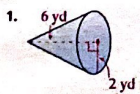
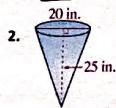


Volumes of Cones, Pyramids, and Spheres

Find each volume. Round to the nearest cubic unit.



25 yd^3



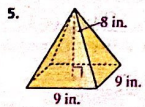
2618 in^3

3. Cone with height 12 cm, radius 21 cm

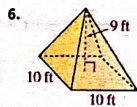
5542 cm^3

4. Cone with height 7 in., diameter 14 in.

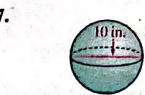
359 in^3



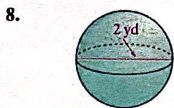
216 in^3



300 ft^3



524 in^3



4 in^3

9. Tennis balls with a diameter of 2.5 in. are sold in cans of three. The can is a cylinder. What is the volume of the space in the can that is not occupied by tennis balls? Assume the tennis balls touch the can on the sides, top, and bottom.



Volume of Cylinder - Volume of 3 balls

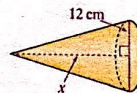
$36.8 - 8.2 = 28.6 \text{ in}^3$

10. You place a steel ball with diameter 4 cm in a water-filled cylinder that is 5 cm in diameter and 10 cm high. What volume of water will spill out of the cylinder?

The volume of the sphere will spill out. 33.5 cm^3

Find the missing dimension. Round to the nearest unit.

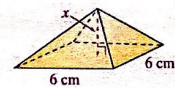
11.



$V = 819 \text{ cm}^3$
Height = \square

$h = 7 \text{ cm}$

12.



$V = 38 \text{ cm}^3$
Height = \square

$h = 3 \text{ cm}$