


Volume Practice

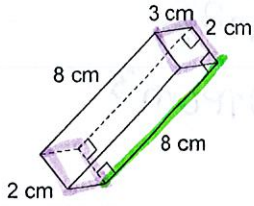
Find the volume of each figure. Round your answers to the nearest hundredth, if necessary. Leave your answers in terms of  $\pi$  for answers that contain  $\pi$ .

1) **Sphere**  
  

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

$$V = \frac{4}{3} \pi (6)^3$$

$$V = 288 \pi \text{ cm}^3$$

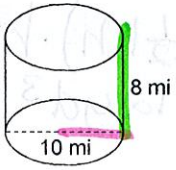
2) **Rect. Prism**  
  

$$V = B \cdot h$$

$$= (b \cdot h) \cdot h$$

$$= (3 \cdot 2) \cdot 8$$

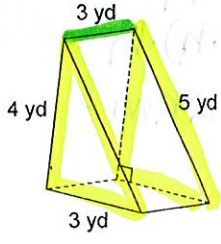
$$= 48 \text{ cm}^3$$

3) **Cylinder**  
  

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

$$= \pi (5)^2 \cdot 8$$

$$= 200 \pi \text{ mi}^3$$

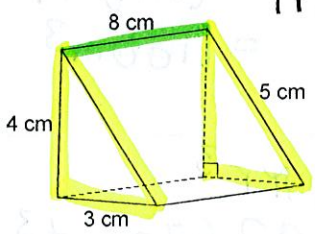
4) **Triangular Prism**  
  

$$V = B \cdot h$$

$$= \left(\frac{1}{2} b \cdot h\right) \cdot h$$

$$= \left(\frac{1}{2} \cdot 3 \cdot 4\right) \cdot 5$$

$$= 30 \text{ yd}^3$$

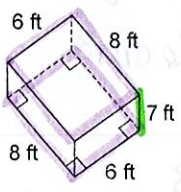
5) **Triangular Prism**  
  

$$V = B \cdot h$$

$$= \left(\frac{1}{2} b \cdot h\right) \cdot h$$

$$= \left(\frac{1}{2} \cdot 4 \cdot 3\right) \cdot 8$$

$$= 48 \text{ cm}^3$$

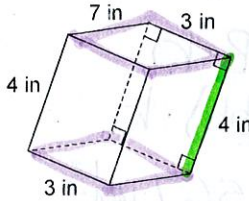
6) **Rect. Prism**  
  

$$V = B \cdot h$$

$$= (b \cdot h) \cdot h$$

$$= (8 \cdot 6) \cdot 7$$

$$= 336 \text{ ft}^3$$

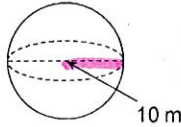
7) **Rect. Prism**  
  

$$V = B \cdot h$$

$$= (b \cdot h) \cdot h$$

$$= (7 \cdot 3) \cdot 4$$

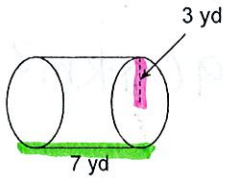
$$= 84 \text{ in}^3$$

8) **Sphere**  
  

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

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

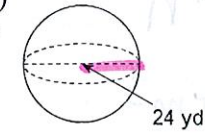
$$= 166.67 \pi \text{ m}^3$$

9) **Cylinder**  
  

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

$$V = \pi (3)^2 \cdot 7$$

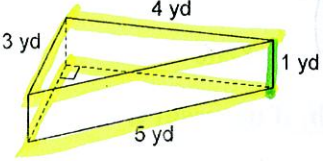
$$= 63 \pi \text{ yd}^3$$

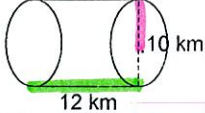
10) **Sphere**  
  

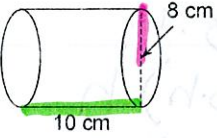
$$V = \frac{4}{3} \pi r^3$$

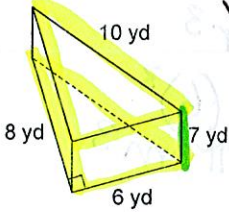
$$= \frac{4}{3} \pi (24)^3$$

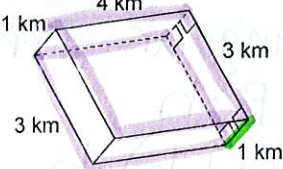
$$= 2,304 \pi \text{ yd}^3$$

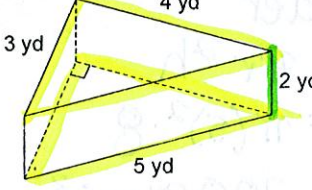
11)  Trian. Prism  
 $V = B \cdot h$   
 $= (\frac{1}{2} b \cdot h) \cdot h$   
 $= 6 \text{ yd}^3$

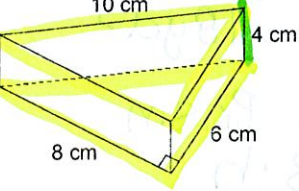
12)  Cylinder  
 $V = \pi r^2 h$   
 $= 300\pi \text{ km}^3$

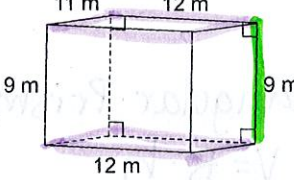
13)  cylinder  
 $V = \pi r^2 h$   
 $= 160\pi \text{ cm}^3$

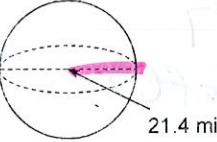
14)   $V = B \cdot h$   
 $V = (\frac{1}{2} b h) \cdot h$   
 $= 168 \text{ yd}^3$

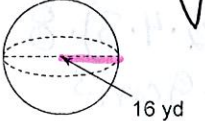
15)   $V = B \cdot h$   
 $= (b \cdot h) \cdot h$   
 $= 12 \text{ km}^3$

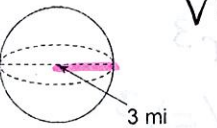
16)   $V = B \cdot h$   
 $= (\frac{1}{2} b h) \cdot h$   
 $= 12 \text{ yd}^3$

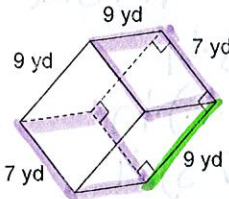
17)   $V = B \cdot h$   
 $= (\frac{1}{2} b \cdot h) \cdot h$   
 $= 96 \text{ cm}^3$

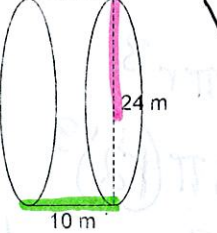
18)   $V = B \cdot h$   
 $= (b \cdot h) \cdot h$   
 $= 1188 \text{ m}^3$

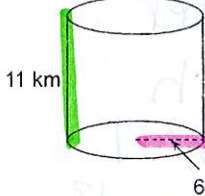
19)   $V = \frac{4}{3} \pi r^3$   
 $= 1,633.39 \pi \text{ mi}^3$

20)   $V = \frac{4}{3} \pi r^3$   
 $= 682.67 \pi \text{ yd}^3$

21)   $V = \frac{4}{3} \pi r^3$   
 $= 4.5 \pi \text{ mi}^3$

22)   $V = B \cdot h$   
 $(b h) \cdot h$   
 $= 567 \text{ yd}^3$

23)   $V = \pi r^2 h$   
 $= 1440 \pi \text{ m}^3$

24)   $V = \pi r^2 h$   
 $= 396 \pi \text{ km}^3$