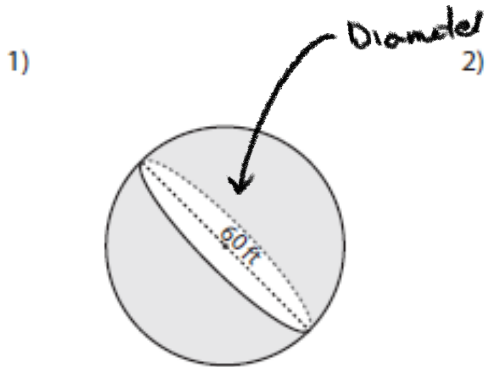


Section 3.4 – Practice Problems

Find the volume of each shape. Round the answer to nearest tenth. (use $\pi = 3.14$)

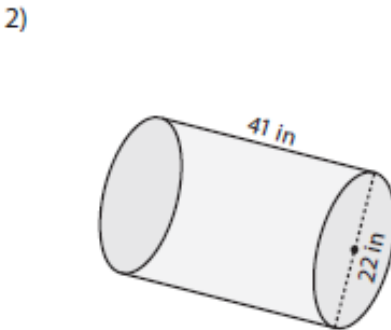


Volume = 113 040 ft³

$$V = \frac{4}{3} \pi r^3$$

$$r = \frac{60}{2} = 30$$

$$V = \frac{4}{3} (3.14) (30)^3$$

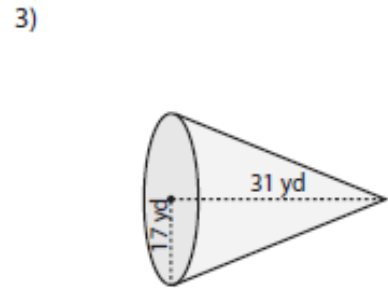


Volume = 1416.1 in³

$$V = \pi r^2 \cdot h$$

$$V = (3.14) (22)^2 (41)$$

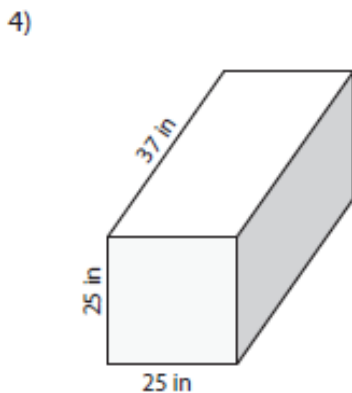
$$V = 1416.14$$



Volume = 9377.1 yd³

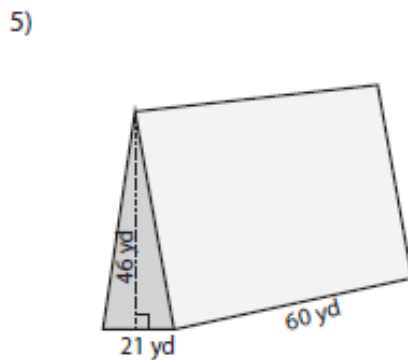
$$\frac{1}{3} \pi r^2 \cdot h$$

$$\frac{1}{3} (3.14) (17)^2 (31)$$



Volume = 23125 in³

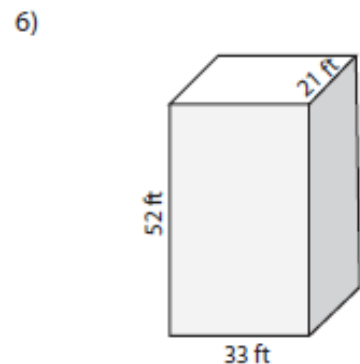
$$25 \cdot 25 \cdot 37$$



Volume = 28980 yd³

Triangle is half rectangle so

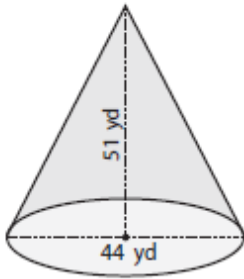
$$\frac{60 \cdot 21 \cdot 46}{2} =$$



Volume = 36036 ft³

$$33 \cdot 21 \cdot 52$$

7)

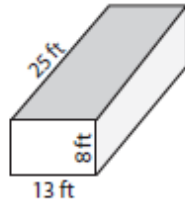


Volume = 25 835.9 yd³

$$\frac{1}{3} \pi r^2 h$$

$$\frac{1}{3} (3.14) (22)^2 (51)$$

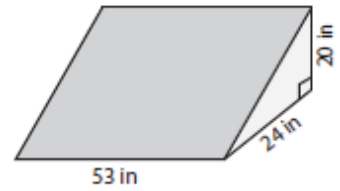
8)



Volume = 2600 ft³

$$13 \cdot 8 \cdot 25$$

9)



Volume = 12 720 in³

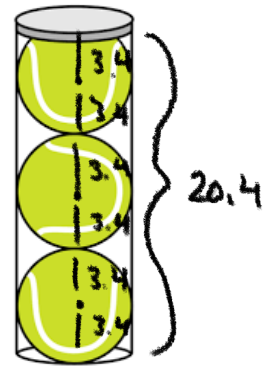
$$\frac{20 \cdot 24}{2} \cdot 53$$

10. Tennis balls are sold in a cylindrical container. There are 3 balls in each container. If the balls have a radius of 3.4 cm and fits perfectly in the container side to side and top to bottom, determine:

a) The volume of one ball. Round to the nearest tenth

$$V = \frac{4}{3} \pi r^3$$

164.6 cm³



b) The dimensions and the volume of the container, to the nearest tenth.

$h = 20.4$
 $r = 3.4$

$$V = \pi r^2 \cdot h$$

$$\pi (3.4)^2 \cdot 20.4$$

$V = 740.5 \text{ cm}^3$

=