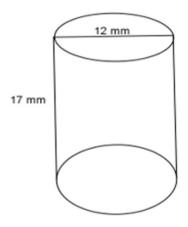
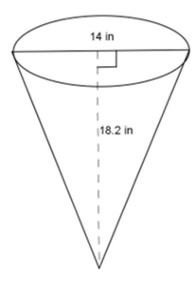
## **Volumes of Cones & Cylinders**

1. Use the diagram to help you find the volume of the right circular cylinder.

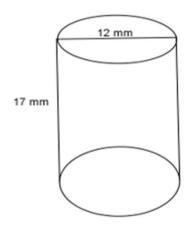


2. Use the diagram to help you find the volume of the right circular cone.



## **Volumes of Cones & Cylinders**

1. Use the diagram to help you find the volume of the right circular cylinder.



If the diameter is 12 mm, then the radius is 6 mm.

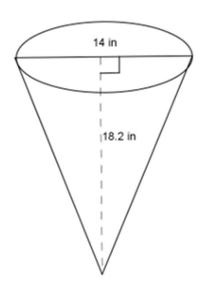
$$V = \pi r^2 h$$

$$V = \pi (6)^2 (17)$$

$$V = 612\pi$$

The volume of the right circular cylinder is  $612\pi \ mm^3$ .

2. Use the diagram to help you find the volume of the right circular cone.



If the diameter is 14 in., then the radius is 7 in.

$$V = \frac{1}{3}\pi r^{2}h$$

$$V = \frac{1}{3}\pi (7)^{2}(18.2)$$

$$V = 297.26666 \dots \pi$$

$$V \approx 297.3\pi$$

The volume of the right cone is about  $297.3\pi$  in<sup>3</sup>.