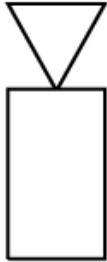Volume Unit Review Day 1

For the following questions find the volume of the given figures. Show all work.

1.

Lindsay Lohan decides to start saving water by collecting rain in a barrel. Lindsay Lohan buys a barrel 2 feet across and 3.5 feet tall, and fits it with a funnel of the same width and half the height. What is the total volume of rain that Lindsay Lohan can collect?

Cross section of barrel

2. I. M. Pei has built a new skyscraper in New York City that he calls "the marble stack." The building is composed of five enormous spheres stacked on top of each other. Each sphere has a radius of 120 feet. The entire interior of each sphere is used as office and living space.

a. How much total three-dimensional space would I. M. Pei have gained by building a cylinder?

Find the volume of each figure. Round your answers to the nearest hundredth, if necessary.

3)
8 mi
1 mi

4)
3 m
2 m

5)
4 yd
5 yd

6)
9 in
22 in

7)
6 km

8)
4 in
2 in

9)
8 m
12 m

10)
12 km

11)
16 in
16 in

12)
18 mi
9 mi

13)
14 m

14)
20 km
10 km