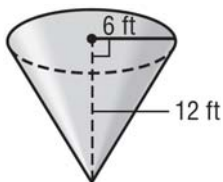# Lesson 2 Reteach

Volume of Cones

A **cone** is a three-dimensional shape with one circular base.

The volume V of a cone with radius r is one third the area of the base B times the height h.

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

Example

Determine the volume of the cone. Round to the nearest tenth.

$V = \frac{1}{3}\pi r^2 h$ Volume of a cone

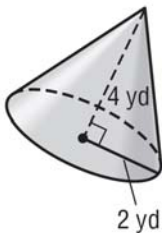$V = \frac{1}{3}(\pi \cdot 6^2 \cdot 12)$ $r = 6$ and $h = 12$

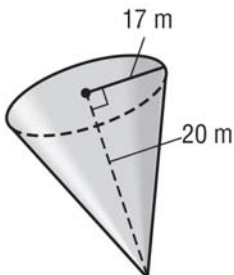$V \approx 452.4$ Simplify.

The volume is about 452.4 cubic feet.

Exercises

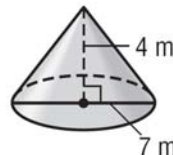**Determine the volume of each cone. Round to the nearest tenth.**

1.
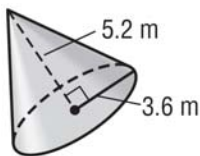

2.

3.

4.

5.

6.