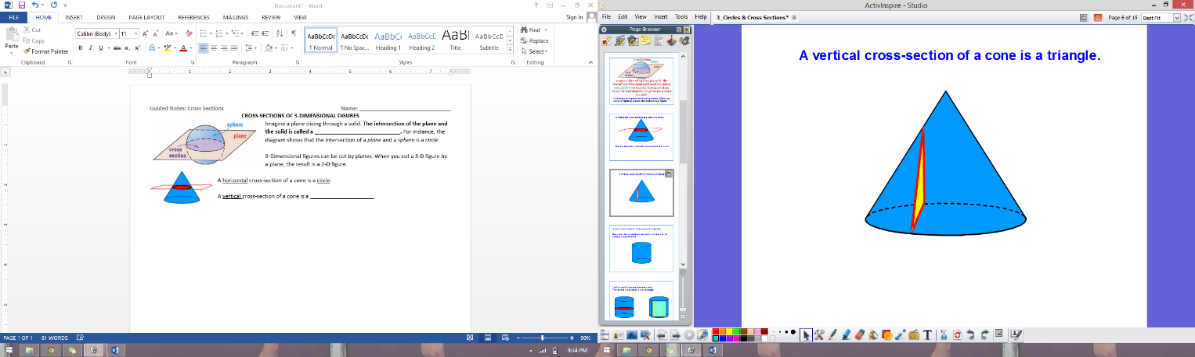
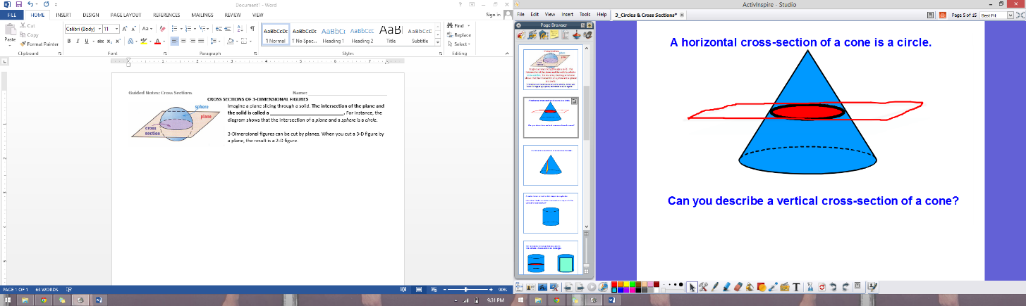
**Unit 1 Cross Sections and Rotations**

*3-Dimensional figures can be cut by planes. When you cut a 3-D figure by a plane, the result is a 2-D figure.*

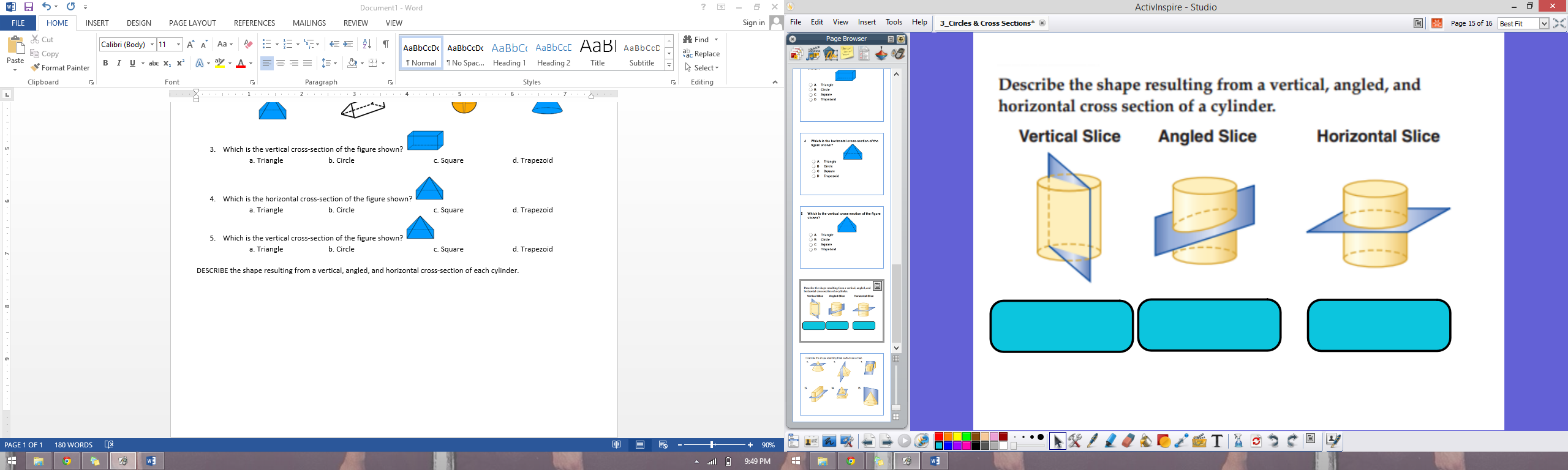


A horizontal cross-section of a cone is a .

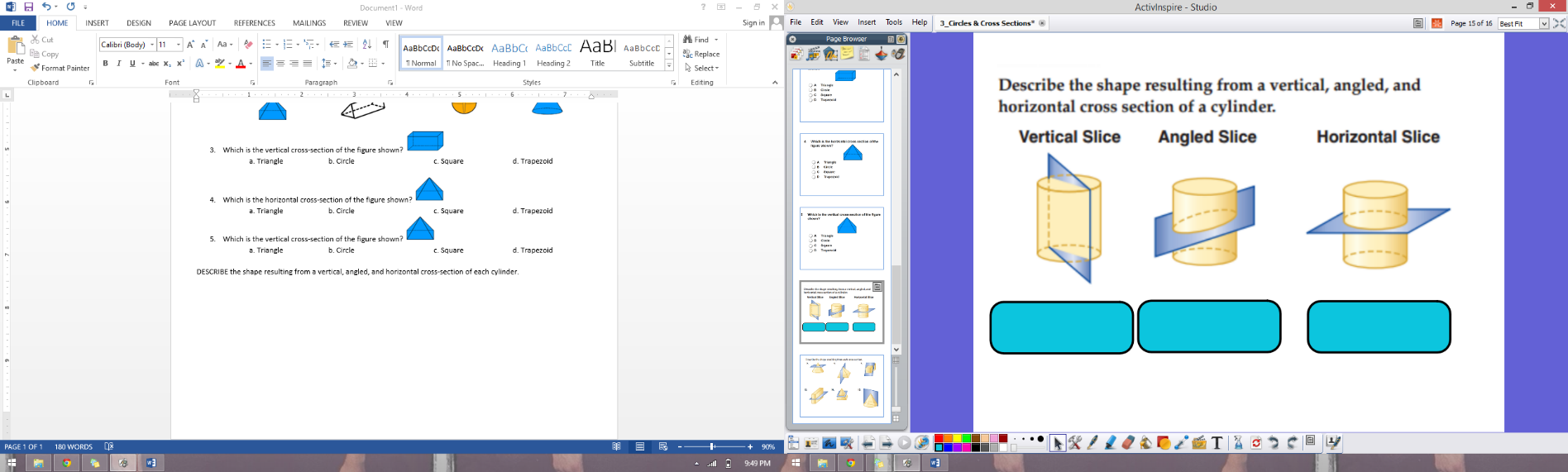
A vertical cross-section of a cone is a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**Examples:** DESCRIBE the shape resulting from a vertical, angled, and horizontal cross-section of each cylinder.

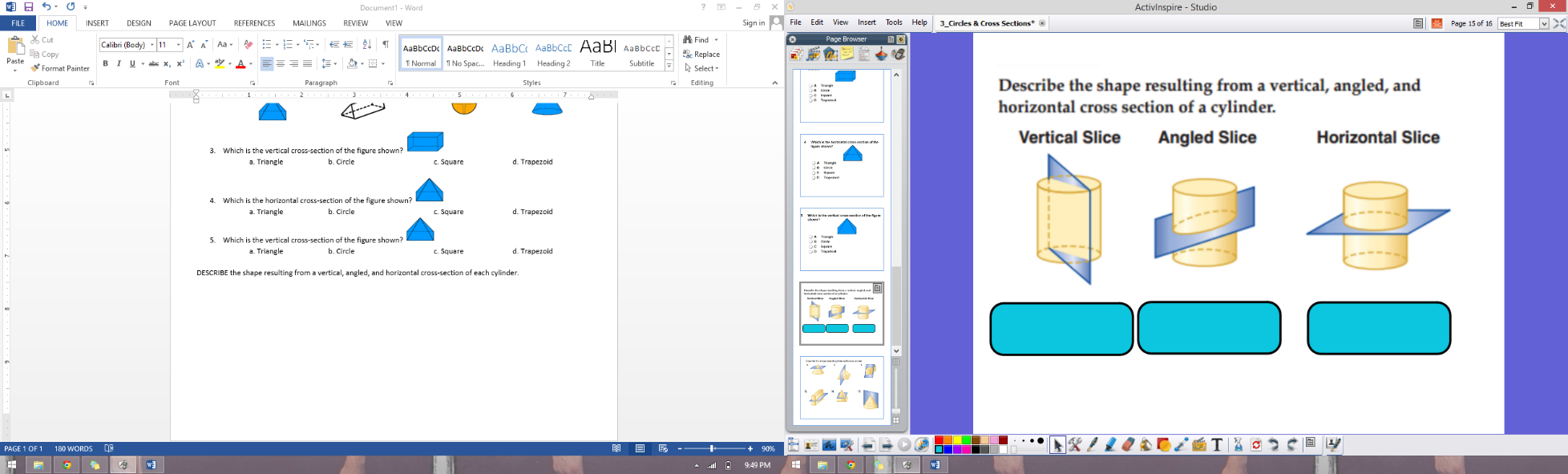
VERTICAL SLICE: The cross-section is a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_



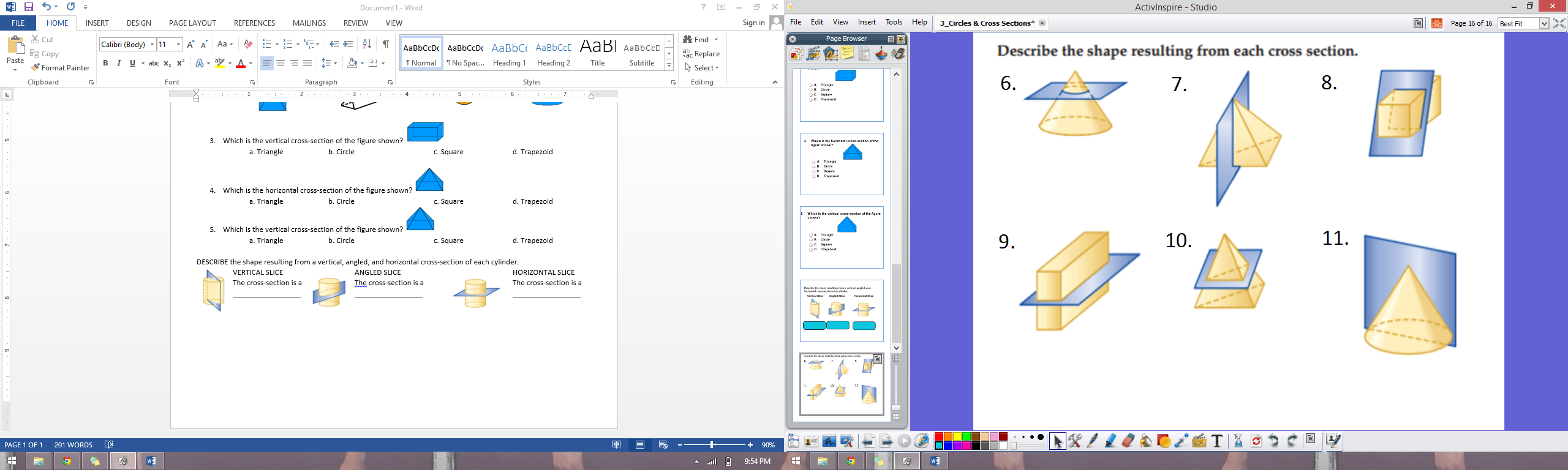
ANGLED SLICE: The cross-section is an \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

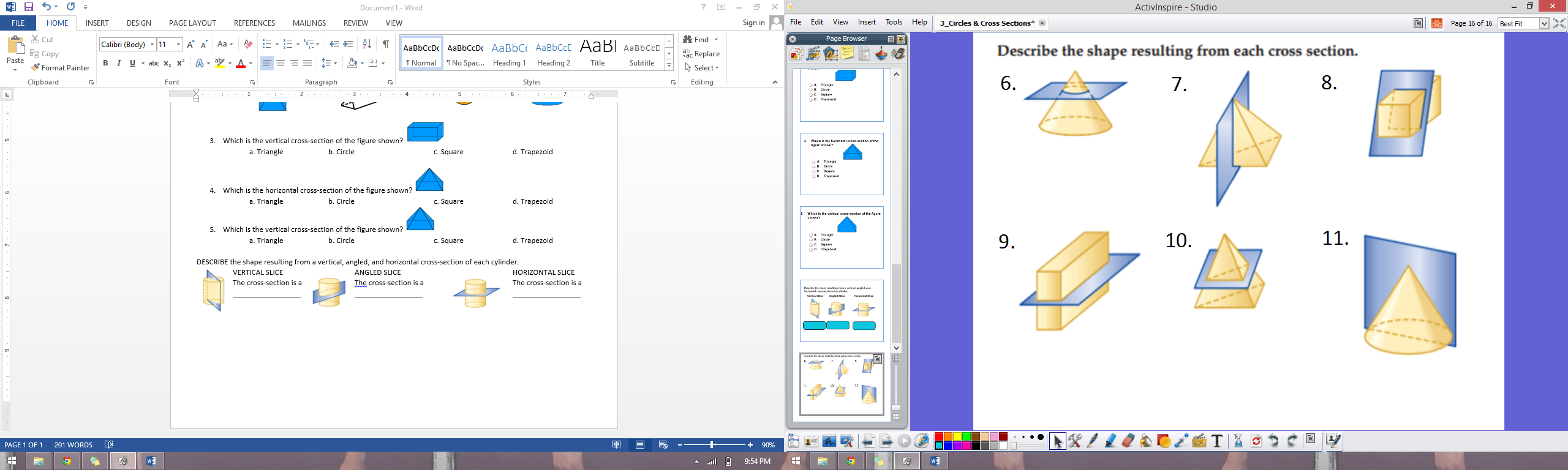


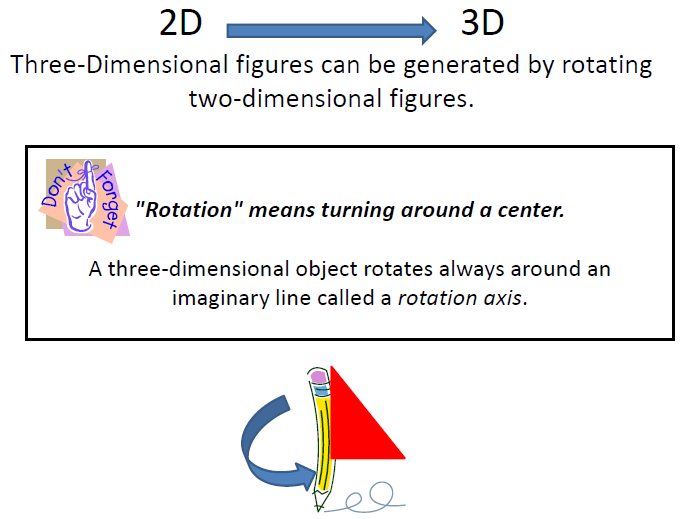
HORIZONTAL SLICE: The cross-section is a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

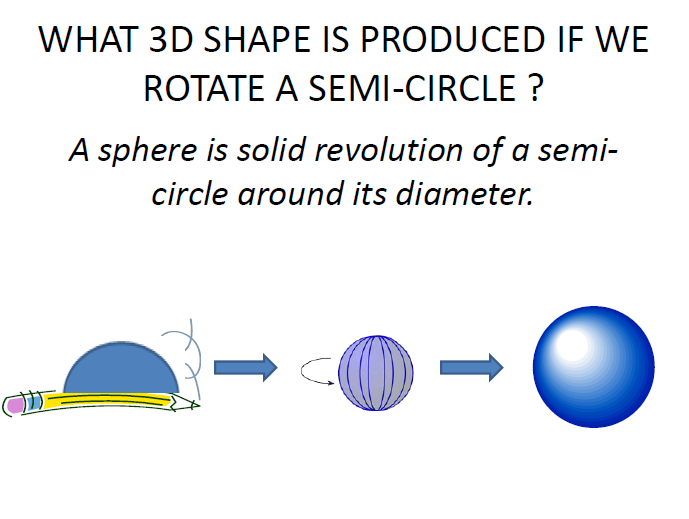


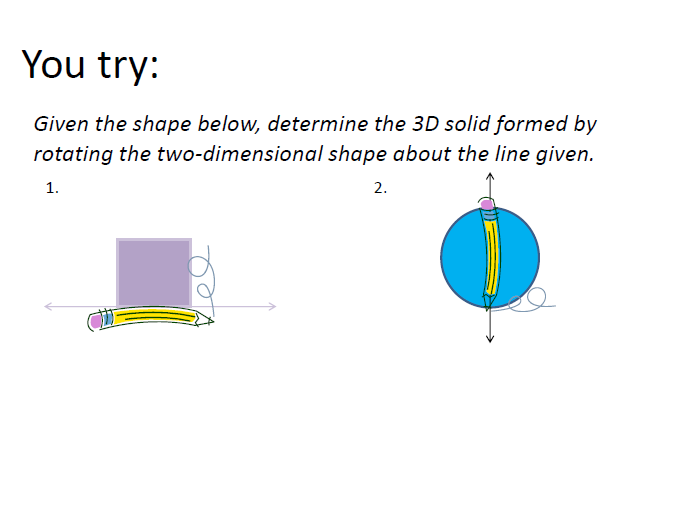
**Practice Problems:** DESCRIBE the shape resulting from each cross-section.











**Application Problem 1:** Given a cylinder with diameter 16cm and height 32cm, find the area of a cross section that is parallel to its base.

**Application Problem 2:** If an equilateral triangle with perimeter 36in is rotated, find the volume of the 3-dimensional shape that is formed.