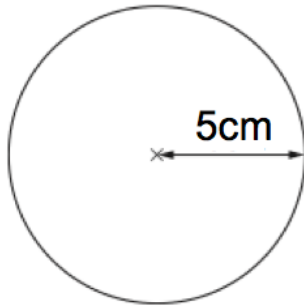# Area and Circumference of a Circle

1. Shown is a circle with radius 5cm.

5cm

Work out the area of the circle.

State the units for your answer.
Give your answer to 2 decimal place.

....

(3)
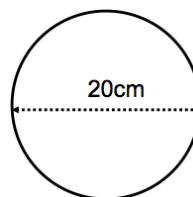
2. A circle has radius 3cm.

Work out the area of the circle. Give an exact answer in terms of π

.........................cm²

(2)

3. A circle has a diameter of 20cm.

Work out the area of the circle.
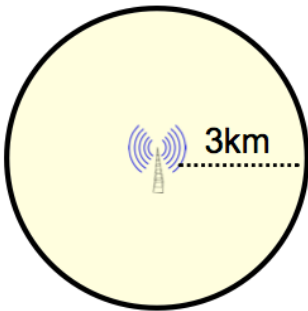Use π = 3.14

20cm

.........................cm²

(2)

4.   A circular fishpond has radius 2.5m

      Calculate the area of the fishpond.
      Include units for your answer.

      ....

      (3)

5.   A mobile phone mast has a range of 3km.

      Calculate the area of the shaded region.
      Give your answer to 2 decimal places.

      ....km²

      (2)

6.   A circular flower bed has diameter 7 metres.

      Work out the area of the flower bed.
      Give your answer correct to 1 decimal place.
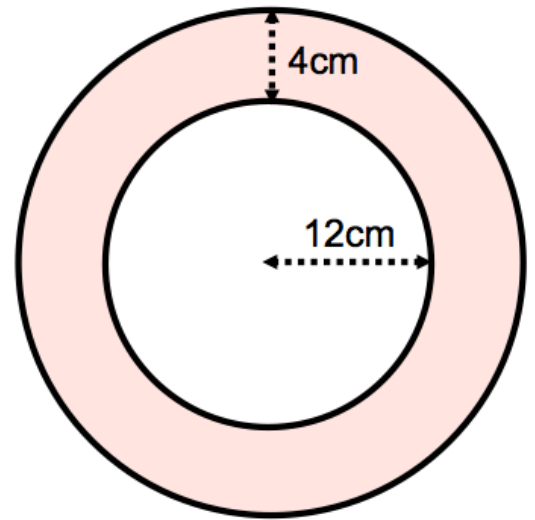

7m
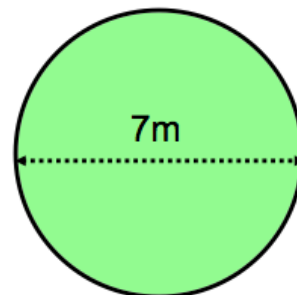
      ....m²

      (2)

7.   Shown below is a circular photo surrounded by a frame.

The photo has radius 12cm.
The frame has width 4cm.

Work out area of the frame.
This area is shaded in the diagram.

4cm

12cm

.........................cm²

(3)

8.   A circle has an area of 200cm²

Work out the radius of the circle.

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

(2)

9.   A circle has an area of 64π cm²

Work out the radius of the circle.

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

(2)

10.   A circle has a circumference of 40cm.

Work out the area of the circle.

.........................cm²

(3)

11.   Shown on the right is a rectangular garden.

Belle wants to re-seed the grass in her garden.

The garden is 10 metres long and 6 metres wide.
There is a vegetable patch that is 2 metres long and
1.5 metres long. There is a circular pond that has
radius 2 metres.
The remainder of the garden is grass.

Each bag of grass seed costs £4.60 and covers 10m².

Work out the total cost to re-seed the garden.

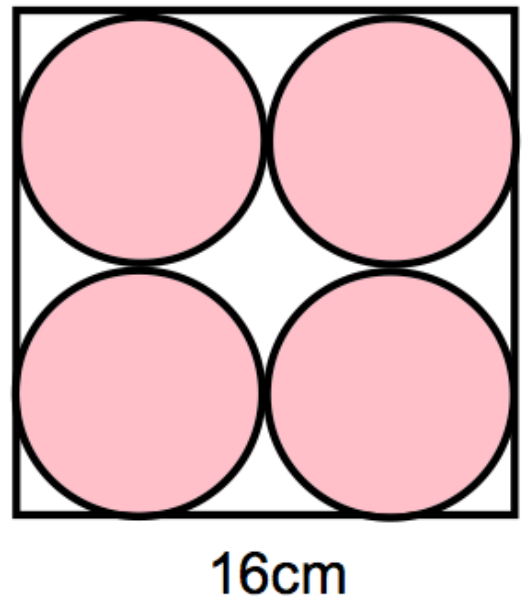
10m

2m

1.5m

2m

6m

£.........................
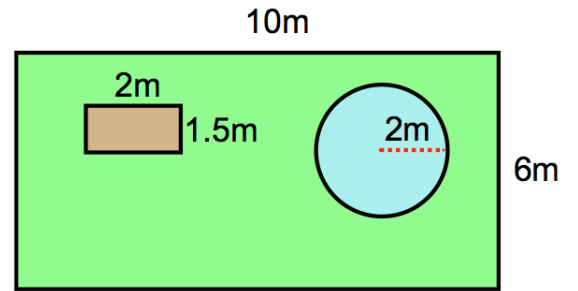
(6)

12.   A logo is designed that has four pink circles within a white square.

The square has side length 16cm.

Find the area of the logo that is white.

16cm

.........................cm²

(5)