

Practice A

For use with pages 500–507

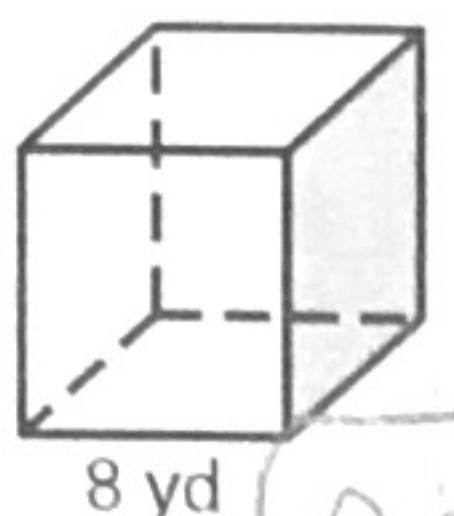
Complete the statement.

1. The formula $V = \pi r^2 h$ is the formula for the volume of a ?.
2. The formula $V = \underline{?}$ is the formula for the volume of a prism.

Cylinder
Area of Base • Height

Find the volume of the cube.

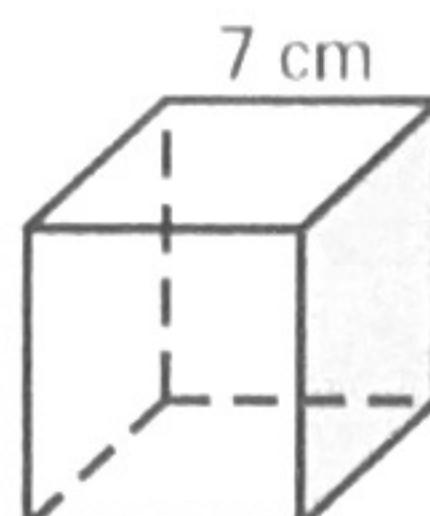
3.



$$\begin{aligned} B &= \text{area of base} \\ B &= 8^2 = 64 \\ \text{Area} &= 512 \end{aligned}$$

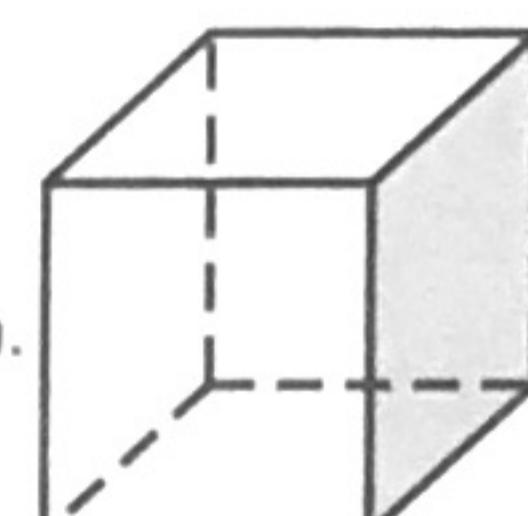
 $B \cdot h$

4.



$$\begin{aligned} \text{Base} &= 7 \cdot 7 = 49 \\ A &= 7 \cdot 7 \cdot 7 = 343 \text{ cm}^3 \end{aligned}$$

5.

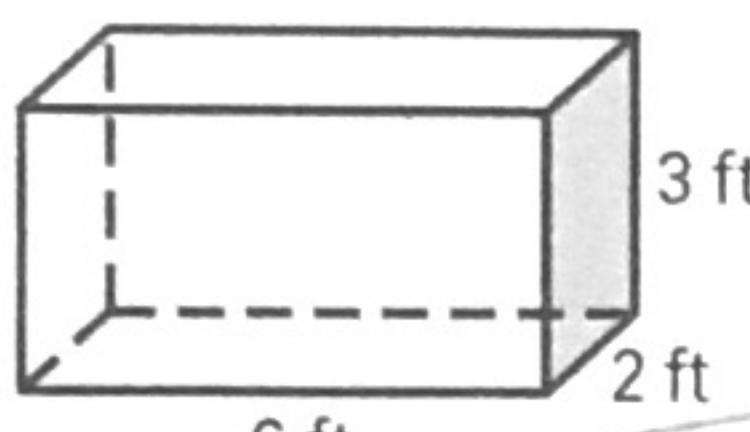


$$\begin{aligned} \text{Area} &= 11^3 = \\ &1331 \text{ in}^3 \end{aligned}$$

Find the volume of the prism.

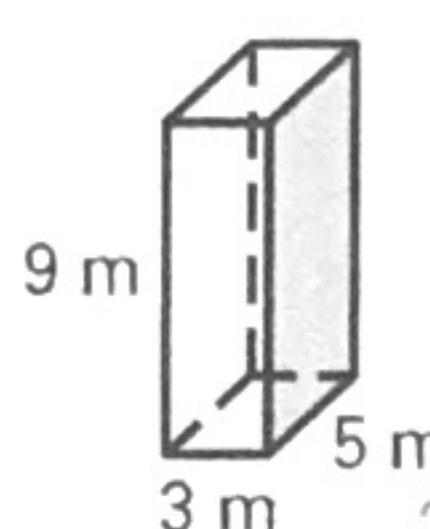
 $B \cdot h$

6.



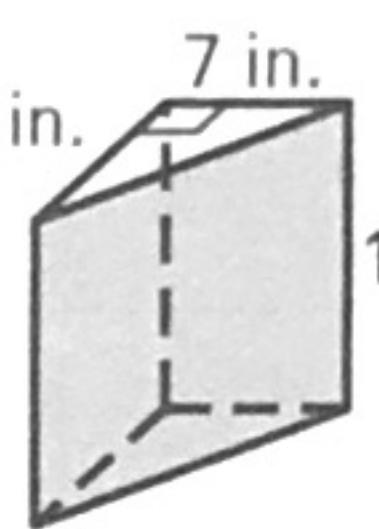
$$6 \cdot 2 \cdot 3 = 36 \text{ ft}^3$$

7.



$$3 \cdot 5 \cdot 9 = 135 \text{ m}^3$$

8.



$$\begin{aligned} \frac{1}{2} \cdot 10 \cdot 7 &\rightarrow \text{Triangle} \\ 35 \cdot 11 &= 385 \end{aligned}$$

Find the volume of the cylinder. Round your answer to the nearest whole number.

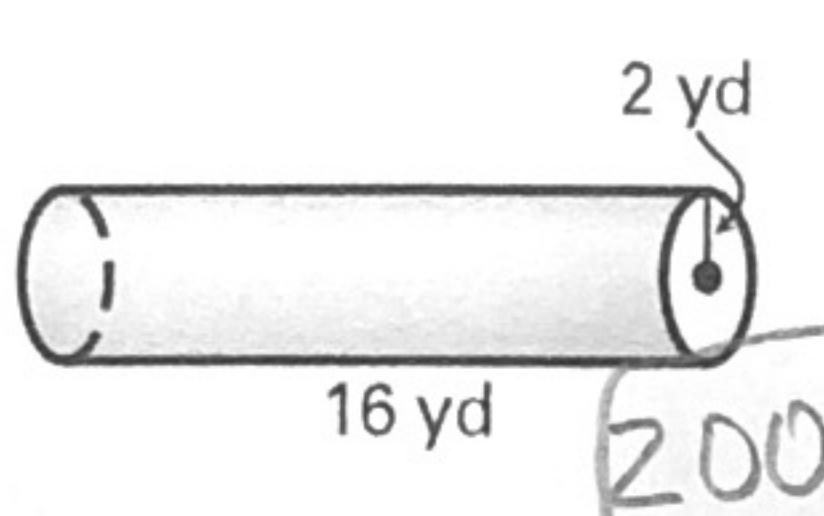
 $\pi r^2 \cdot h$

9.



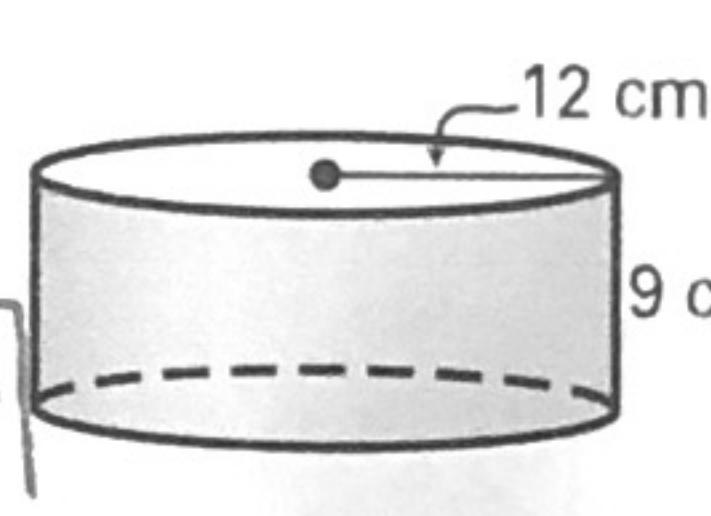
$$3014.4 \text{ in}^3$$

10.



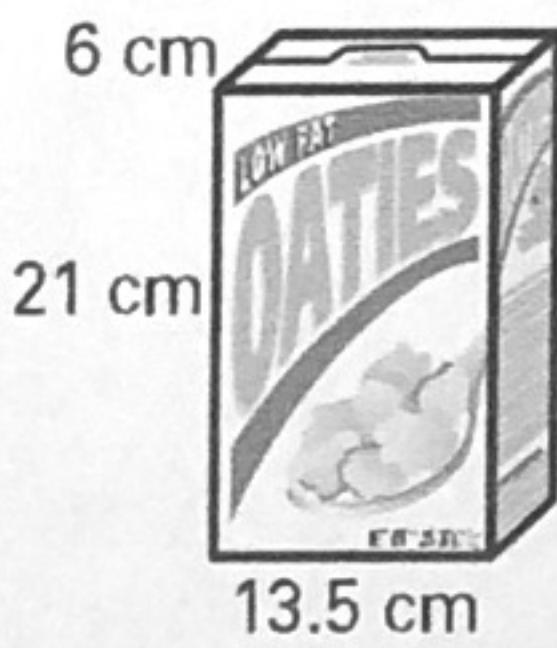
$$200.96 \text{ yd}^3$$

11.



$$4096.44 \text{ cm}^3$$

12. A box of cereal is shown below. Find the volume of the box.



$$13.5 \cdot 6 \cdot 21 =$$

$$1701 \text{ cm}^3$$