

Geometry – Measurements of Three-Dimensional Figures
16d Homework: Volumes of Spheres

Name _____
Pd _____ Date _____

Show all work to earn full credit.

1. Determine the volume of a sphere that has a radius of 4 feet. Express your answer in exact form and as an approximation rounded to the nearest hundredth.
2. An ice cream shop uses an ice cream scoop with a radius of 2.5 inches. How much ice cream do you get with each scoop? Determine the volume of this sugar cone. Express your answer as an approximation rounded to the nearest hundredth.
3. The official basketball used in National Basketball Association (NBA) games is a sphere with a ***circumference*** of 29.5 inches. The official basketball used in Women’s National Basketball Association (WNBA) games is a sphere with a ***circumference*** of 28.5 inches. Determine the difference between the volumes of the basketballs used by the NBA and the WNBA.