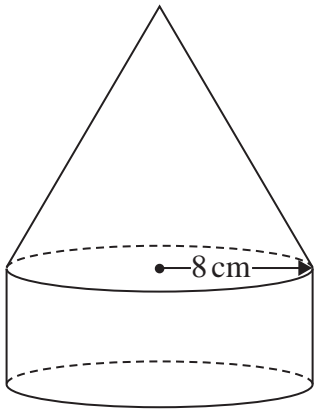
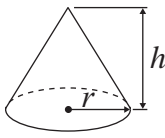


16 The diagram shows a solid shape made from a cylinder and a cone.



Volume of cone = $\frac{1}{3}\pi r^2 h$



The cone has a base radius of 8 cm.

The cylinder has a radius of 8 cm.

The vertical height of the cone is three times the height of the cylinder.

The volume of the solid shape is $640\pi\text{cm}^3$

Work out the vertical height of the cone.

You must show all your working.

..... cm

(Total for Question 16 is 4 marks)