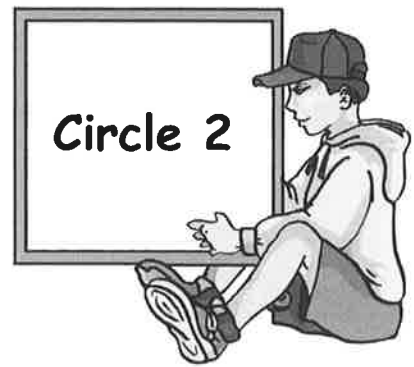


# CHAPTER 14



## Exercise 1 The Area of a Circle

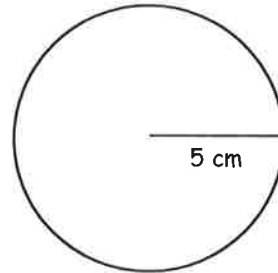
1. Find the area of a circle with radius 5 cm.

COPY and complete :-

$$A = \pi r^2$$

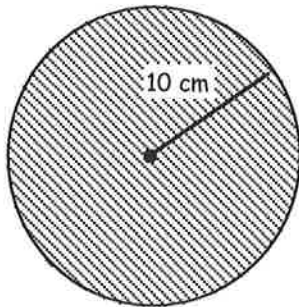
$$A = 3.14 \times 5 \times \dots$$

$$A = \dots$$

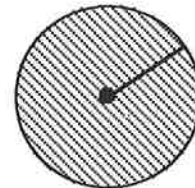


2. Calculate the area of each circle below :-  
(You should set down 3 lines of working)

a

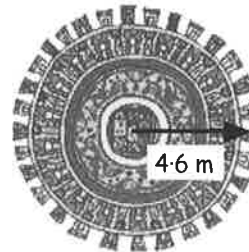


b



radius = 22.5 mm

3. Calculate the area of the circular carpet shown.  
It has a radius of 4.6 metres.  
(Round your answer to 1 dec. pl.)

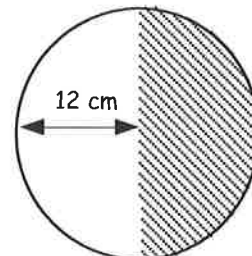


4.



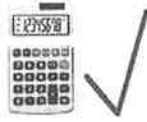
Work out the area of this coloured counter which has **diameter** 1.8 cm. (Round your answer to 2 dec. pl.)

5. This circular sign has been split into 2 semi-circles.  
If the radius of the circle is 12 cm, find the area of the shaded part of the circle.



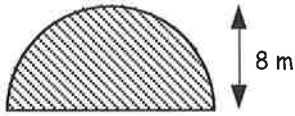
## Exercise 2

## Circle Problems

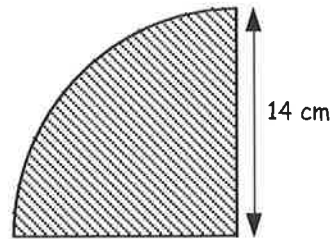


1. Calculate the area of each shape below :-

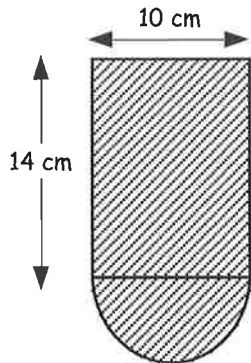
a



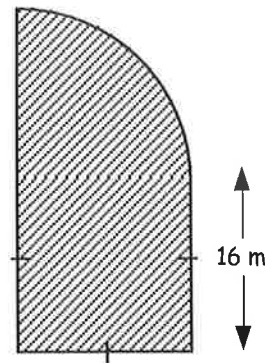
b



c



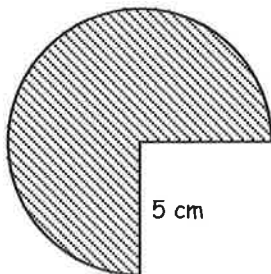
d



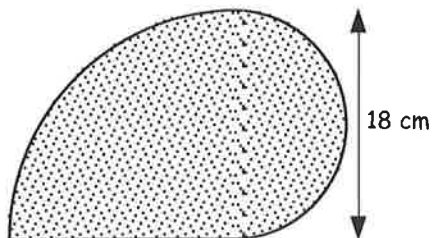
2. Calculate the perimeter of each shape in question 1.

3. Calculate the area of each shape below :-

a

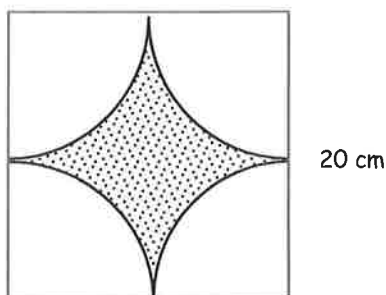


b

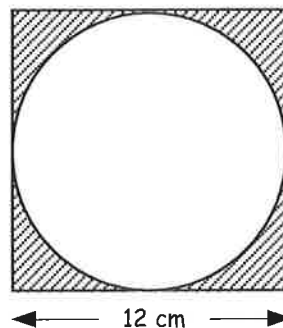


4. Calculate the shaded area of each square below :-

a



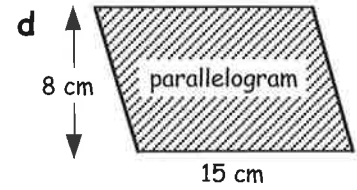
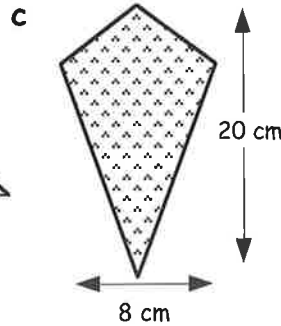
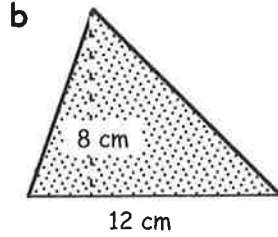
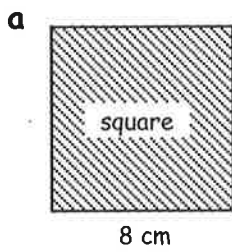
b



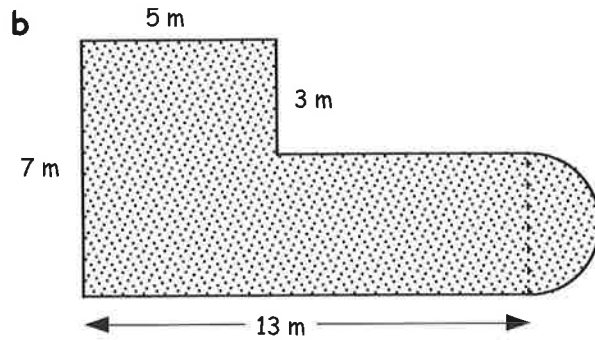
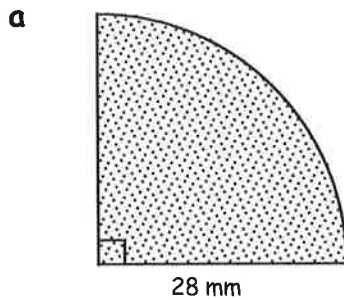
# Revisit - Review - Revise Exercise 14



1. Use the correct formula to calculate the area of each of the following :-



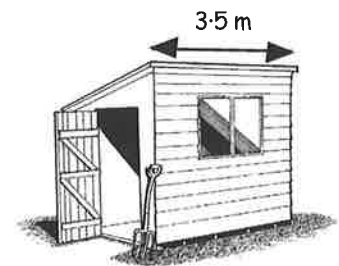
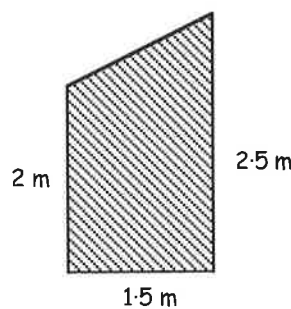
2. Calculate the area of each of the following shapes :-



3. **a** A circle has a radius of 80 cm. Find its circumference.  
**b** A circle has a circumference of 1884 cm. Find its radius.  
**c** A circle has a diameter of 14 m. Find its area.

4. The back wall of a shed is as shown.

- a** Find the area of the back wall.  
**b** Find the volume of the shed.



5. A box in the shape of a cuboid has length 80 cm, breadth 40 cm and height 20 cm.

- a** Calculate the volume of the box.  
**b** Write down the capacity of the box.

