1. Use the word diameter and radius to complete this statement.

The ──── is the . . . . and - - - - - is the . . . . of the circle
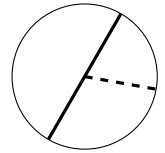
2. Here is a picture of 4 identical circles inside a rectangle.
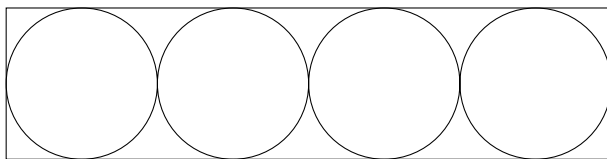
h Diagram NOT accurately drawn

$w = 800\,\text{mm}$

Work out the diameter of one of the circles.   . . . . . mm
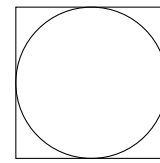
3a)   The width, w, of the rectangle is 5.6 cm.

h

w
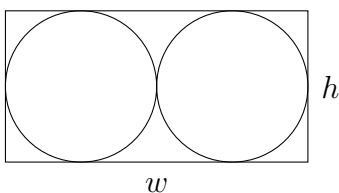
Work out the diameter of one of the circles.

. . . . . cm
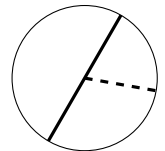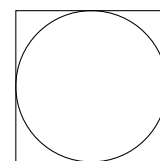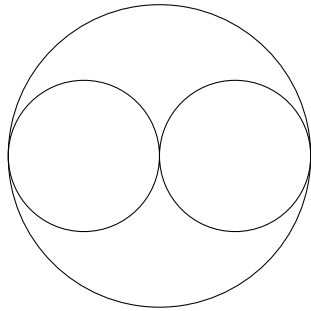
3b)   The side length of this square is 7.6 cm.

Work out the radius of the circle.

. . . . . cm

shapeProblemNC (2) Answers 1) diameter, radius 2) 200 mm 3a) 2.8 3b) 3.8 4a) 50 4b) 18

4a)   Here is a diagram of 3 circles.
Two of the circles are the same size.

The radius of the large circle is 100 mm

Work out the radius of the small circles

. . . . . mm

4b)   Here is a diagram of 3 semi circles.
Two of the semi circles are the same size.

The diameter of the large semi circle is 72 m

Work out the size of the radius of the
small semi circles.

. . . . . m

4a)   Here is a diagram of 3 circles.
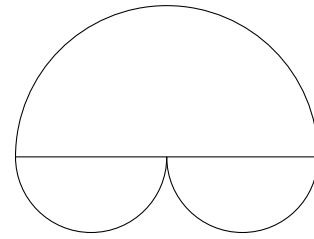Two of the circles are the same size.

The radius of the large circle is 100 mm

Work out the radius of the small circles

. . . . . mm

4b)   Here is a diagram of 3 semi circles.
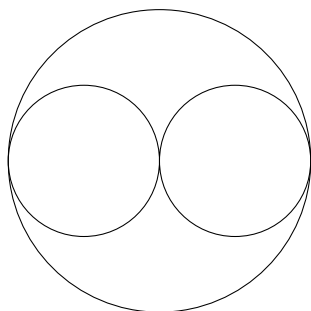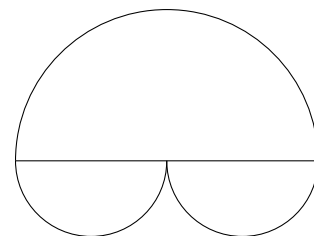Two of the semi circles are the same size.

The diameter of the large semi circle is 72 m

Work out the size of the radius of the
small semi circles.

. . . . . m