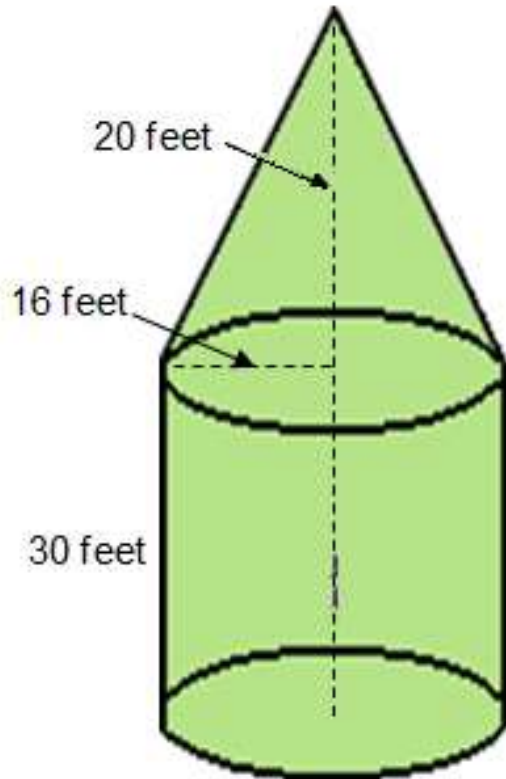


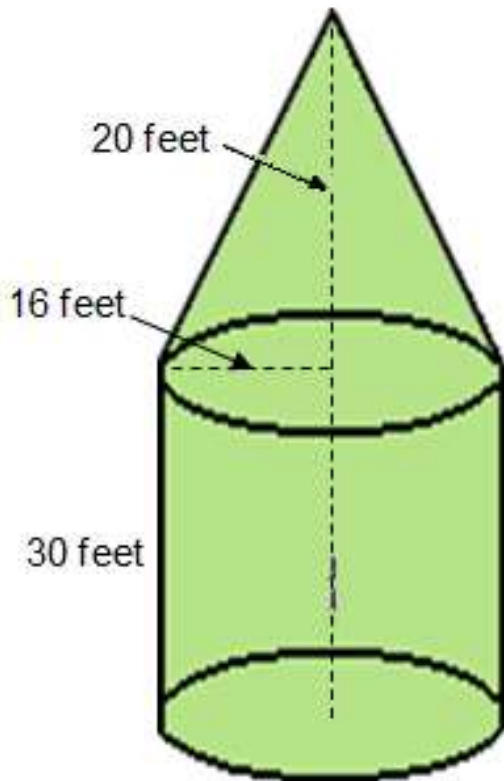
Volume of a Composite Figure

Find the volume. Round to the nearest hundredth if necessary.



Volume of a Composite Figure

Find the volume. Round to the nearest hundredth if necessary.



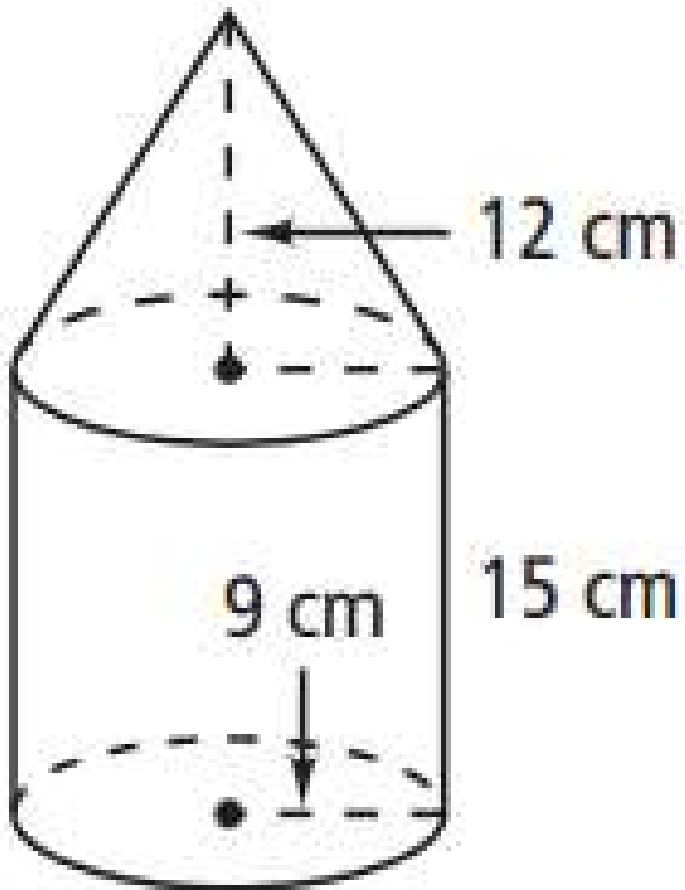
$$\begin{aligned}V_{\text{cone}} &= \frac{1}{3} \pi r^2 h \\&= \frac{1}{3} \cdot \pi \cdot 16^2 \cdot 20 \\&= 5,361.65 \text{ ft}^3\end{aligned}$$

$$\begin{aligned}V_{\text{cylinder}} &= \pi r^2 h \\&= \pi \cdot 16^2 \cdot 30 \\&= 24,127.43 \text{ ft}^3\end{aligned}$$

$$\begin{aligned}V_{\text{Total}} &= V_{\text{cone}} + V_{\text{cylinder}} \\&= 5,361.65 + 24,127.43 \\&= 29,489.08 \text{ ft}^3\end{aligned}$$

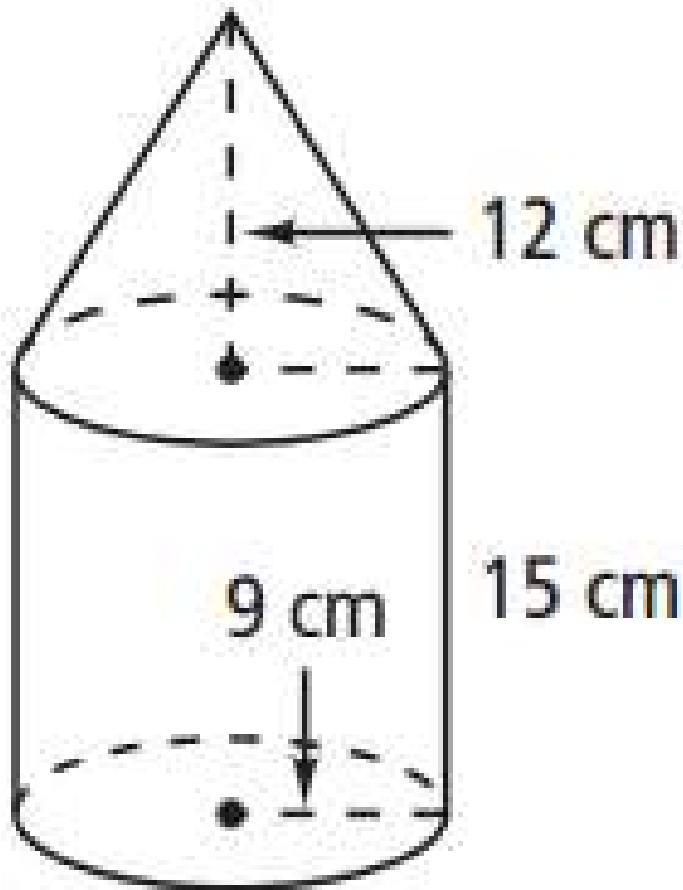
Volume of a Composite Figure

Find the volume. Round to the nearest hundredth if necessary.



Volume of a Composite Figure

Find the volume. Round to the nearest hundredth if necessary.



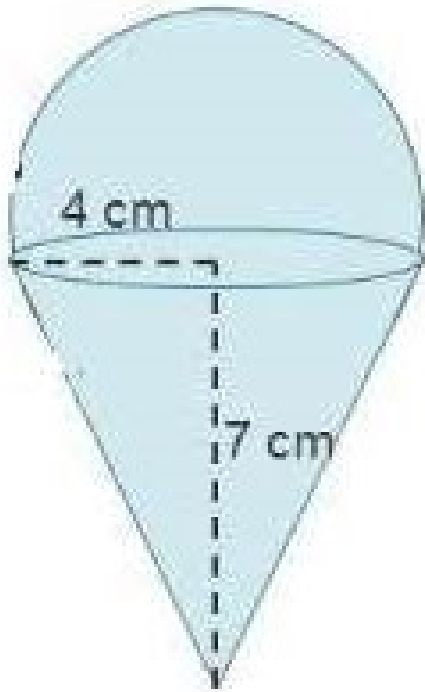
$$\begin{aligned}V_{\text{cone}} &= \frac{1}{3}\pi r^2 h \\&= \frac{1}{3} \cdot \pi \cdot 9^2 \cdot 12 \\&= \boxed{1,017.88 \text{ cm}^3}\end{aligned}$$

$$\begin{aligned}V_{\text{cylinder}} &= \pi r^2 h \\&= \pi \cdot 9^2 \cdot 15 \\&= \boxed{3,817.04 \text{ cm}^3}\end{aligned}$$

$$\begin{aligned}V_{\text{Total}} &= V_{\text{cone}} + V_{\text{cylinder}} \\&= 1,017.88 + 3,817.04 \\&= \boxed{4,834.92 \text{ cm}^3}\end{aligned}$$

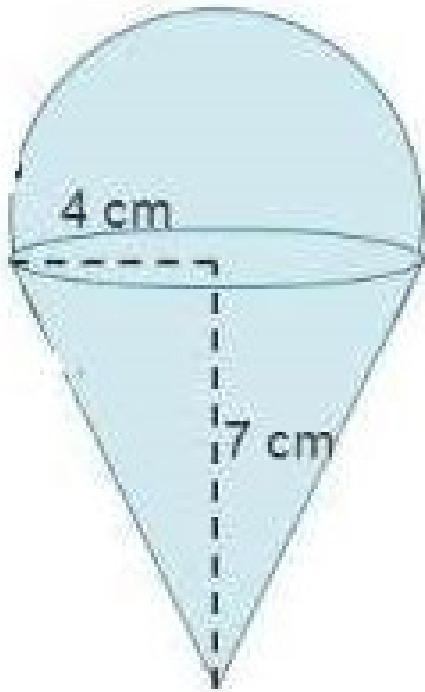
Volume of a Composite Figure

Find the volume. Round to the nearest hundredth if necessary.



Volume of a Composite Figure

Find the volume. Round to the nearest hundredth if necessary.



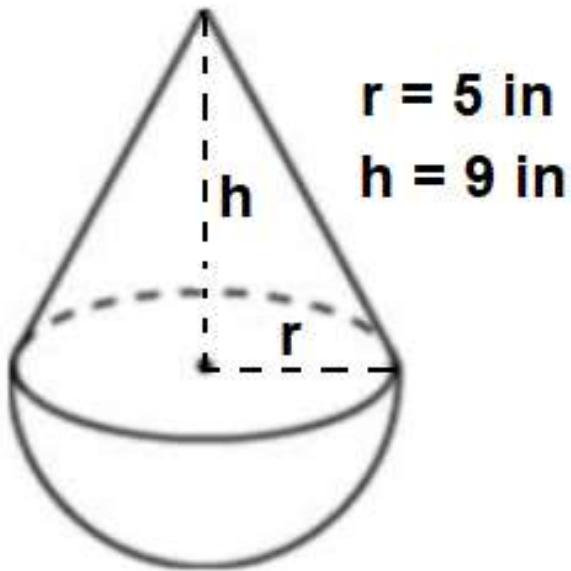
$$\begin{aligned}V_{\text{Half Sphere}} &= \frac{4}{3}\pi r^3 \div 2 \\&= \frac{4}{3} \cdot \pi \cdot 4^3 \div 2 \\&= \boxed{134.04 \text{ cm}^3}\end{aligned}$$

$$\begin{aligned}V_{\text{Cone}} &= \frac{1}{3}\pi r^2 h \\&= \frac{1}{3} \cdot \pi \cdot 4^2 \cdot 7 \\&= \boxed{117.29 \text{ cm}^3}\end{aligned}$$

$$\begin{aligned}V_{\text{Total}} &= V_{\text{Half Sphere}} + V_{\text{Cone}} \\&= 134.04 + 117.29 \\&= \boxed{251.33 \text{ cm}^3}\end{aligned}$$

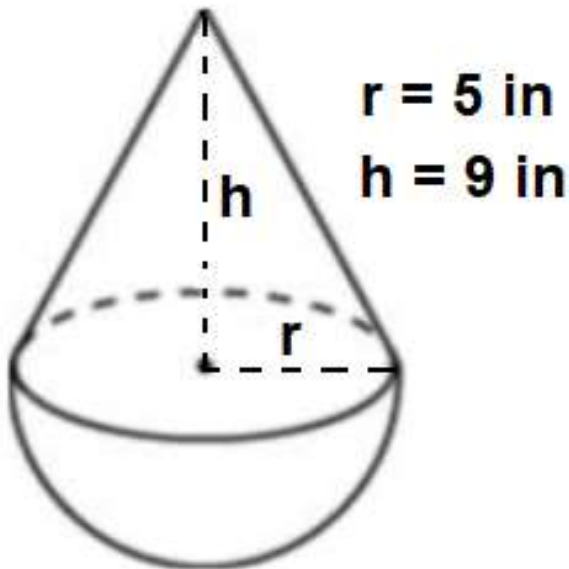
Volume of a Composite Figure

Find the volume. Round to the nearest hundredth if necessary.



Volume of a Composite Figure

Find the volume. Round to the nearest hundredth if necessary.



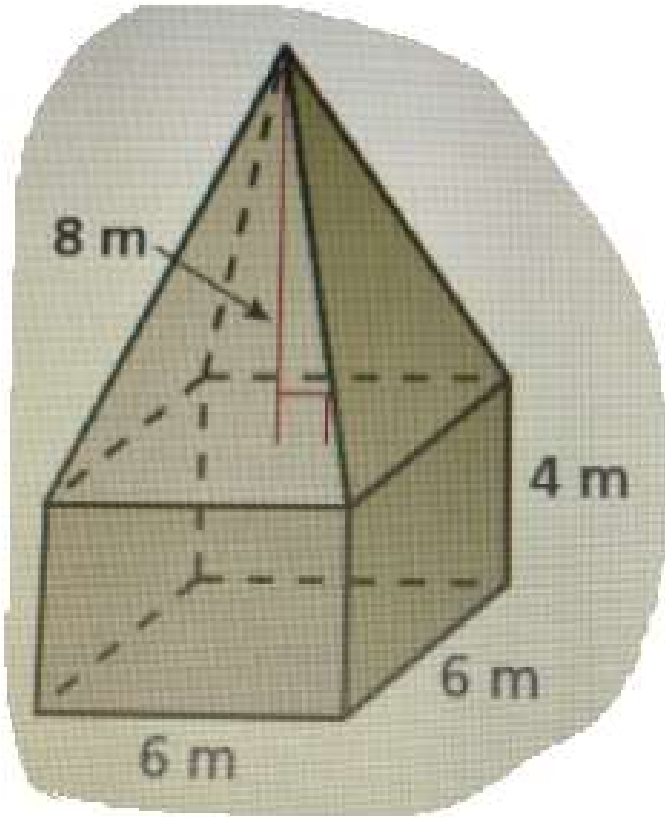
$$\begin{aligned}V_{\text{cone}} &= \frac{1}{3} \pi r^2 h \\ &= \frac{1}{3} \cdot \pi \cdot 5^2 \cdot 9 \\ &= \boxed{235.62 \text{ in}^3}\end{aligned}$$

$$\begin{aligned}V_{\text{Half Sphere}} &= \frac{4}{3} \pi r^3 \div 2 \\ &= \frac{4}{3} \cdot \pi \cdot 5^3 \div 2 \\ &= \boxed{261.80 \text{ in}^3}\end{aligned}$$

$$\begin{aligned}V_{\text{Total}} &= V_{\text{cone}} + V_{\text{Half Sphere}} \\ &= 235.62 + 261.80 \\ &= \boxed{497.42 \text{ in}^3}\end{aligned}$$

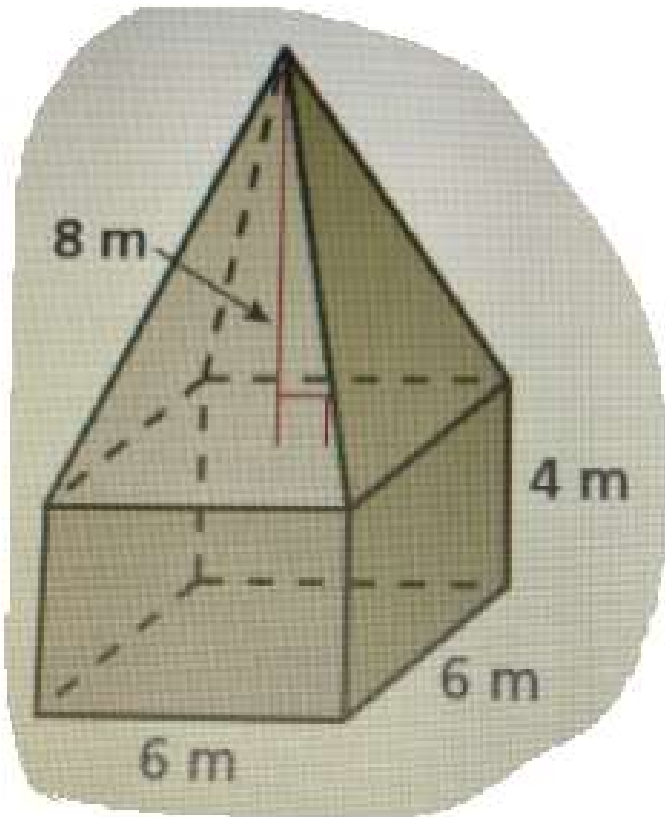
Volume of a Composite Figure

Find the volume. Round to the nearest hundredth if necessary.



Volume of a Composite Figure

Find the volume. Round to the nearest hundredth if necessary.



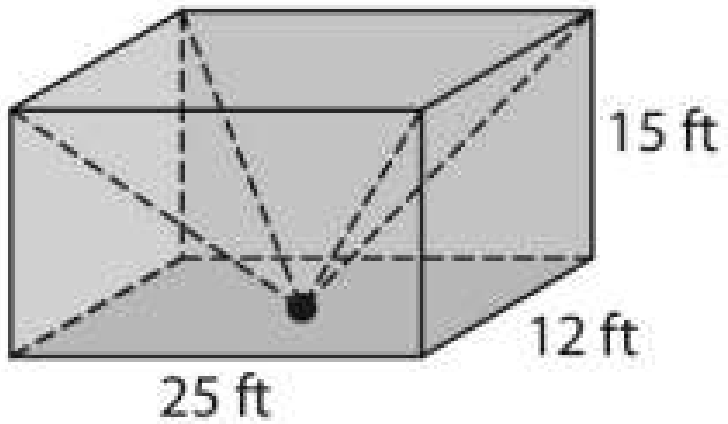
$$\begin{aligned}V_{\text{pyramid}} &= \frac{1}{3}Bh \\ &= \frac{1}{3} \cdot 6 \cdot 6 \cdot 8 \\ &= 96 \text{ m}^3\end{aligned}$$

$$\begin{aligned}V_{\text{prism}} &= LWH \\ &= 6 \cdot 6 \cdot 4 \\ &= 144 \text{ m}^3\end{aligned}$$

$$\begin{aligned}V_{\text{Total}} &= V_{\text{pyramid}} + V_{\text{prism}} \\ &= 96 + 144 \\ &= \boxed{240 \text{ m}^3}\end{aligned}$$

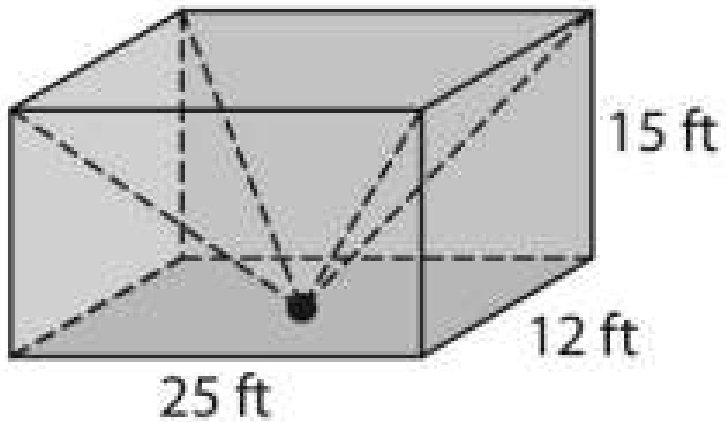
Volume of a Composite Figure

Find the volume. Round to the nearest hundredth if necessary.
(The pyramid is cut out of the rectangular prism)



Volume of a Composite Figure

Find the volume. Round to the nearest hundredth if necessary.
(The pyramid is cut out of the rectangular prism)



$$\begin{aligned}V_{\text{Prism}} &= LWH \\ &= 25(12)(15) \\ &= \boxed{4,500 \text{ ft}^3}\end{aligned}$$

$$\begin{aligned}V_{\text{Pyramid}} &= \frac{1}{3}Bh \\ &= \frac{1}{3} \cdot 25 \cdot 12 \cdot 15 \\ &= \boxed{1,500 \text{ ft}^3}\end{aligned}$$

$$\begin{aligned}V_{\text{Total}} &= V_{\text{Prism}} - V_{\text{Pyramid}} \\ &= 4,500 - 1,500 \\ &= \boxed{3,000 \text{ ft}^3}\end{aligned}$$