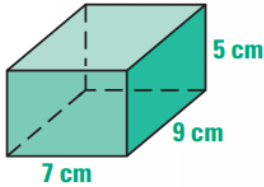


4.REV.1 – Volume

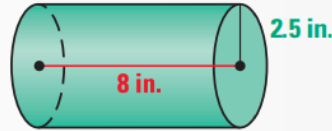
VOLUME OF PRISMS AND CYLINDERS

Example pp. 743-

EXAMPLES The volume of a rectangular prism and a right cylinder are shown.



$$V = Bh = (7 \cdot 9)(5) = 315 \text{ cm}^3$$



$$V = \pi r^2 h = \pi(2.5^2)(8) \approx 157.1 \text{ in.}^3$$

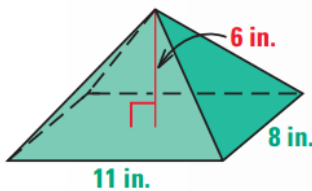
Find the volume of the solid described. Round your answer to the nearest hundredth. Label accordingly.

1. A side of a cube measures 8 centimeters.
2. A right cylinder has a radius of 3.5 inches and a height of 8 inches.

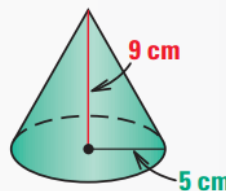
VOLUME OF PYRAMIDS AND CONES

Example pp. 752-

EXAMPLES The volume of a right pyramid and a right cone are shown.

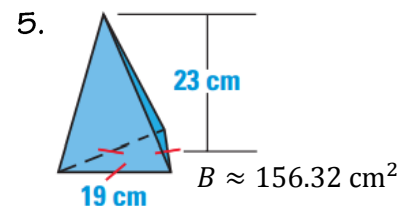
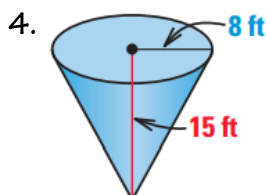
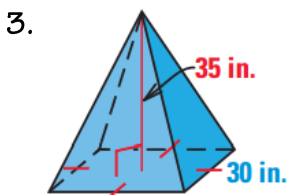


$$\begin{aligned} V &= \frac{1}{3}Bh \\ &= \frac{1}{3}(11 \cdot 8)(6) \\ &= 176 \text{ in.}^3 \end{aligned}$$



$$\begin{aligned} V &= \frac{1}{3}\pi r^2 h \\ &= \frac{1}{3}\pi(5^2)(9) \\ &\approx 235.6 \text{ cm}^3 \end{aligned}$$

Find the volume of the regular pyramid or cone. Round your answer to the nearest hundredth. Label accordingly.



SURFACE AREA AND VOLUME OF SPHERES

EXAMPLES The ~~surface area and~~ volume of the sphere are shown.

~~$$S = 4\pi r^2 = 4\pi(7^2) \approx 615.8 \text{ in.}^2$$~~

$$V = \frac{4}{3}\pi r^3 = \frac{4}{3}\pi(7^3) \approx 1436.8 \text{ in.}^3$$



Find the volume of the sphere described. Round your answer to the nearest hundredth. Label accordingly.

6. Radius 14 meters

7. Diameter 3 inches

Find the volume of the entire solid. Round your answer to the nearest hundredth. Label accordingly.

