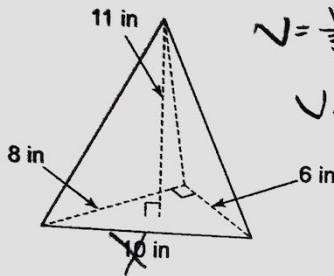
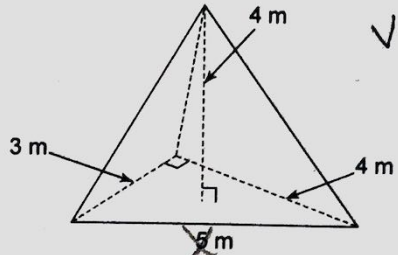
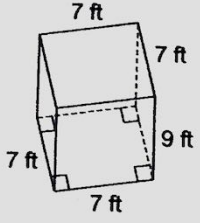


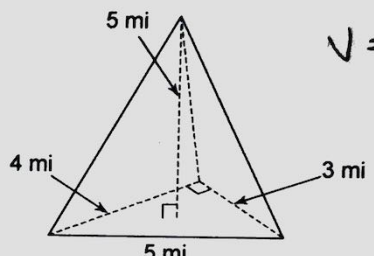
Assignment

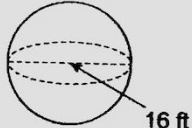
Find the volume of each figure. Round your answers to the nearest tenth, if necessary.

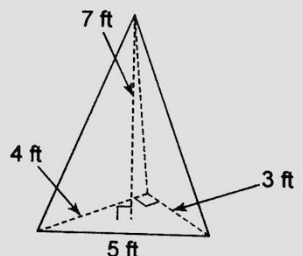
1)  $V = \frac{1}{3}(\frac{1}{2}bh)h$
 $V = \frac{1}{3}(\frac{1}{2} \cdot 10 \cdot 6)11$
 $V = 88 \text{ in}^3$

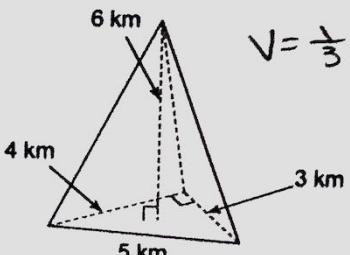
2)  $V = \frac{1}{3}(\frac{1}{2}bh)h$
 $V = \frac{1}{3}(\frac{1}{2} \cdot 8 \cdot 3)4$
 $V = 8 \text{ m}^3$

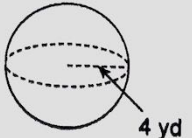
3)  $V = l \cdot w \cdot h$
 $V = 7 \cdot 7 \cdot 9$
 $V = 441 \text{ ft}^3$

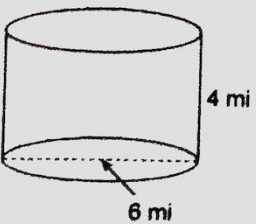
4)  $V = \frac{1}{3}(\frac{1}{2}bh)h$

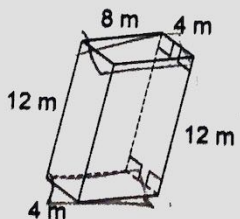
5)  $V = \frac{4}{3}\pi r^3$

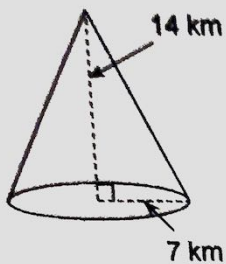
6)  $V = \frac{1}{3}(\frac{1}{2}bh)h$

7)  $V = \frac{1}{3}(\frac{1}{2}bh)h$

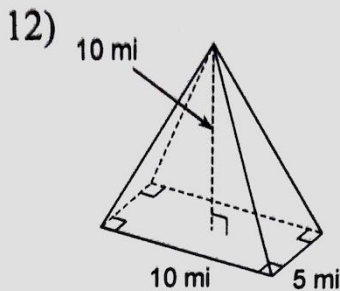
8)  $V = \frac{4}{3}\pi r^3$

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

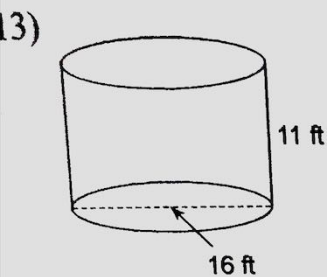
10)  $V = l \cdot w \cdot h$



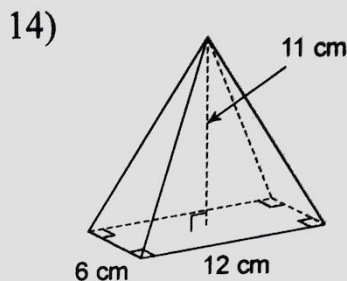
$$V = \frac{1}{3} \pi r^2 h$$



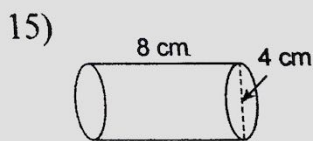
$$V = \frac{1}{3} (l \cdot w) h$$



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



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



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

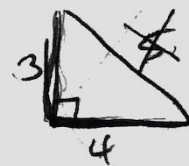
Find the volume of each figure. Round your answers to the nearest hundredth, if necessary.

16) A sphere with a diameter of 22 mi. $\frac{4}{3} \pi r^3$

17) A prism 3 km tall with a right triangle for a base with side lengths 3 km, 4 km, and ~~5~~ km.

$$V = Bh = \left(\frac{1}{2}bh\right) \cdot h$$

$$V = \frac{1}{2} \cdot 3 \cdot 4 \cdot 3$$



18) A cone with diameter 20 yd and a height of 20 yd.

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

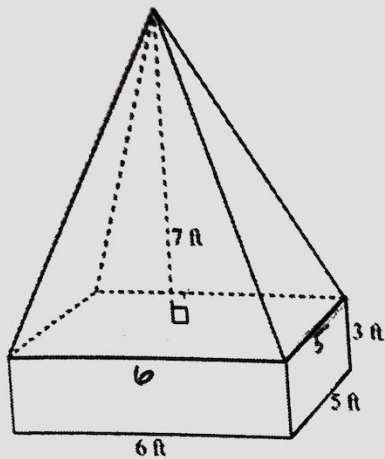
$$= \frac{1}{3} (\pi 10^2) (20)$$

19) A cylinder with a radius of 12 cm and a height of 11 cm.

$$V = Bh$$

$$V = \pi 12^2 \cdot 11$$

20. Find the total volume of the figure below.



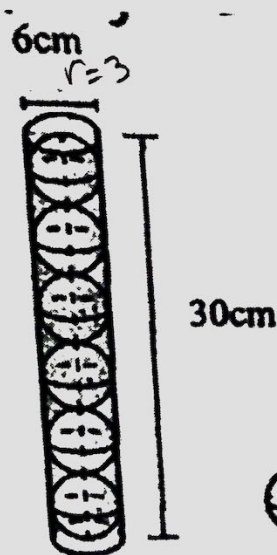
$$\frac{1}{3} Bh = \frac{1}{3} (l \cdot w) h$$

$$V_{\text{Rectangular Pyramid}} = \frac{1}{3} (5 \cdot 6) \cdot 7 = 70 \text{ ft}^3$$

$$V_{\text{Rectangular Prism}} = (6 \cdot 5) \cdot 3 = 90 \text{ ft}^3$$

$$V_{\text{Total}} = 70 + 90 = 160 \text{ ft}^3$$

21. A cylindrical container of six rubber balls has a height of 30 centimeters and a diameter of 6 centimeters. Each ball in the container has a radius of 3 centimeters. Find the amount of space in the container that is not occupied by rubber balls. Round your answer to the nearest whole number. Hint: find the total volume of the cylinder and subtract the volume of the 6 rubber balls.



$$V_{\text{Cylinder}} = \pi r^2 h = \pi 3^2 \cdot 30 = 848.23 \text{ cm}^3$$

$$V_{\text{Sphere}} = \frac{4}{3} \pi r^3 = \frac{4}{3} \pi 3^3 = 113.1 \text{ cm}^3$$

Volume of cylinder minus 6 balls

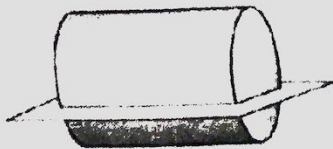
$$= 848.23 - 6(113.1)$$

$$= \boxed{170 \text{ cm}^3}$$

22. Name the cross section

a.

Rectangle



b. Triangle

