

8.2

**VOLUME OF
CONES**

Rounding Decimals Review

Round to the indicated place

0-4 stay the same

5-9 round up

11) 1.2852 (Thousandths)

12) 3.157 (Hundredths)

13) 12.449 (Tenths)

14) 0.349 (Hundredths)

Investigation

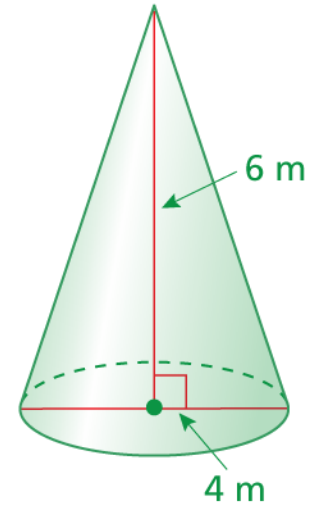
What is the relationship between a cylinder and a cone with the same base area and height?

VOLUME FORMULA OF A CONE



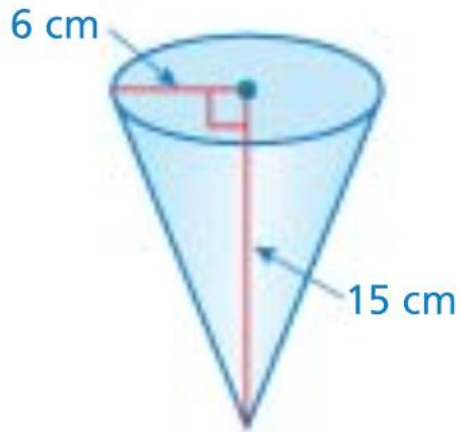
Example

1) Find the volume of the cone. Round your answers to the nearest tenth.



Example

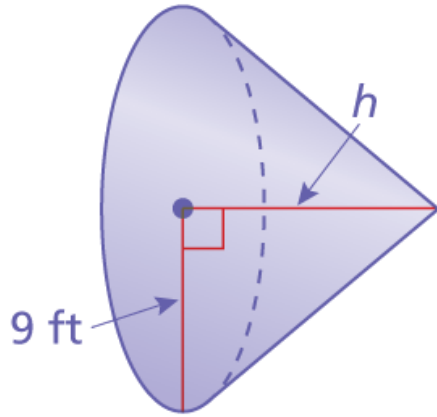
2) Find the volume of the cone. Round your answers to the nearest tenth.



$V \approx$

Example

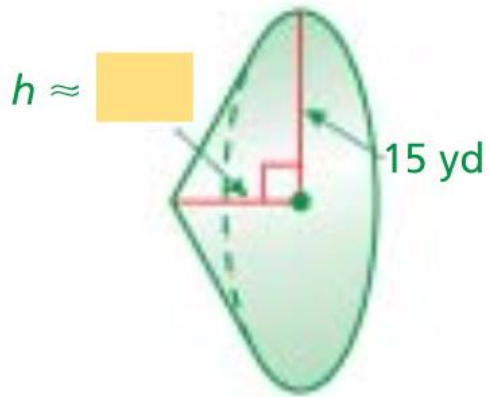
3) Find the height of the cone. Round your answer to the nearest tenth.



$$\text{Volume} = 956 \text{ ft}^3$$

Example

4) Find the height of the cone. Round your answer to the nearest tenth.



$$\text{Volume} = 7200 \text{ yd}^3$$

Example

- 5) You must answer a trivia question before the sand in the timer falls to the bottom. The sand falls at a rate of 50 cubic millimeters per second. How much time do you have to answer the question?

