Name _____

Date _____

Volume of Cones and Spheres - Guided Lesson Explanation

Explanation#1

Step 1) First we have to see what is being asked.

"What is the volume of this cone?"

Step 2) The formula of volume of cone = $\frac{1}{3} \pi r^2 h$

Step 3) radius and height of the cone.

Diameter = 12 in, so radius = $\frac{12}{2} = 6$ radius = 6 inches, height = 9 inches, $\pi \approx 3.14$ $\frac{1}{3}$ X 3.14 X 6 X 6 X 9 Volume of cone = 339.29 cubic inches

Explanation#2

Step 1) First we have to see what is being asked.

" What is the surface area of this sphere?"

Step 2) The formula of Surface area = $4\pi r^2$

Step 3) Radius of the sphere.

radius =11 inches, $\pi \approx 3.14$

4 X 3.14 X 11 X 11

Volume of sphere = 1520.53 square inches.



Name _____

Date _____

Explanation#3

Step 1) First we have to see what is being asked.

"What is the surface area of this sphere?"

Step 2) The formula of Surface area = $4\pi r^2$

Step 3) Radius of the sphere.

Diameter = 14 m, so radius = $\frac{14}{2}$ = 7

Radius =6 meters, $\pi \approx 3.14$

4 X 3.14 X 7 X 7

Volume of sphere = 615.75 square meters.

