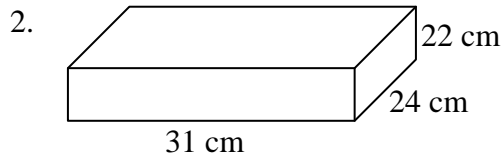**Directions: Round your answers to the nearest tenth. Show your work!!!**

(#1-3) Find the volume and surface area of the following.
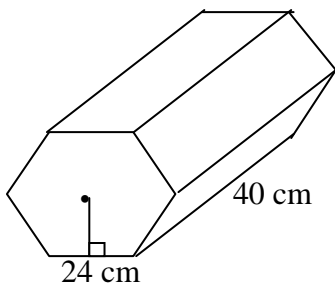
1.   A cube with edge equal to 24 cm.

2.

22 cm

24 cm

31 cm

3.   A sphere with a diameter of 50 inches.

(#4-8) Find the area of the base, lateral area, volume and surface area.
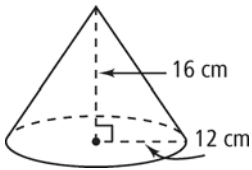
4.   A regular hexagonal prism, as pictured.
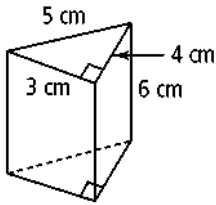

40 cm

24 cm

5.   A cylinder with a height of 14 inches and a diameter of 8 inches.

6. A square based pyramid with height 44 feet and side length 50 feet.

7.

8.

9. Reasoning Every cross section parallel to the base of a solid is a circle. If all those circles are congruent, what type of solid is it? If none of those circles are congruent, what type of solid is it?(A *cross section* is the intersection of a solid and a plane.)

10. A container company makes small and large cylindrical shampoo containers. The area of the base of each cylinder is 10 cm^2. The volume of the small shampoo container is 60 cm^3. The large shampoo container is 3 cm taller. What is the volume of the large shampoo container?