Name:

Exam Style Questions

Scales and Maps

Corbettmaths

Equipment needed: Ruler, Calculator, Pencil and Pen

Guidance

1. Read each question carefully before you begin answering it.
2. Check your answers seem right.
3. Always show your workings

Video Tutorial
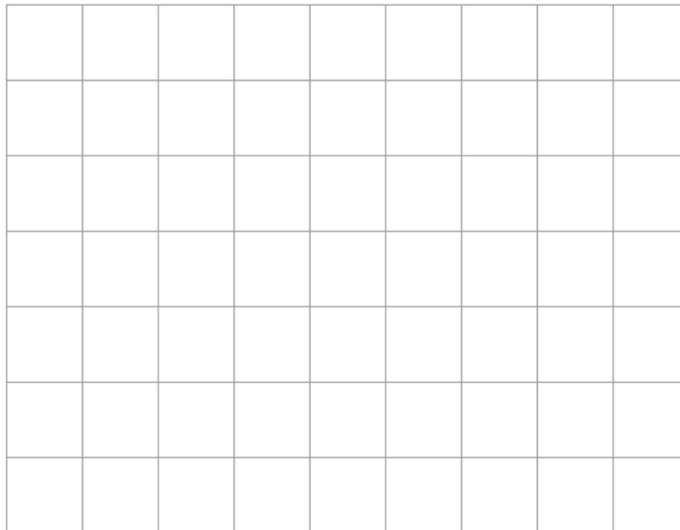
www.corbettmaths.com/contents

Video 283

Answers and Video Solutions

1. Shown below is a rectangle.

12km

20km

Draw an accurate scale drawing of the rectangle on the centimetre grid below.
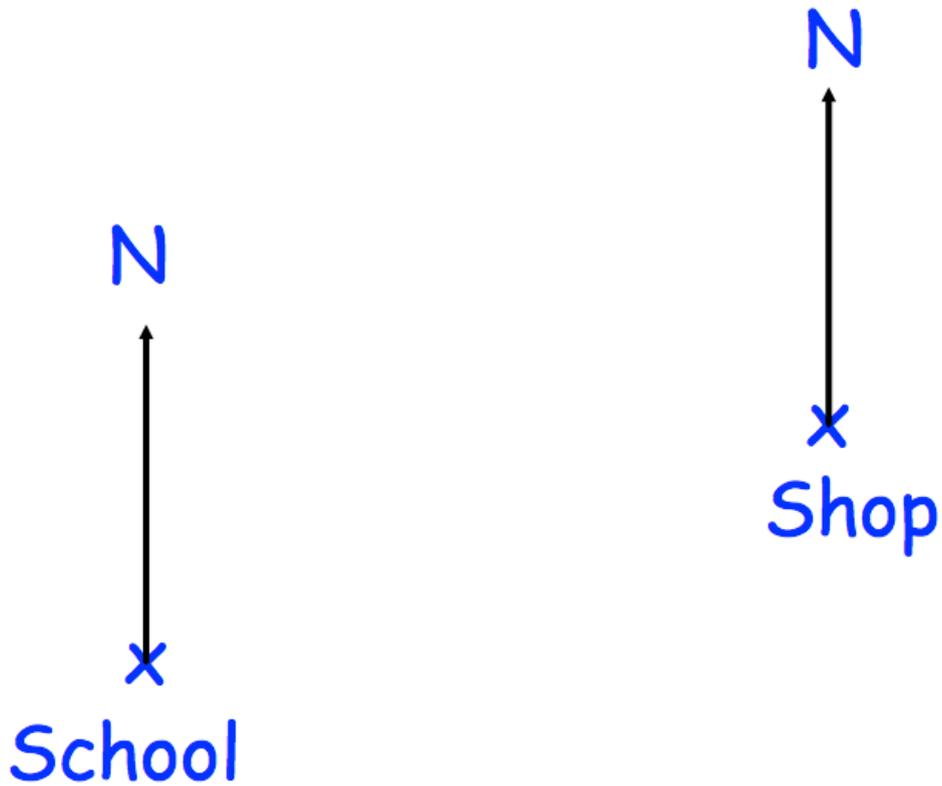Use a scale of 1cm represents 4km.

(2)

2. A map has a scale of 1cm : 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.

....

(2)

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

N

N

x
Shop

x
School

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.

.........................m

(2)

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

    What is the distance between the cities on the map?

.............................cm

(1)

5. The diagram shows a scale drawing.

Scale: 1cm represents 100km

C

D

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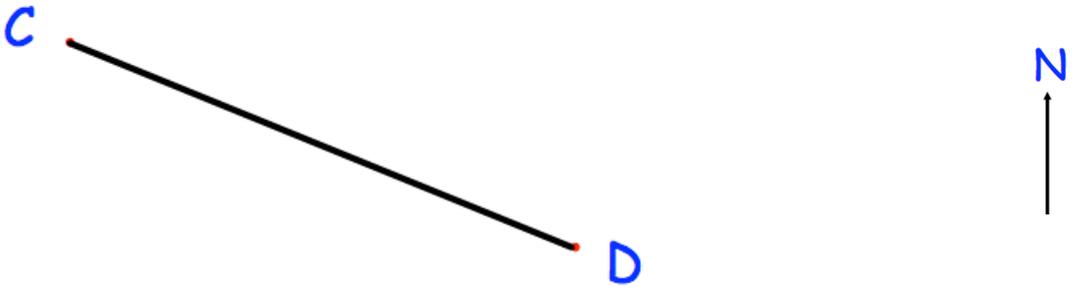
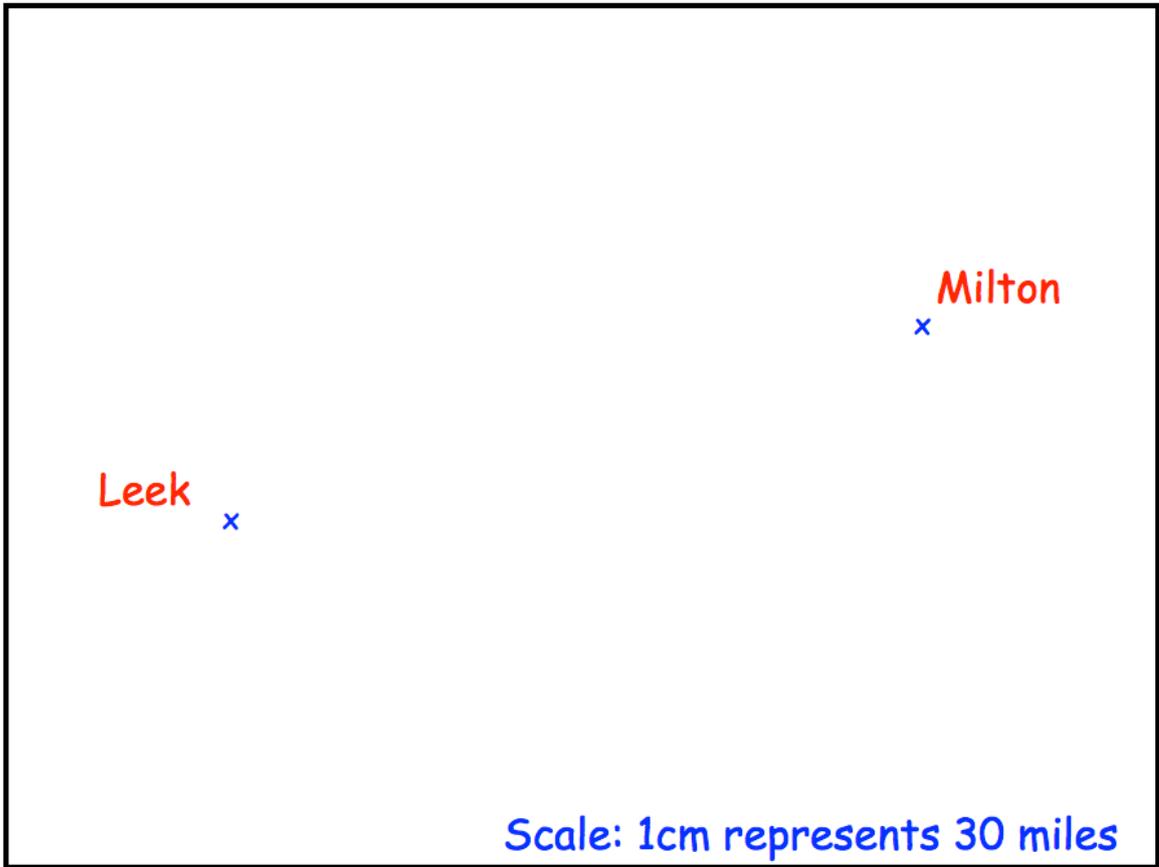(a) Use the diagram to calculate the actual distance from C to D.

........................km

(2)

E is 300km due south of C.

(c) Show E on the diagram.

(1)

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

Milton
×

Leek
×

Scale: 1cm represents 30 miles

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

........................miles

(2)

Sandville is located at the midpoint of Leek and Milton.

(b) How far is Sandville from Leek?

........................miles

(1)

7. The diagram shows the position of three lampposts, A, B and C, on a scale drawing of a road.

6.5cm

A   B   C

10cm
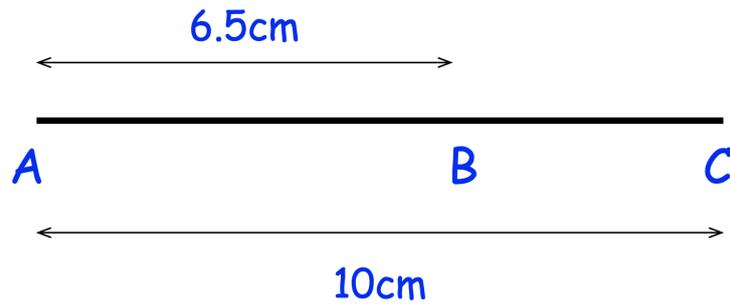
The scale drawing has a scale of 1cm = 30m

Work out the actual distance between lamppost B and lamppost C.

.............................m

(3)

8. In a garden, there is an oak tree and an apple tree.

Anna draws a scale drawing of the apple tree.
She uses a scale of 1cm represents 2.4m
The height of the apple tree on her scale drawing is 3.75cm

The actual height of the oak tree is 1.9 times the height of the apple tree.

Work out the actual height of the oak tree.

.............................m

(3)

9. Shown is a scale drawing of an island.
Each square on the grid has an area of 1cm²
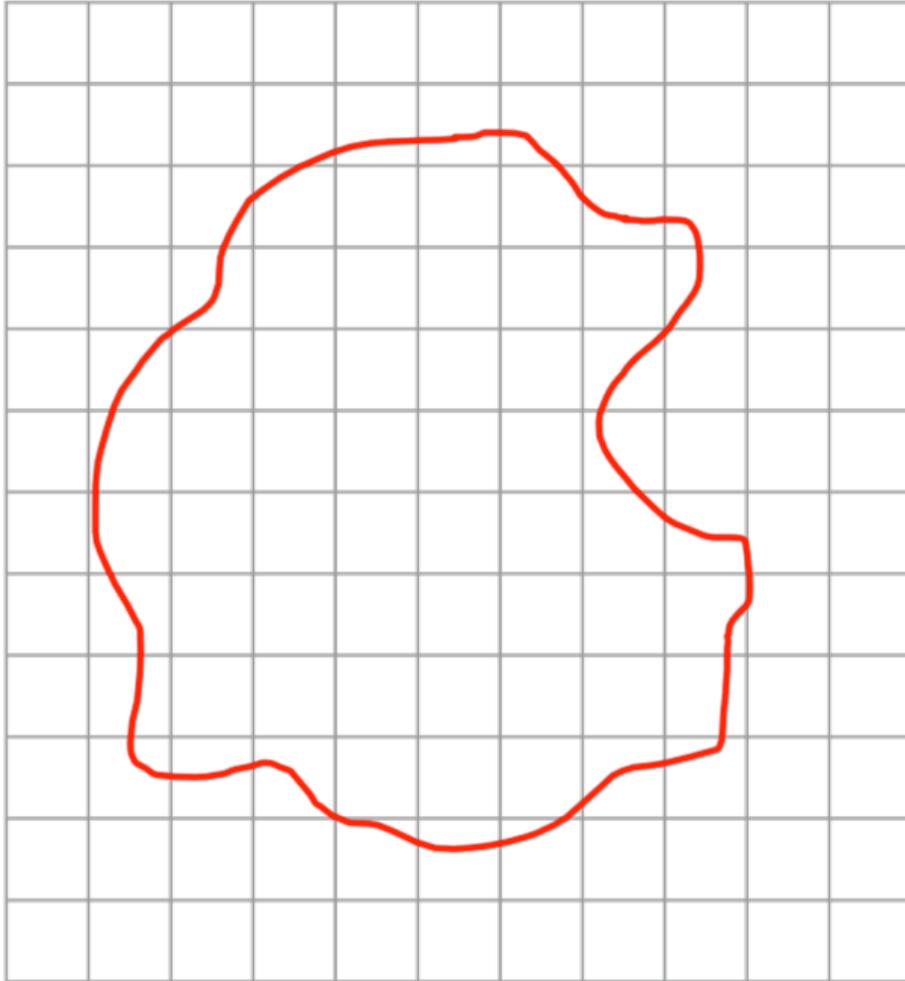
The scale is 1cm² represents 10km²

Find an estimate for the area of the island.
Give your answer in km²

.........................km²

(3)

10. A farmer makes a scale drawing of his rectangular field.
On the scale drawing, the field has a length of 24cm and width of 5.2cm

The actual width of the field is 72.8 metres

Work out the actual length of the field.
Give your answer in metres.

.........................m

(3)

---

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

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

....

(2)

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

....

(1)

12. 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?

    ....m
    (2)

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

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

    ....
    (2)

    The distance between two lakes is 4.5km

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

    ....cm
    (2)

14.   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.

                                                           ....m
                                                                              (3)

15.   Jordan has a map with a scale of 1:75000

      The distance between two towns is 8cm on the map.

      Work out the distance, in kilometres, between the towns.

                                                           ....km
                                                                              (3)

16.   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.

                                                           ....cm
                                                                              (3)

17. The map shows the location of two towns, A and B.

B

A

Scale: 1cm represents 8km

A helicopter departs town A at 21:52 and flies directly to town B.
The helicopter travels at an average speed of 120km/h

What time does the helicopter arrive at town B?

....

(5)