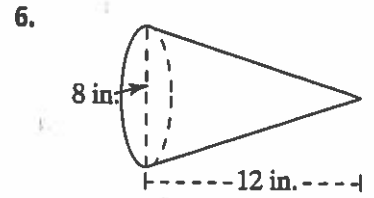
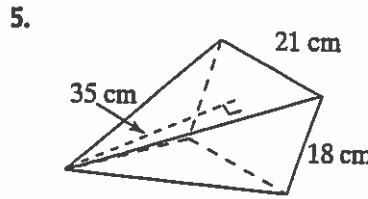
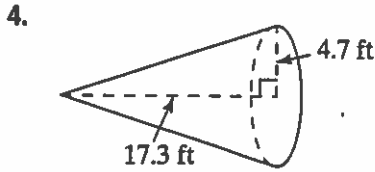
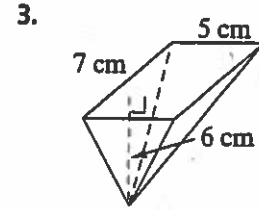
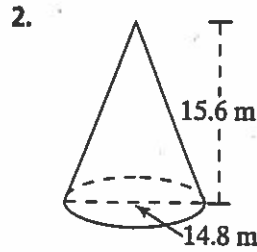
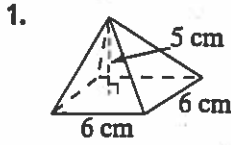


# Practice 8-7

## Volumes of Pyramids and Cones

Find the volume of each figure to the nearest cubic unit.



Find the missing dimension for each three-dimensional figure to the nearest tenth, given the volume and other dimensions.

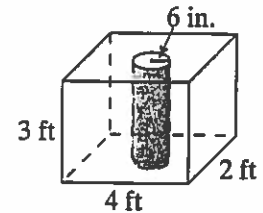
7. rectangular pyramid,  
 $l = 8 \text{ m}, w = 4.6 \text{ m}, V = 88 \text{ m}^3$

8. cone,  $r = 5 \text{ in.}, V = 487 \text{ in.}^3$

9. square pyramid,  $s = 14 \text{ yd}, V = 489 \text{ yd}^3$

10. square pyramid,  $h = 8.9 \text{ cm}, V = 56 \text{ cm}^3$

11. Find the volume of a 4 ft by 2 ft by 3 ft rectangular prism with a cylindrical hole, radius 6 in., through the center.



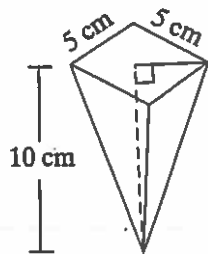
12. Margarite has a cylindrical tin of popcorn that is 18 in. tall and has a radius of 4 in. She wants to use the tin for something else and needs to empty the popcorn into a box. The box is 8 in. long, 8 in. wide, and 14 in. tall. Will the popcorn fit in the box? Explain.

# Puzzle 8-7

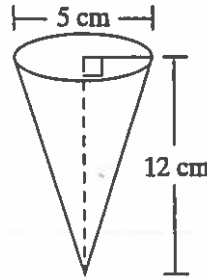
## Volumes of Pyramids and Cones

Alice and Tom live in a town that has two ice cream parlors. Both stores offer soft-serve ice cream in a cone for \$1.75. Alice prefers Store A because its ice cream is served in a traditional cone with a circular base. Tom prefers Store B because he claims that he gets more ice cream for the same price in Store B's unique pyramid shaped cone even though it is shorter. Use your knowledge of volume to settle this dispute. (Assume the scoop on top of each cone has the same volume.)

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Volume = \_\_\_\_\_



Volume = \_\_\_\_\_

Who is getting the better deal? \_\_\_\_\_

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