Accelerated Geometry Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Rotations of 2D Figures Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Three dimensional figures can be created by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ two dimensional figures.

**Rotation:**

**Rotation axis:**

What 3D figure is generated by rotating the triangle in the given picture?



What about the hemisphere?

What about the square and circle?

**Problem 1:** A square with area of 100 $cm^{2}$ is rotated to form a cylinder. What is the volume of the cylinder?

**Problem 2:** Given a cone with radius 6 ft and height 12 ft, find the area of the triangle formed by a perpendicular cross section down through the cone’s center.