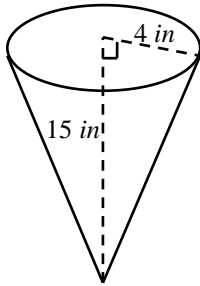


# Lesson 4.7 ~ Volume of Cones

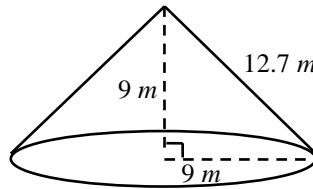
Name \_\_\_\_\_ Period \_\_\_\_\_ Date \_\_\_\_\_

Find the volume of each cone. Use 3.14 for  $\pi$ .

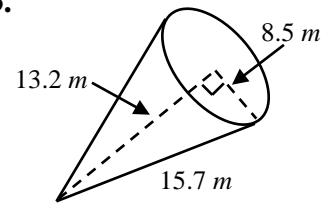
1.



2.



3.



4. A cone has a radius of 3 yards and height of 3.5 yards.

a. Find the volume of the cone.

b. Find the volume of a cylinder with the same radius and height as the cone.

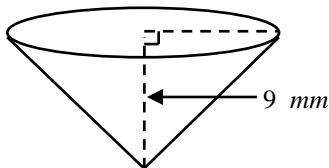
5. A snow cone cup is 12 cm tall and has a diameter of 8 cm. Find the volume of flavored ice that can be held inside the snow cone cup.

6. A cement truck malfunctioned causing all of the cement to be dumped all at one time. The pile of cement was in the shape of a cone. It had a radius of 12 feet and a height of 2 feet. How much cement spilled?

Find each missing measure. Use 3.14 for  $\pi$ .

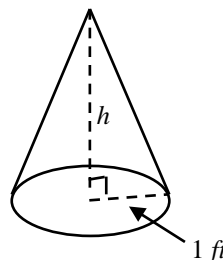
7. Volume  $\approx 602.88 \text{ mm}^3$

Radius  $\approx$  \_\_\_\_\_



8. Volume =  $15.7 \text{ ft}^3$

Height of the cone  $\approx$  \_\_\_\_\_



9. A conveyor belt dumps gravel into conical piles. Kevin measured the height of one pile of gravel. It was  $10\frac{1}{2}$  feet tall. The volume of the pile was 77 cubic feet. Find the diameter of the pile of gravel. Round the answer to the nearest hundredth.