5.

The diagram shows a shape, made from a semi-circle and a rectangle. The diameter of the semi-circle is 12 cm. The length of the rectangle is 14 cm.

Calculate the perimeter of the shape. Give your answer correct to 3 significant figures.

5.

A semicircle has a diameter of 9 cm.

Work out the perimeter of the semicircle. Give your answer correct to 3 significant figures.
18. The diagram shows the shape $PQRST$.

Diagram NOT accurately drawn.

$RST$ is a circular arc with centre $P$ and radius 18 cm.

Angle $RPT = 40^\circ$.

(a) Calculate the length of the circular arc $RST$.
Give your answer correct to 3 significant figures.

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

(2)

$PQR$ is a semicircle with centre $O$.

(b) Calculate the total area of the shape $PQRST$.
Give your answer correct to 3 significant figures.

.......................... cm$^2$

(3)
2. A can of drink is in the shape of a cylinder.
The can has a radius of 4 cm and a height of 15 cm.

![Diagram of a cylinder with dimensions 4 cm radius and 15 cm height]

Calculate the volume of the cylinder.
Give your answer correct to 3 significant figures.

6.

![Diagram of a solid cylinder with dimensions 54 cm radius and 10 cm height]

The diagram shows a solid cylinder.
The radius of the cylinder is 54 cm.
The height of the cylinder is 10 cm.

(a) Calculate the curved surface area of the cylinder.
Give your answer correct to three significant figures.
21. Diagram NOT accurately drawn

The diagram shows a sector $OAB$ of a circle centre $O$. The radius of the circle is 12 cm. Angle $AOB = 171^\circ$.

(a) Calculate the area of the sector $AOB$. Give your answer correct to 3 significant figures.

\[ \text{............... cm}^2 \]  
(3)

$OA$ and $OB$ are joined to make a cone.

(b) Calculate the vertical height, in centimetres, of the cone. Give your answer correct to 3 significant figures.

This is tricky – only attempt if you are up for a challenge!

\[ \text{............... cm} \]  
(6)