathrm{~cm}: 3$ miles.

On the map, the distance between two towns is 7 cm .
What is the actual distance between the two towns?
Include units for your answer.
2. The diagram shows part of a map.

It shows the position of a school and a shop.


The scale of the map is $1 \mathrm{~cm}=100$ metres.

Work out the real distance between the school and the shop. Give your answer in metres.
3. A map has a scale of $1 \mathrm{~cm}: 4$ kilometres.

The actual distance between two cities is 52 kilometres.

What is the distance between the cities on the map?
4. The diagram shows a scale drawing.

## Scale: 1 cm represents 100 km


(a) Use the diagram to calculate the actual distance from C to D .
$E$ is 300 km due south of $C$.
(c) Show E on the diagram.

## 5. Here is a map.

The map shows two cities, Leek and Milton.


## Scale: 1 cm represents 30 miles

(a) Use the map to calculate the actual distance from Leek to Milton.
miles
(2)

Sandville is an equal distance from Leek and Milton
(b) How far is Sandville from Leek?
6. Shown is a scale drawing of an island.

Each square on the grid has an area of $1 \mathrm{~cm}^{2}$


The scale is $1 \mathrm{~cm}^{2}$ represents $10 \mathrm{~km}^{2}$
Find an estimate for the area of the island.
Give your answer in km²
$\qquad$
7. A map has a scale of 1 cm represents 2 km .
(a) Write this scale as a ratio in its simplest form.
$\qquad$
(b) What is the actual length of a road measuring 5.5 cm on the map?
8. A map has a scale of 1 cm represents 50 metres.
(a) Put a circle around the ratio which is equivalent to this.
$\begin{array}{llllll}1: 50 & 1: 500 & 1: 5000 & 1: 50000 & 1: 500000 & 1: 5000000\end{array}$

The distance between two shops on the map is 4.5 cm
(b) What is the actual distance between the shops?
9. A map has a scale of 8 cm to 1 km .
(a) Write this scale as a ratio in its simplest form.
$\qquad$

The distance between two lakes is 4.5 km
(b) How far will this be on the map?
10. A map has a scale of $1: 4000$

On the map, the distance between two houses is 9 cm .

What is the actual distance between the houses?
Give your answer in metres.
11. A scale drawing has a scale of 1:20

In real life the length of a boat is 150 m

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

