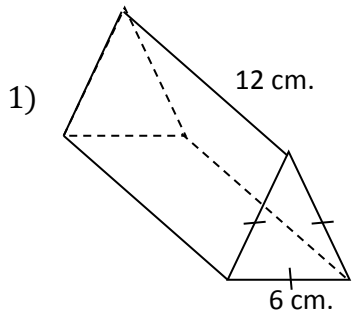
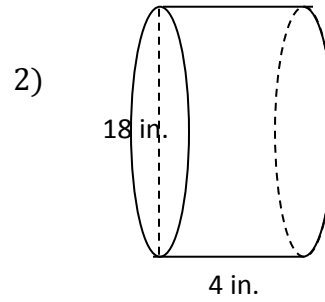


Directions: Please show ALL work to justify your answer.



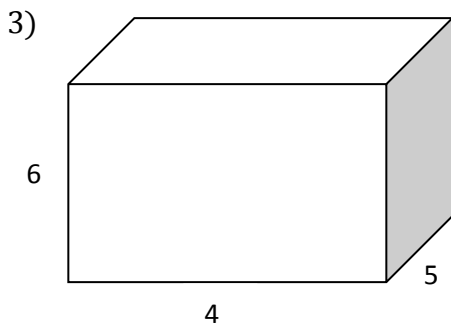
Name the 3-D Solid: \_\_\_\_\_

Volume: \_\_\_\_\_



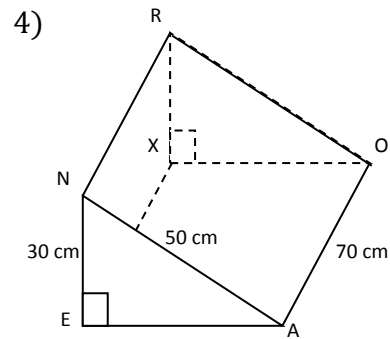
Name the 3-D Solid: \_\_\_\_\_

Volume: \_\_\_\_\_



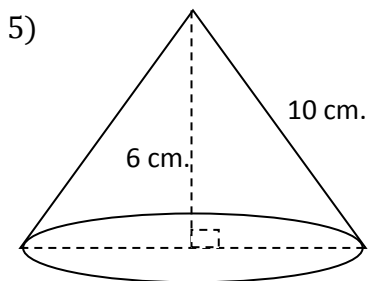
Name the 3-D Solid: \_\_\_\_\_

Volume: \_\_\_\_\_



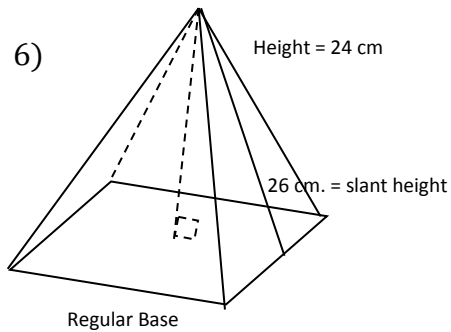
Name the 3-D Solid: \_\_\_\_\_

Volume: \_\_\_\_\_



Name the 3-D Solid: \_\_\_\_\_

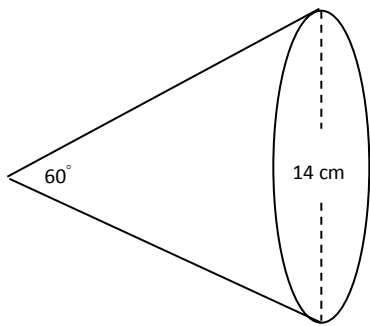
Volume: \_\_\_\_\_



Name the 3-D Solid: \_\_\_\_\_

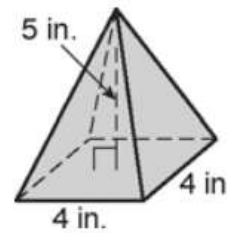
Volume: \_\_\_\_\_

7)



8)

The dimensions of the square pyramid are changed by a factor of  $\frac{1}{4}$ . Describe the effect this has on the volume of the pyramid.



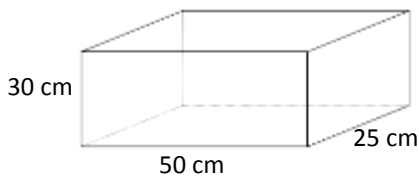
Name the 3-D Solid: \_\_\_\_\_

Description: \_\_\_\_\_

Volume: \_\_\_\_\_

\_\_\_\_\_

9) In an aquarium, each fish needs at least 750 cubic centimeters of space. In the tank below, what is the greatest number of fish that should be placed in the aquarium?



10) The volume of a cone is  $2560\pi$  and the area of the base is  $256\pi$ . Find the radius, height, and slant height of this figure.

11) If the volume of a regular square pyramid is  $1568\text{ cm}^3$  and has a height of 24 cm, what is the side length of the base?

12) Mrs. Klotz bought a box that was 4 ft by 3 ft by 2 ft to store all of her stuff to make room for the baby's stuff! Unfortunately, she way underestimated the amount of "stuff" she had and she cannot get a box that is more than 2 feet tall or it will not fit on top of her closet. If she triples the length and the width of the box, how much more space will she have to store her "stuff"?