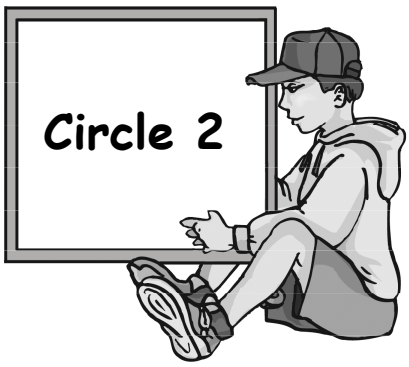
CHAPTER 14



Exercise 1 — The Area of a Circle

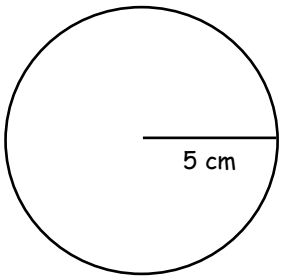
1. Find the area of a circle with radius 5 cm.

COPY and complete :-

$A = \pi r^2$

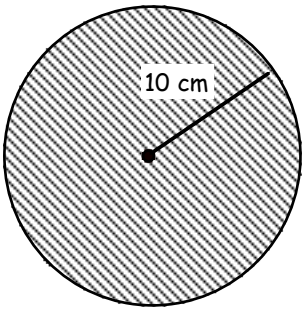
$A = 3{\cdot}14 \times 5 \times \ldots$

$A = \ldots\ldots$

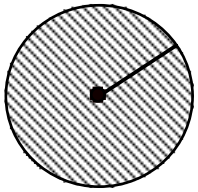


2. Calculate the area of each circle below :-
*(You **should** set down 3 lines of working)*

a



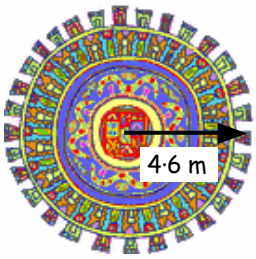
b



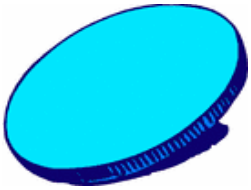
radius = 22·5 mm

3. Calculate the area of the circular carpet shown.

It has a radius of 4·6 metres.
(*Round your answer to 1 dec. pl.*)



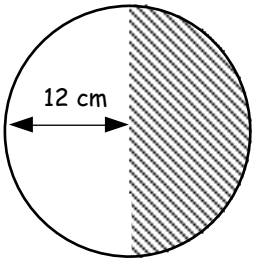
4.



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.

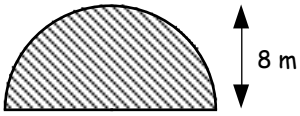
If the radius of the circle is 12 cm, find the area of the shaded part of the circle.



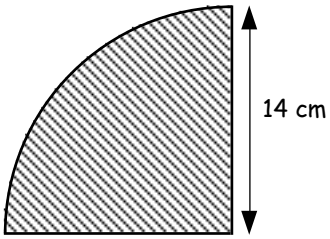
Exercise 2 Circle Problems

1. Calculate the area of each shape below :-

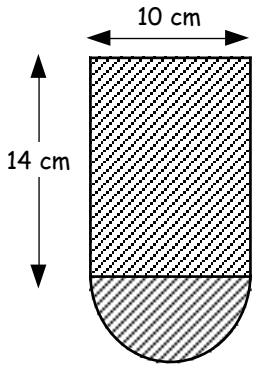
a



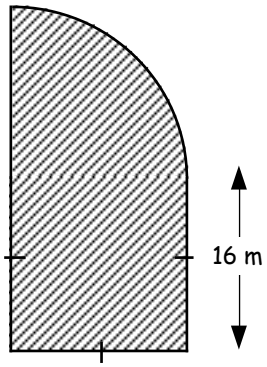
b



c



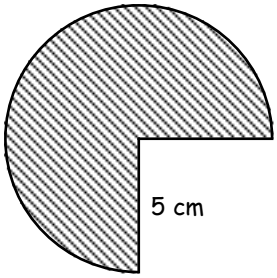
d



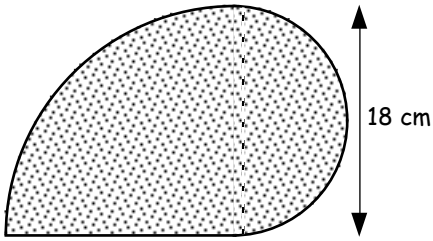
2. Calculate the perimeter of each shape in question 1.

3. Calculate the area of each shape below :-

a

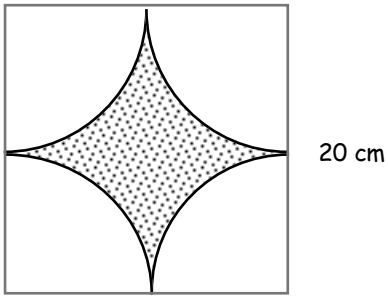


b

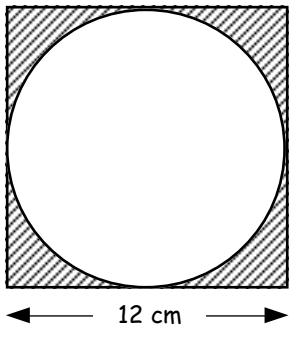


4. Calculate the shaded area of each square below :-

a



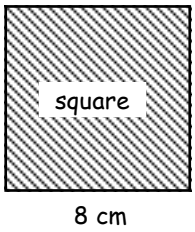
b



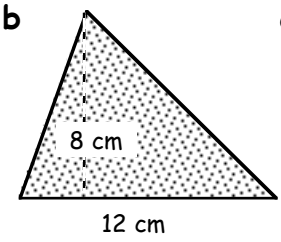
Revisit - Review - Revise Exercise 14

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

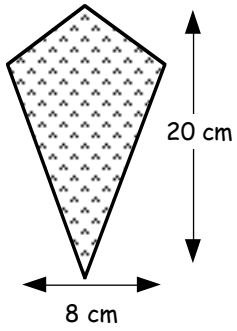
a



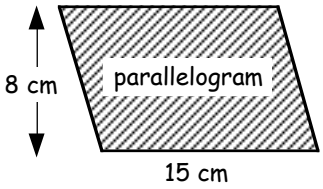
b



c

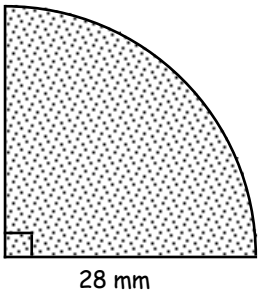


d

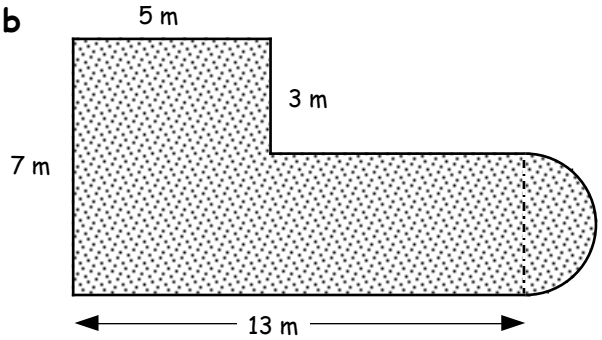


2. Calculate the area of each of the following shapes :-

a



b



3. **a** A circle has a radius of 80 cm. Find its circumference.

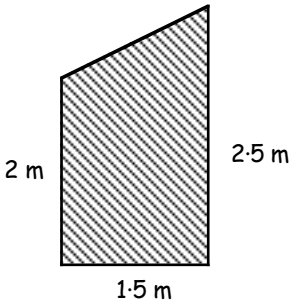
b A circle has a circumference of 1884 cm. Find its radius.

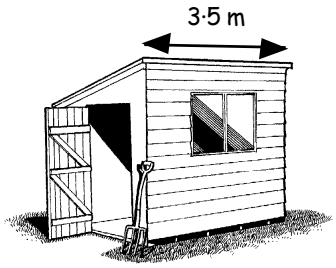
c A circle has a diameter of 14 m. Find its area.

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.