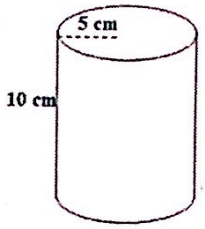
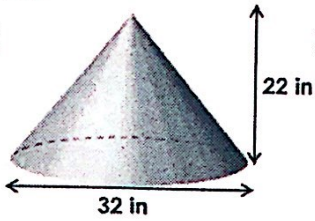
EXTRA PROBLEMS

- Find the volume of each. When I OK your answer, move on to the next.

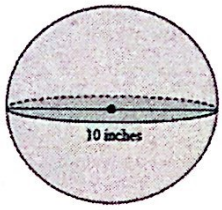
1)



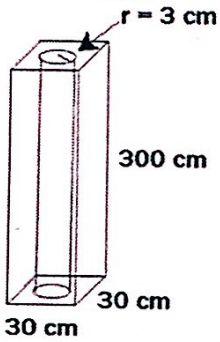
2)



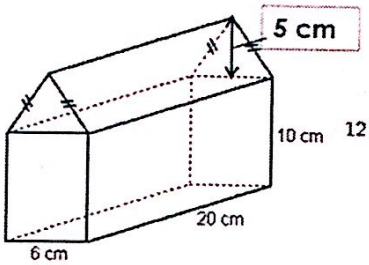
3)



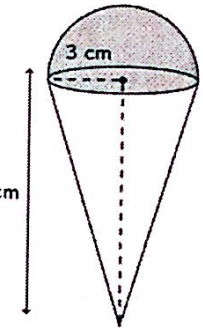
4)



5)



6)



1) $V \approx 785.4\ cm^3$

2) $V \approx 5897.8\ in^3$

3) $V \approx 523.6\ in^3$

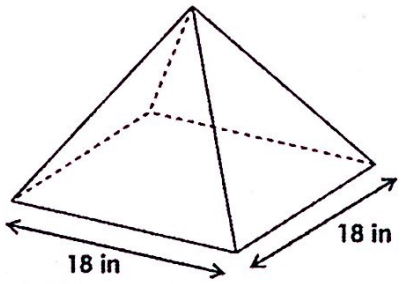
4) $V \approx 261{,}517.7\ cm^3$

5) $V = 1500\ cm^3$

6) $V \approx 169.6\ cm^3$

MORE EXTRA PROBLEMS

7) The volume is **2268 cm³.** Find the height.



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

$2268 = \frac{1}{3} \cdot 18 \cdot 18 \cdot h$

$2268 = 108h$

$21 = h$

$\boxed{21 \text{ in}}$

8) The circumference of a circle is **6π** feet. Find the area. Write it as an **exact** answer.

$C = 2\pi r$

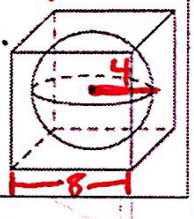
$\frac{6\pi}{2} = \frac{2\pi r}{2}$

$3 = r$

$A = \pi r^2$

$A = \pi \cdot 3^2$

9) A ball with a radius of **4 cm** is inside a cube. The ball touches all sides of the cube. What is the volume of the empty space inside the cube?



V = Cube − sphere

$V = 8 \cdot 8 \cdot 8 - \frac{4}{3}\pi \cdot 4^3$

$V \approx 512 - 268.1$

$\boxed{V \approx 243.9 \text{ cm}^3}$