Name: _____   Date _____

Volume

Copy the formulas from your notes.
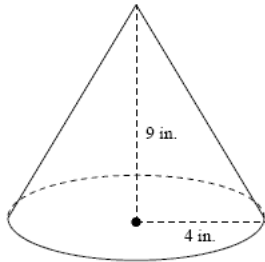
Cylinder: Sphere: Cone:

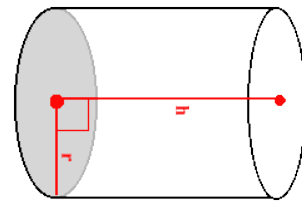Note: $\frac{1}{3} \neq .3$ (you must use the fraction)

For each figure plug in the given lengths and solve to find the missing value. Show all of your work. Use 3.14 for π. Use correct units.
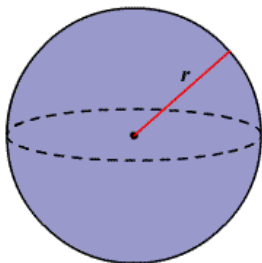
1) Find the volume.

9 in.

4 in.

Volume: _____

2) Find the height if the radius is 5 feet and the volume is 471 ft^3
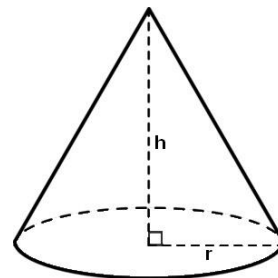
Height: _____

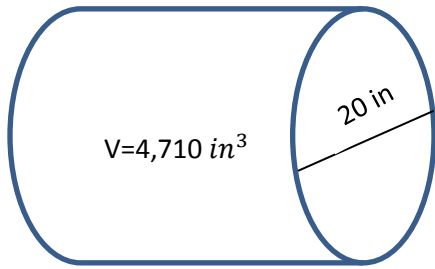3) Find the volume of the sphere if the radius is 3 yards.

r

Volume: _____

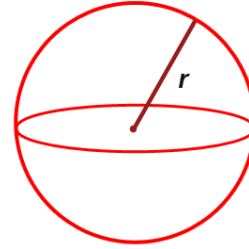4) Find the radius if the height is 12 inches and the volume is 113.04 in^3

h

r

Radius: _____

5) Find the height.

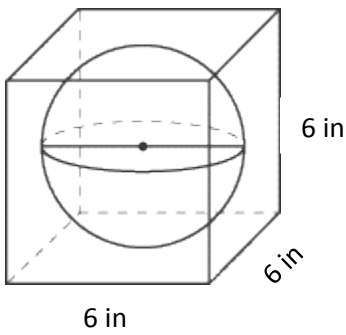

V=4,710 in^3

20 in

Height: _____

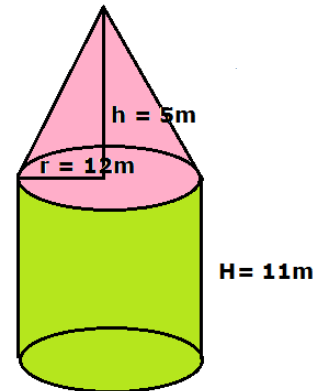6) What is the radius if the volume is 3052.08 cm^3?

r

Radius: _____

7) A sphere fits snugly inside a 6 inch cube as shown. what is the volume of the region inside the cube but outside the sphere?

6 in

6 in

6 in

8) Find the volume of the figure below.

h = 5m

r = 12m

H= 11m

9) 602.88 cm^3 of soup can fit in a soup
can with a diameter of 4 cm.
What is the height of the soup can?

10) How much water can the water tower
below hold?