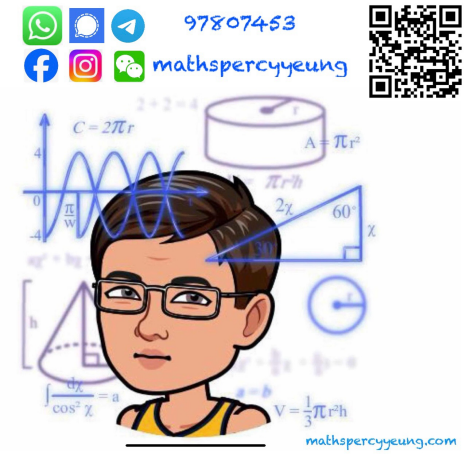
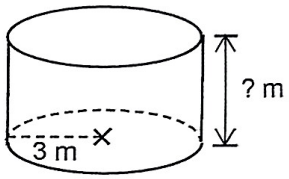
11 Areas and Volumes (II)



Section A: Write your answers in the spaces provided. Working need not be shown.

MSS18-4

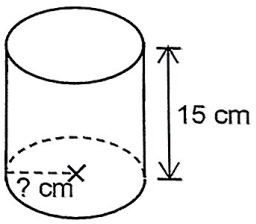
1. The figure shows a right circular cylinder. Its base radius is 3 m and its volume is 36π m^3. Find the height of the cylinder.



The height of the cylinder is _____ m.

MSS18-4

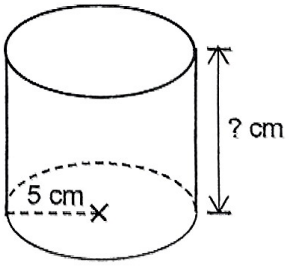
2. The figure shows a right circular cylinder. Its height is 15 cm and its volume is 735π cm^3. Find the base radius of the cylinder.



The base radius of the cylinder is _____ cm.

MSS18-5

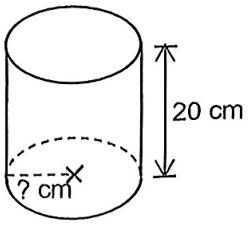
3. The figure shows a right circular cylinder. Its base radius is 5 cm and its curved surface area is 70π cm^2. Find the height of the cylinder.



The height of the cylinder is _____ cm.

MSS18-5

4. The figure shows a right circular cylinder. Its height is 20 cm and its curved surface area is 440π cm^2. Find the base radius of the cylinder.

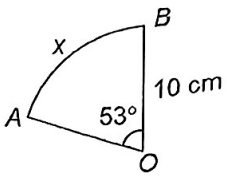


The base radius of the cylinder is _____ cm.

Section B: Answer in the spaces provided. All working and conclusions must be clearly shown.

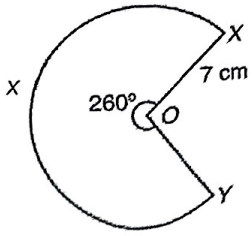
MSS16-1

5. In the figure, the radius of sector OAB is 10 cm and $\angle AOB = 53°$. Let x be the arc length of the sector, find x. Give the answer correct to 3 significant figures.



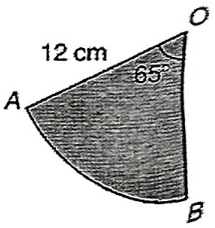
MSS16-1

6. In the figure, the radius of sector OXY is 7 cm and reflex $\angle XOY = 260°$. Let x be the arc length of the sector, find x. Give the answer correct to 3 significant figures.



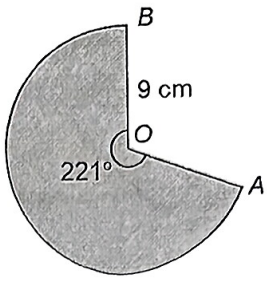
MSS16-2

7. In the figure, the radius of sector OAB is 12 cm and $\angle AOB = 65°$. Find the area of the sector. Give the answer correct to the 3 significant figures.



MSS16-2

8. In the figure, the radius of sector OAB is 9 cm and reflex $\angle AOB = 221°$. Find the area of the sector. Give the answer correct to the 3 significant figures.



MSS18-1

9. The figure shows a right circular cylinder. Its base radius is 9 cm and its height is 14 cm. Find the volume of the cylinder. Express the answer in terms of π.