

Map Scales

ANSWERS

1 Start with the scale.

On a map, 1 cm represents 5 km.
Two villages are 7 cm apart on the map.
Work out the real distance between the villages.

Map (cm)	Real (km)
1	5
7	35

$\times 7$

2

On a map, 1 cm represents 4 km. A lake is 6 cm long on the map.
Work out the real length of the lake.

Map (cm)	Real (km)
1	4
6	24

$\times 6$

3

On a plan, 1 cm represents 2 m. A garden is 9 cm long on the plan.
Work out the real length of the garden.

Map (cm)	Real (m)
1	2
9	18

$\times 9$

4

On a map, 1 cm represents 20 km.
Two cities are 8 cm apart on the map.
Work out the real distance between the cities.

Map (cm)	Real (km)
1	20
8	160

$\times 8$

5 Notice the change!

On a map, 1 cm represents 5 km.
The real distance between two towns is 30 km.
Work out the distance on the map.

Map (cm)	Real (km)
1	5
6	30

$\times 6$

6

On a plan, 1 cm represents 3 m. A hall is 27 m long.
Work out the length of the hall on the plan.

Map (cm)	Real (m)
1	3
9	27

$\times 9$

7

On a map, 1 cm represents 10 km. A river is 4.5 cm long on the map.
Work out the real length of the river.

Map (cm)	Real (km)
1	10
4.5	45

$\times 4.5$

Answer 45 km

8

A scale drawing uses 1 cm to represent 2 m.
A lorry is 9 m long.
Work out the length of the lorry on the drawing.

Map (cm)	Real (m)
1	2
4.5	9

$\times 4.5$

Answer 4.5 cm

Map Scales further practice

ANSWERS

9

On a map, 1 cm represents 4 km.
Two train stations are 26 km apart.
Work out the distance between them on the map.

$26 \div 4$

Answer 6.5 cm

10

This scale bar is from a map.
Each section is 1 cm on the map.
A lake is 3.5 cm long on the map.
How long is the real lake?

0 2 4 6 8 km

1 cm represents 2 km, 3.5×2

Answer 7 km

11

On a plan, 1 cm represents 50 cm.
A sofa is 4 cm long on the plan.
How long is the real sofa in metres?

$4 \times 50 = 200$ cm

Answer 2 m

12

On a map, 2 cm represents 5 km.
A walking trail is 8 cm long on the map.
How long is the real trail?

8 cm is 4 lots of 2 cm, 4×5

Answer 20 km

13

A cycle route has three stages.
On a map where 1 cm represents 3 km, the stages are 4 cm, 2.5 cm and 5.5 cm long. How far is the whole route?

$4 + 2.5 + 5.5 = 12$ cm, 12×3

Answer 36 km

14

On map A, 1 cm represents 2 km.
On map B, 1 cm represents 5 km.
A town and a beach are 6 cm apart on map A. How far apart are they on map B?

$6 \times 2 = 12$ km, $12 \div 5$

Answer 2.4 cm

15

This is a plan of a garden. 1 cm on the plan represents 2 m. A fence goes all the way round the real garden.
How long is the fence?

6 cm 4 cm

real garden 12 m by 8 m
 $12 + 8 + 12 + 8$

Answer 40 m

16

On a map, 1 cm represents 5 km.
Jo says two villages 15 km apart will be 75 cm apart on the map.
Is Jo right? Explain.

Jo multiplied, $15 \div 5 = 3$

Answer No, they are 3 cm apart