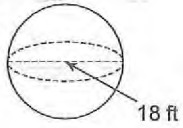


"More Volume"

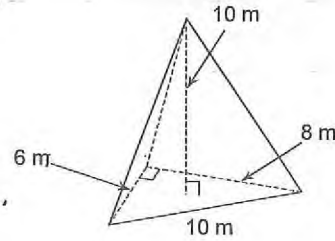
Date _____

Find the volume of each figure. Round your answers to the nearest hundredth, if necessary.

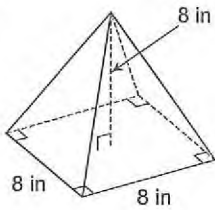
1)



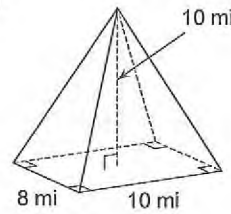
2)



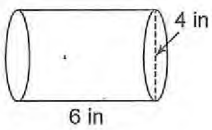
3)



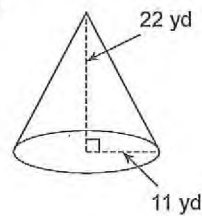
4)



5)

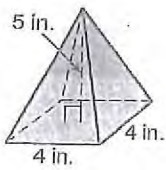


6)

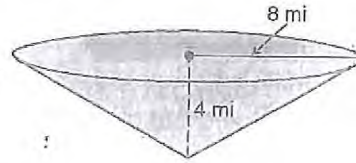


Describe the effect of each change on the volume of the given figure.

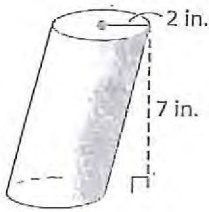
7. The dimensions are multiplied by $\frac{2}{3}$.



8. The dimensions are tripled.



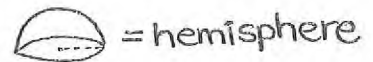
9. The dimensions are multiplied by 2.



10. A baseball has a diameter of approximately 3 in., and a softball has a diameter of approximately 5 in. About how many times as great is the volume of a softball as the volume of a baseball?

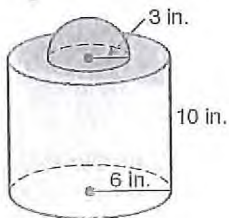
**A composite figure is a figure composed of two or more figures.

**A hemisphere is half of a sphere.

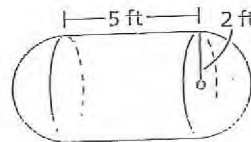


Find the volume of each composite figure.

11.

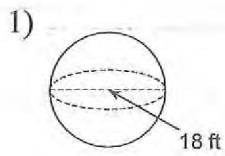


12.



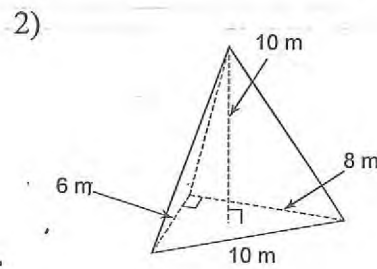
"More Volume"

Find the volume of each figure. Round your answers to the nearest hundredth, if necessary.



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

$$\frac{4}{3}\pi \cdot 9^3 = 3053.63 \text{ ft}^3$$

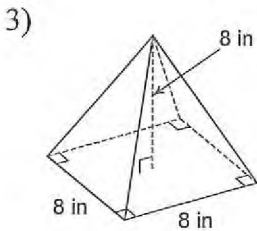


$$\frac{1}{3}Bh$$

$$\frac{1}{3}(\frac{1}{2}bh) \cdot h$$

$$\frac{1}{3}(\frac{1}{2} \cdot 6 \cdot 8) \cdot 10$$

$$80 \text{ m}^3$$

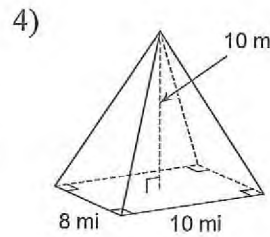


$$\frac{1}{3}Bh$$

$$\frac{1}{3}(l \cdot w) \cdot h$$

$$\frac{1}{3}(8 \cdot 8) \cdot 8$$

$$170.67 \text{ in}^3$$

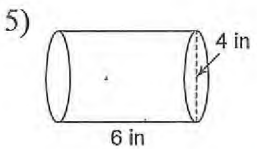


$$\frac{1}{3}Bh$$

$$\frac{1}{3}(l \cdot w) \cdot h$$

$$\frac{1}{3}(8 \cdot 10) \cdot 10$$

$$266.67 \text{ mi}^3$$

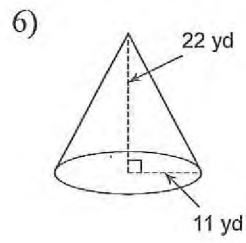


$$Bh$$

$$(\pi r^2)h$$

$$\pi \cdot 2^2 \cdot 6$$

$$75.40 \text{ in}^3$$



$$\frac{1}{3}Bh$$

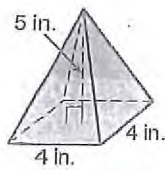
$$\frac{1}{3}(\pi r^2)h$$

$$\frac{1}{3}(\pi \cdot 11^2) \cdot 22$$

$$2787.64 \text{ yd}^3$$

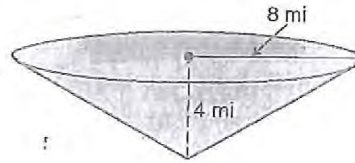
Describe the effect of each change on the volume of the given figure.

7. The dimensions are multiplied by $\frac{2}{3}$.



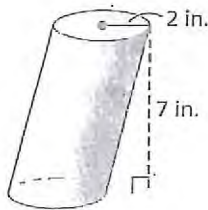
$(\frac{2}{3})^3$ $\left(\frac{8}{27}\right)$

8. The dimensions are tripled.



3^3 (27)

9. The dimensions are multiplied by 2.

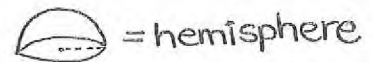


2^3 (8)

10. A baseball has a diameter of approximately 3 in., and a softball has a diameter of approximately 5 in. About how many times as great is the volume of a softball as the volume of a baseball?

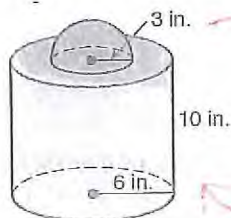
dimensions change by $\frac{5}{3}$
 volume changes by $\left(\frac{125}{27}\right)$

**A composite figure is a figure composed of two or more figures.
 **A hemisphere is half of a sphere.



Find the volume of each composite figure.

11.



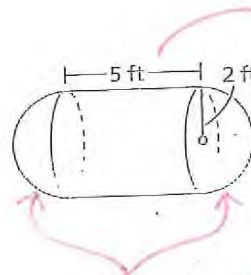
$\frac{1}{2} \pi \cdot 3^3$

56.55

$\pi \cdot 6^2 \cdot 10$
 1130.97

$56.55 + 1130.97$
 1187.52 in^3

12.



a whole sphere

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

33.51

$\pi \cdot 2^2 \cdot 5$
 62.83

$33.51 + 62.83$
 96.34 ft^3