Review Unit 10
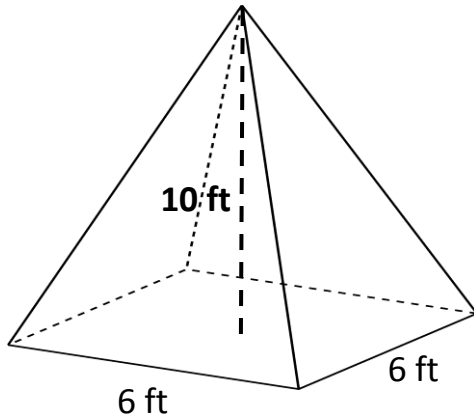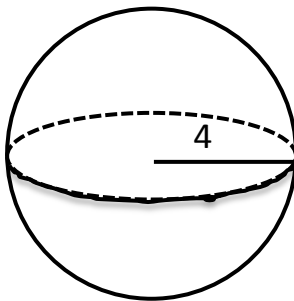
1. Bob built a model of one of the Egyptian pyramids out of plywood and put it in his front lawn. How much plywood did he need if it does not have a bottom?
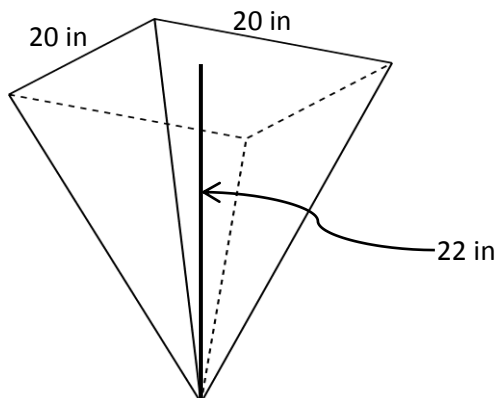
10 ft

6 ft

6 ft

2. Mr. Fahres built a conical storage shed. The base of the shed is 4 meters in diameter and the height of the shed is 3 meters. What is the volume of the shed?

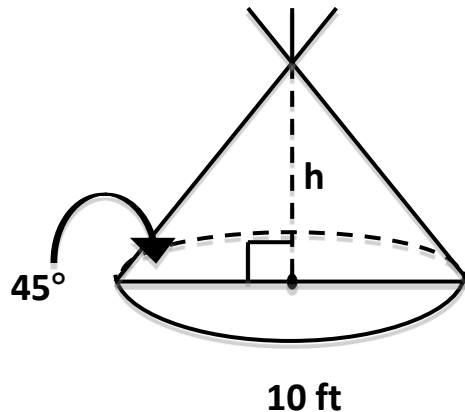3. Find the Surface Area and Volume of the below Sphere.

4

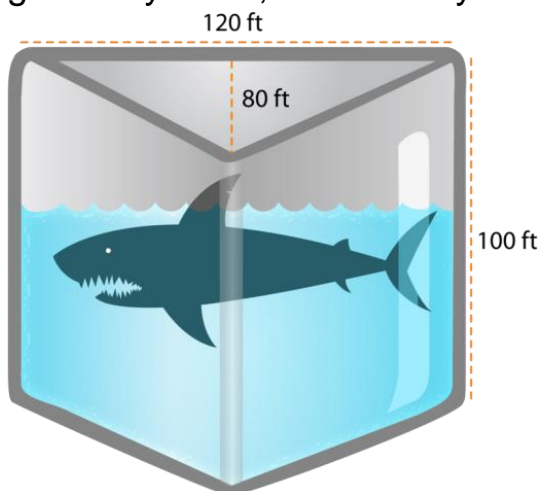4. What is the volume of the below pyramid??

20 in   20 in

22 in

5. Caitlyn made a teepee for a class project. Her teepee had a diameter of 10 feet. The angle the side of the teepee made with the ground was 45°. What was the height and surface area of the teepee? (Hint: Special Right Triangle 45-45-90)

10 ft

6. A golf ball has a diameter of 4 centimeters and a tennis ball has a diameter of 10 centimers. About how much greater is the surface area of the tennis ball?

7. The San Gregornio Girl Scout Council wants to shrink the size of their Thin Mints box in order to save on material cost. The current box is 18 cm tall, 10 cm wide and 5.5 cm deep. The proposed new box would be 16 cm tall, 10 cm wide and 5 cm deep. How much material will they save per case (hint: 12 boxes = 1 case)?

8. On your last visit to the aquarium you visited the shark tank and wondered how much water was needed to fill the tank. Since you are in Ms. Ramirez's geometry class, show how you would determine the answer.

9. A soup can has a diameter of 8 cm and a height of 10.5 cm. How much metal is needed to make the can?

10. Josh is wrapping a box that is 5 feet long 14 feet wide and 3 feet tall with wrapping paper. How much wrapping paper will he need to cover the box?

11. A cylindrical chemical tank is 12 feet high and has a diameter of 45 feet. How many cubic feet of liquid could the tank hold?

12. A round swimming pool has a diameter of 15 feet and is 6 feet tall. How much water will the pool hold?

13. Brian is building a sand box that is 6 feet wide, 3 feet long, and 15 inches high. How many cubic feet of sand with the box hold?

14. Find the surface area and volume of the below figure.

20 ft

20 ft

25 ft

12 ft