Practice Worksheet for Lessons 12-3 and 12-4   Name:

                                                     Mailbox #:

1) A cone has radius 6 in and slant height 10 in. Find the height, lateral area, total area, and volume.

2) A cone has radius 5 ft and volume 100π ft^3. Find the height, slant height, lateral area, and total area.

3) Cylinder A has radius 4 m and height 6 m. Cylinder B has radius 6 m and height 4 m. Which has the greatest volume? The greatest lateral area?

4) The lateral area of a cone is 32π in^2 and the slant height is 8 in. Find the radius, height, total area, and volume.

5) Find the area and volume of a sphere with radius 9 ft.

6) Find the radius and volume of a sphere with area 200π cm^2.

7) Find the radius and area of a sphere with volume 288π in^3.

8) A water storage tank consists of a cylinder capped with a hemisphere (half a sphere). If the diameter = 6 m and the height of the cylinder is 12 m, find the volume of the tank.