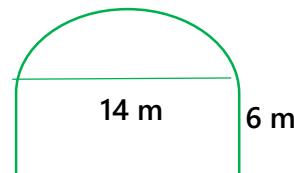




# SCALE DRAWINGS

- 1) On a drawing, the scale is 1 cm to 10 km. What do the following lengths on the drawing represent in real life?
  - a. 2 cm
  - b. 4 cm
  - c. 5 cm
  - d. 1.5 cm
- 2) On a design layout, the scale is 1 cm to 5 m. What do the following lengths on the layout represent in real life?
  - a. 2 cm
  - b. 3 cm
  - c. 0.5 cm
  - d. 0.2 cm
- 3) On a globe, the scale is 1 cm to 500 miles. What do the following lengths on the globe represent in real life?
  - a. 5 cm
  - b. 10 cm
  - c. 0.5 cm
  - d. 0.1 cm
- 4) On the diagram of a stadium, the scale is 2 cm to 10 m. How many centimetres on the diagram are needed to represent 30 m?
- 5) On a blueprint, the scale is 0.5 cm to 1 m. How many centimetres on the blueprint are needed to represent 3 m?
- 6) On a map, the scale is 1 cm to 8 miles. How many centimetres on the map are needed to represent 12 miles?
- 7) On a scale diagram, 1 cm represents 4 m. What is the actual distance for a line of 6.5 cm?
- 8) A map uses a scale of 1 cm to 2 km. How far is 7.5 cm on the map in real life?
- 9) A statue model uses a scale of 1 cm to 20 cm. The model is 18 cm long. What is the actual length of the statue in real life?
- 10) Express the following scales as ratios in the form 1 : n.
  - a. 1 cm to 2 m
  - b. 1 mm to 10 cm
  - c. 2 cm to 10 m
  - d. 4 cm to 5 m
  - e. 2 cm to 1 km
  - f. 0.2 cm to 3 km
- 11) The model of a car has a scale of 1 : 30. The actual length of the car is 4.2 m. How long is the model of the car in centimetres?
- 12) The model of an office building has a scale of 1 : 150. The height of the model is 60 cm. What is the actual height of the office building in metres?
- 13) The map of a national park has a scale of 1 : 25,000. The distance between two points on the map is 14 cm. Work out the actual distance between the two points in kilometres.
- 14) A garden pond is made of a rectangle 14 m by 6 m with a semicircle attached to one of the long 14 m sides.



A scale drawing of the pond is made with a scale of 1 : 200.

- a. Find the length (in mm) on the drawing of the straight long edge.
- b. Work out the area of the pond on the drawing in  $\text{cm}^2$ . Give your answer to 3 significant figures.
- c. Find the actual area of the pond in  $\text{m}^2$ . Give your answer to 3 significant figures.
- d. A stone border is built 0.5 m from the outer perimeter of the pond. The border follows the same shape as the pond. Calculate the area between the border and the pond. Give your answer to 3 significant figures.