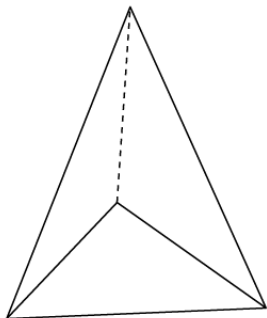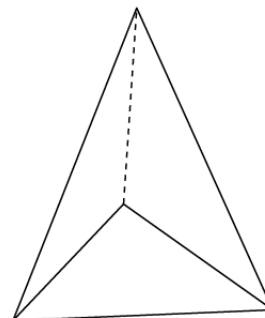Name_____

Unit 5a Review

1.   Using the given geometry solid, what shape is created when it is intersected by a plane:
        Draw the plane on the solid and the resulting shape next to and describe each answer, be specific.
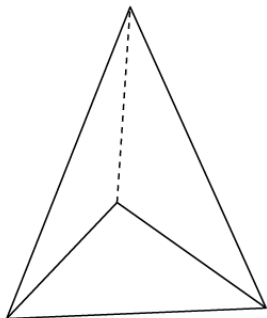
        a.   By a horizontal plane?   b.   By a vertical plane?

        c.   By a diagonal plane?

Volume Formulas	Area Formulas
Prism or Cylinder: $V = Base \bullet Height$	Rectangle: $A = LW$
Cone or Pyramid: $V = \frac{1}{3} Base \bullet Height$	Triangle: $A = \frac{1}{2} Base \bullet Height$
Sphere: $V = \frac{4}{3} \pi r^3$	Circle: $A = \pi r^2$
Cone Frustrum: $V = \frac{1}{3} \pi \bullet Height(R^2 + Rr + r^2)$	

2.   Find the volume of the following geometric solids.
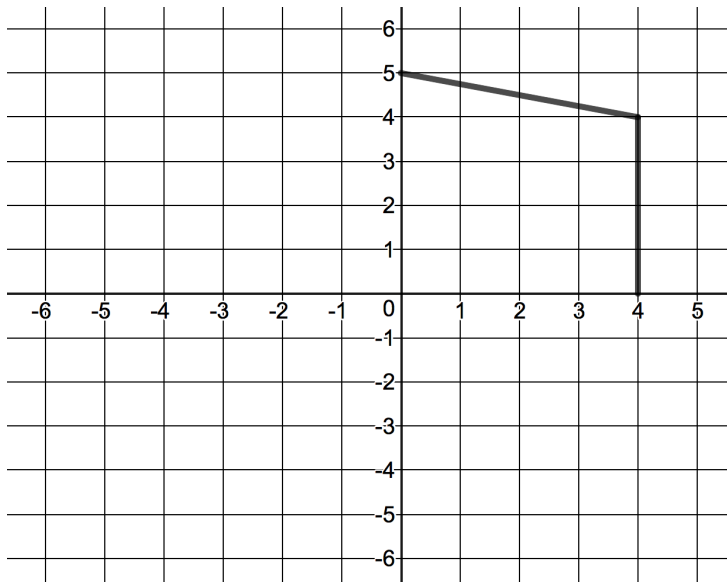
a.

0.64 cm

b.

12 yd

11 yd

9 yd
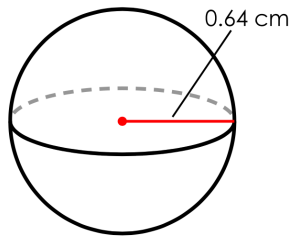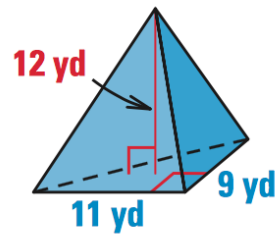
3.   If you complete one revolution around the y-axis, sketch the resulting shape. Then calculate the volume of the geometric solid that was created. Show all work.

4.   A grain silo on a farm has the same shape as the shape you made in #3. Given these dimensions, determine the volume of the grain silo.

Height in the center: 63 feet
Height on the outside: 51 feet
Diameter: 24 feet

5. If you complete one revolution around the x-axis, sketch the resulting shape. Then calculate the volume of the geometric solid that was created. Show all work.