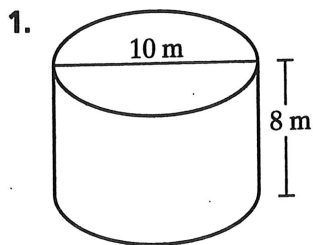# Practice 10-7

Volume: Prisms and Cylinders
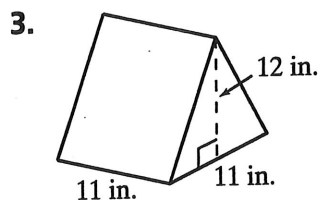
Find the volume of each prism or cylinder to the nearest cubic unit.

1.

10 m

8 m

_____

2.

16 cm

11 cm   8 cm

_____

3.

12 in.

11 in.   11 in.

_____

4.

13 ft

12 ft   5 ft

16 ft

_____
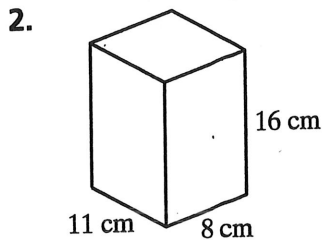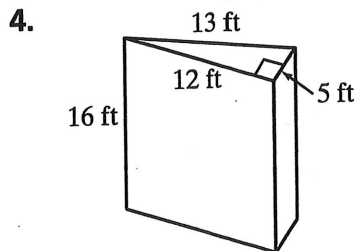
5. prism
rectangular base:
8 in. by 6 in.
height: 7 in.

_____

6. cylinder
radius: 14 in.
height: 18 in.

_____

7. prism
square base:
3.5 ft on a side
height: 6 ft

_____

8. cube
sides: 13 m

_____

9. A water storage tank has a cylindrical shape. The base has a diameter of
18 m and the tank is 32 m high. How much water, to the nearest cubic
unit, can the tank hold?

_____

10. A tent in the shape of a triangular prism has a square base with a side of
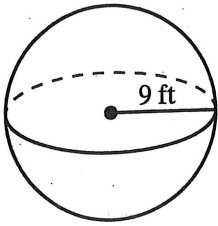8 feet and a height of 6 feet. What is the volume of the tent?

_____

Algebra-Readiness Lesson 10-7

Practice 10-9

Volume: Pyramids, Cones, and Spheres

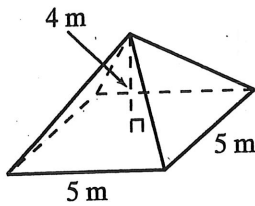**Find the volume of each figure to the nearest cubic unit. Use $\pi \approx 3.14$.**
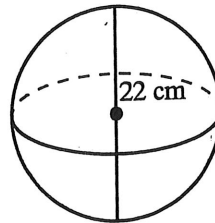
1.

9 ft

_____

2.

15 in.

9 in.

_____

3.

4 m

5 m

5 m

_____

4.

22 cm

_____
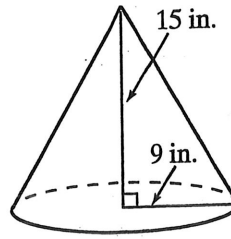
5. square-based pyramid
   $s = 9$ in.
   $h = 12$ in.

_____

6. cone
   $r = 8$ cm
   $h = 15$ cm

_____

7. You make a snow figure using three spheres with radii of 12 in., 10 in., and 8 in., with the biggest on the bottom and the smallest for the head. You get snow from a rectangular area that is 6 ft by 7 ft. Find the volume of snow in your snow figure to the nearest hundredth of a cubic inch.

bottom: _____

middle: _____

head: _____

total: _____