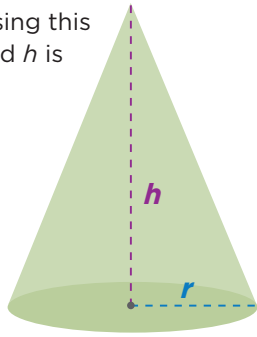


Volume of Cones

A cone is a three-dimensional figure with one circular base and one vertex. You can find the volume of a cone using this formula, where r is the **radius** and h is the **height**:

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



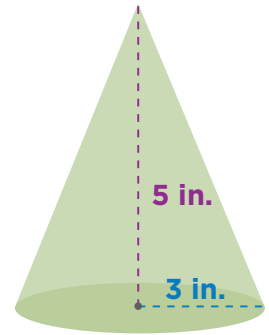
Let's try it! Find the volume of the cone below. Use 3.14 as an approximation for π .

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

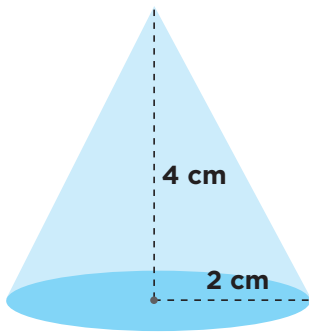
$$V \approx \frac{1}{3} \cdot 3.14 \cdot 3^2 \cdot 5$$

$$V \approx \frac{1}{3} \cdot 3.14 \cdot 9 \cdot 5$$

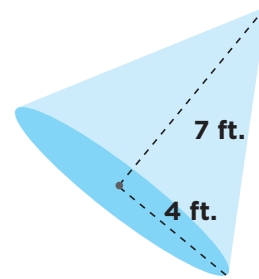
$$V \approx 47.1 \text{ in.}^3$$



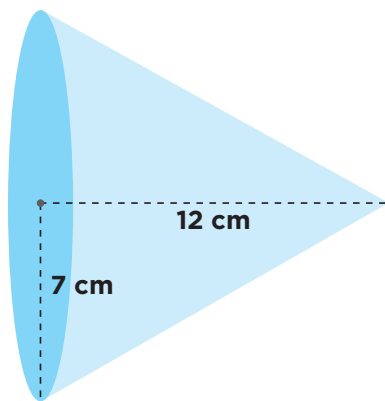
Try it yourself! Calculate the volume of each cone. Use 3.14 for π . Round your answer to the nearest hundredth if needed.



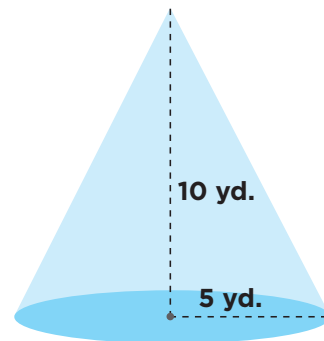
$$V \approx \underline{16.75 \text{ cm}^3}$$



$$V \approx \underline{117.23 \text{ ft.}^3}$$



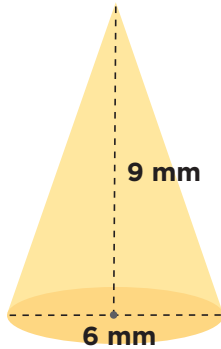
$$V \approx \underline{615.44 \text{ cm}^3}$$



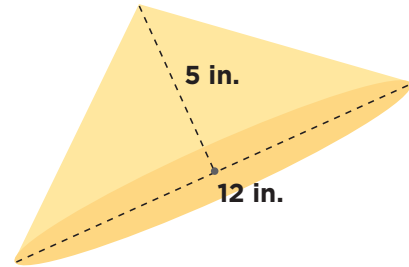
$$V \approx \underline{261.67 \text{ yd.}^3}$$

Volume of Cones

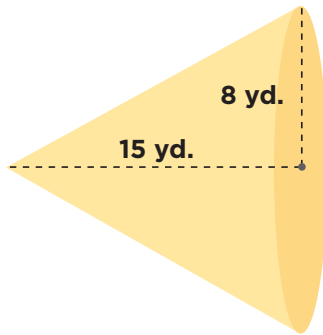
Keep going! Calculate the volume of each cone. Use 3.14 for π . Remember that the diameter of a circle is twice its radius. Round your answer to the nearest hundredth if needed.



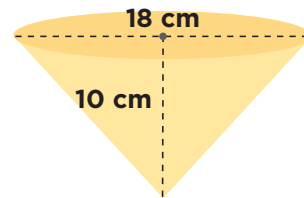
$$V \approx \underline{84.78 \text{ mm}^3}$$



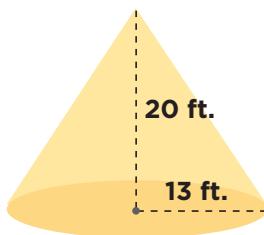
$$V \approx \underline{188.4 \text{ in.}^3}$$



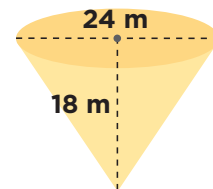
$$V \approx \underline{1,004.8 \text{ yd.}^3}$$



$$V \approx \underline{847.8 \text{ cm}^3}$$



$$V \approx \underline{3,537.73 \text{ ft.}^3}$$



$$V \approx \underline{2,712.96 \text{ m}^3}$$