

Problem of the Day: Find the volume of a cone if the height is 6 in. and the diameter is 4 inches. Round to the nearest tenth.

Plan for the Day: Integer quiz (if needed)

Go over last week's homework

Notes on volume of spheres

More practice with volume

Objective: We will be able to find the volume of spheres.

Good luck volleyball at Palestine!!


3.  $2 + p = 4p - 13$   
 $\quad -p \quad -p$   
 $2 = 3p - 13$   
 $+13 \quad +13$   
 $15 = 3p$   
 $\frac{15}{3} = \frac{3p}{3}$   
 $5 = p$

8. Correct | 124 | 32  
 Total | 155 | 40

Sphere- a ball or 3-dimensional circle

The volume of a sphere is  
 $V = \frac{4}{3}\pi r^3$   
 $\frac{4 \cdot \pi \cdot r^3}{3}$


Example 1: Find the volume of the object below.



$r = 2$

$V = \frac{4}{3}\pi r^3$   
 $V = \frac{4}{3} \cdot \pi \cdot 2^3$   
 $V = \frac{4}{3} \cdot \pi \cdot 8$   
 $V = 33.5 \text{ in}^3$


Example 2: Find the volume of a globe if the diameter is 18 cm.



$r = 9$

$V = \frac{4}{3}\pi r^3$   
 $V = \frac{4}{3} \cdot \pi \cdot 9^3$   
 $V = 3052.08 \text{ cm}^3$

Example 3: Find the volume of the object below.



$r = 4.25$

$V = \frac{4}{3}\pi r^3$   
 $V = \frac{4}{3} \cdot \pi \cdot 4.25^3$   
 $V = 321.4 \text{ in}^3$

[https://my.hrw.com/content/hmof/math/gomath/common/video/video.html#videoid=ref:TXGOMTH\\_RW\\_V8.14](https://my.hrw.com/content/hmof/math/gomath/common/video/video.html#videoid=ref:TXGOMTH_RW_V8.14)



<https://www.youtube.com/watch?v=Zf64OnKR0kM>

