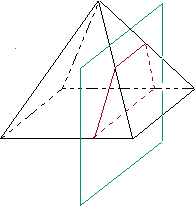
**ML #2: Cross Sections (3Dimensional Unit – Math 7)**

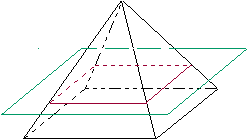
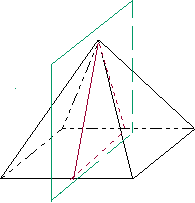
**CROSS SECTIONS: When a solid is cut with a 2-D plane, what the view looks like where the cut was made.**

**What DO You Think??**

For each figure below, draw the 2-D shape that would result in cutting the 3-D figure in the different directions.

|  |  |  |  |
| --- | --- | --- | --- |
|  | Horizontal Cut  (parallel to the base) | Vertical Cut  (perpendicular to the base) | Diagonal Cut  (from lower left to upper right) |
|  |  |  |  |
|  |  |  |  |

**Below are three cross sections of a square pyramid. What is the shape of the base?**

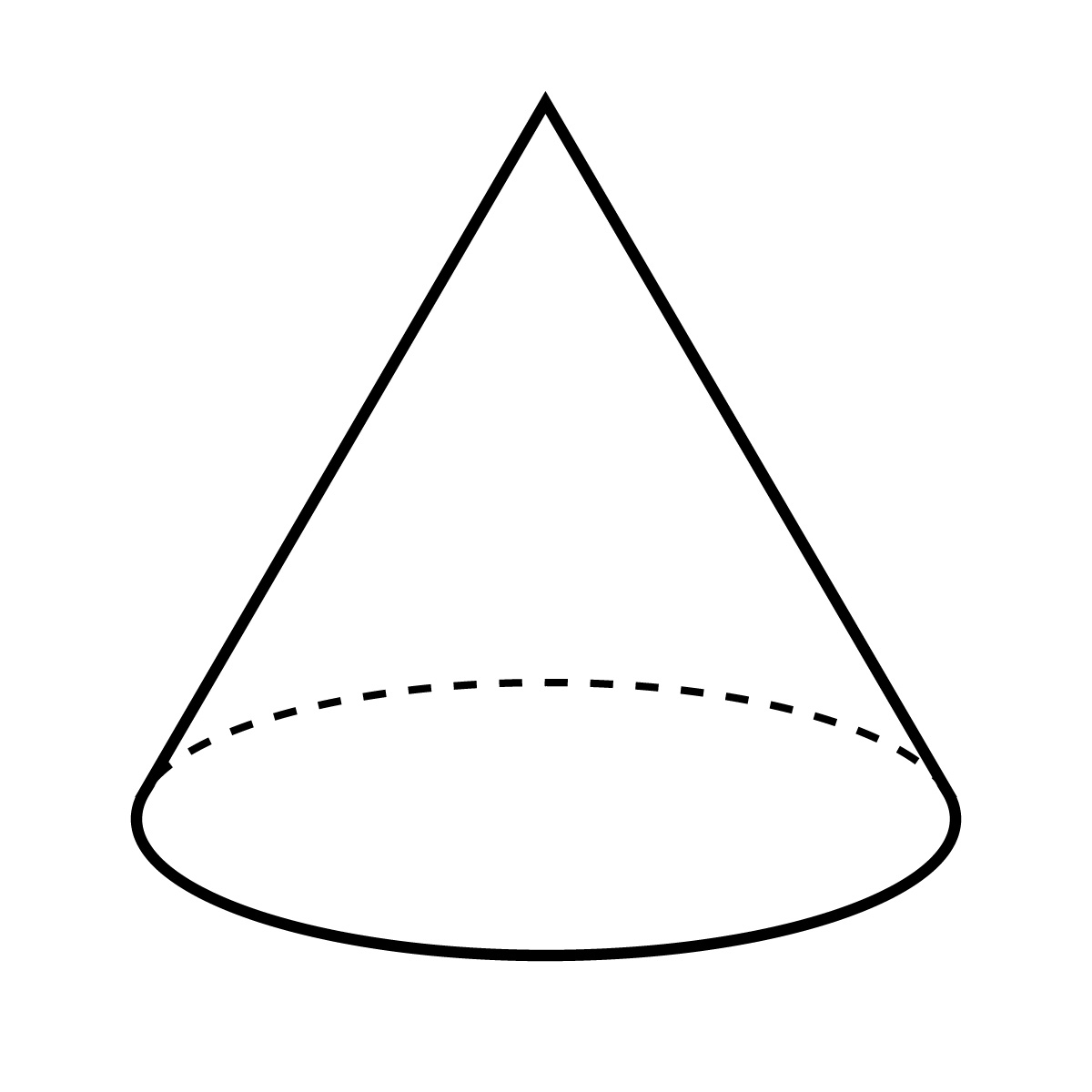
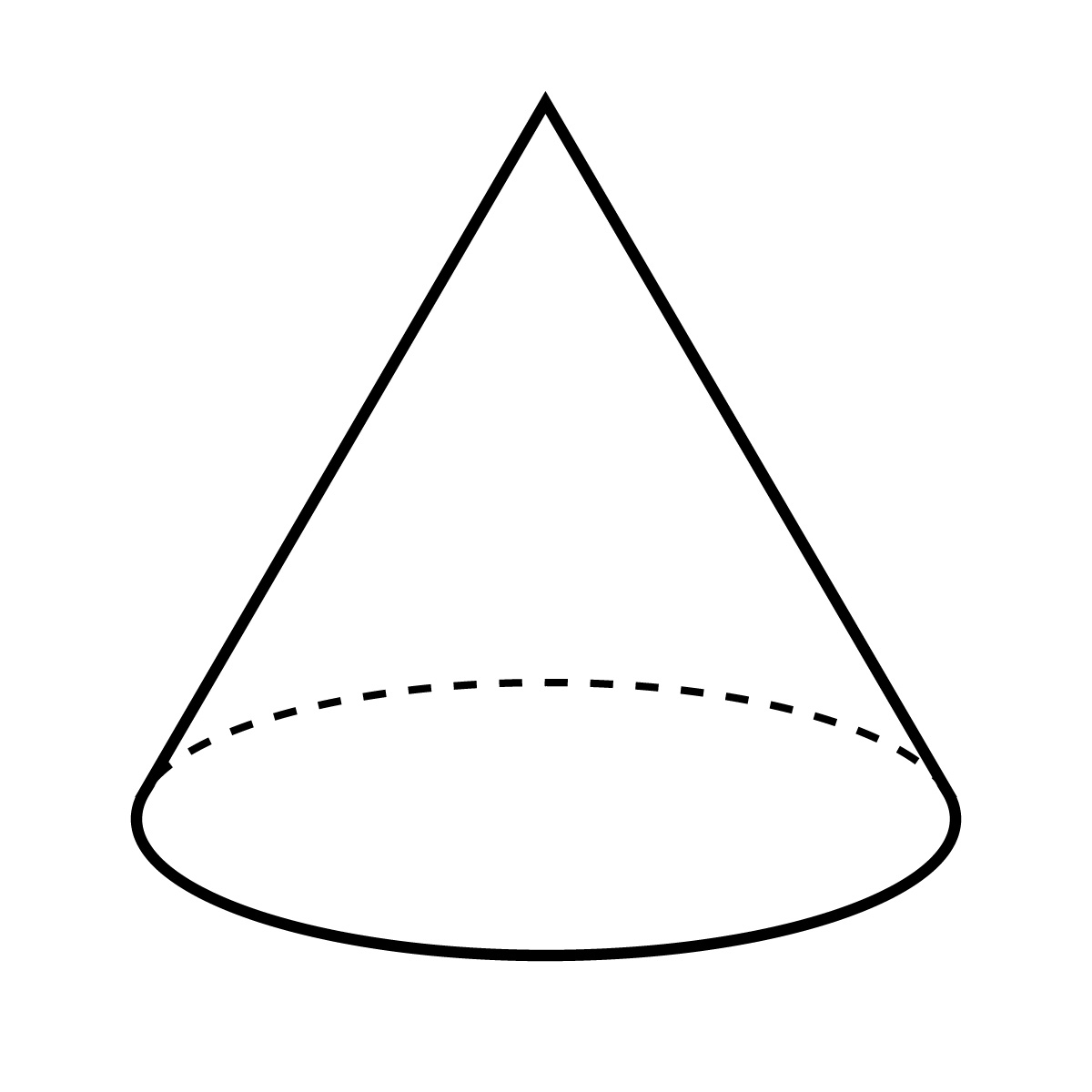
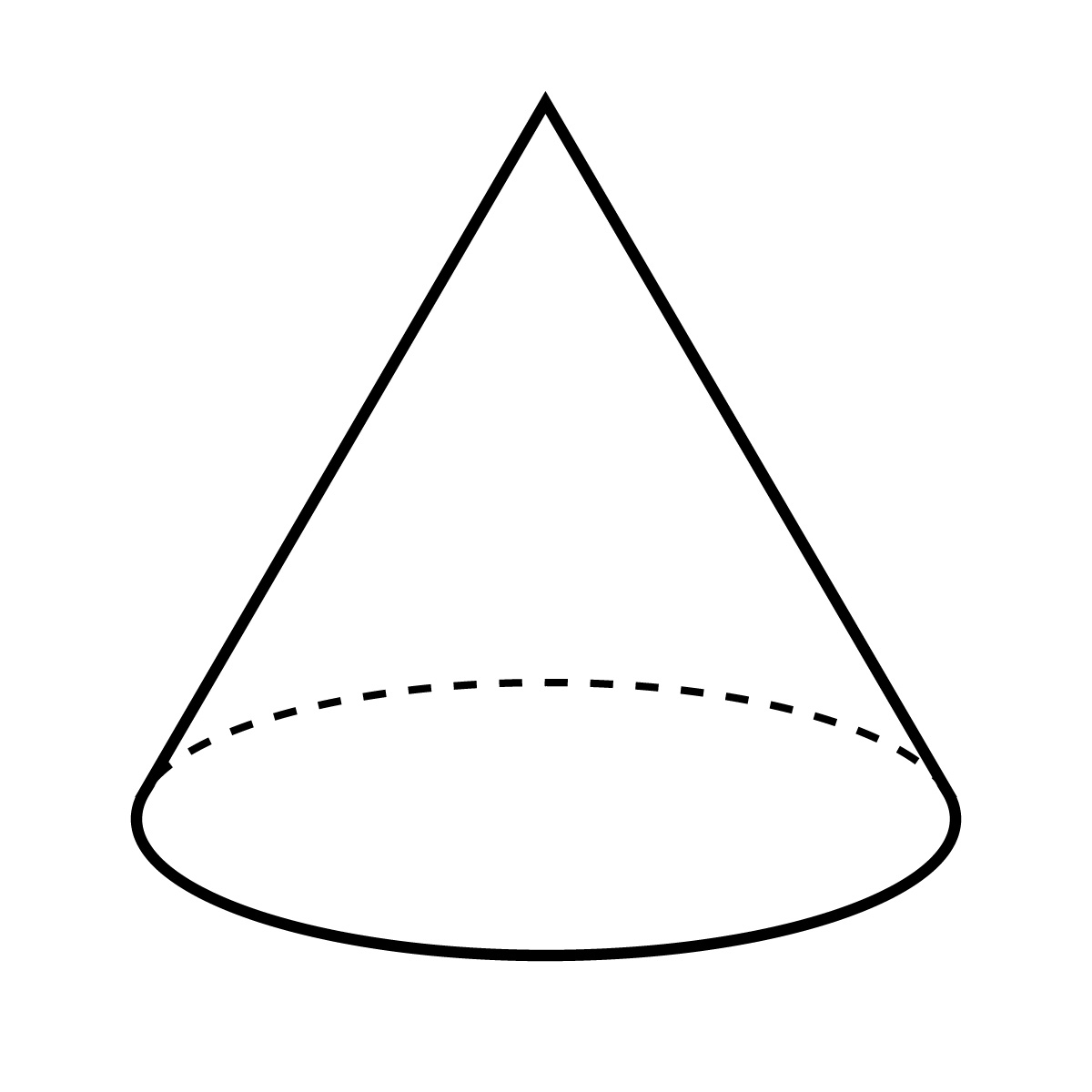
**Draw a picture of each cross section**

|  |  |
| --- | --- |
|  |  |
|  |  |
|  |  |

**Discovering Plane Sections: Draw the 2-D shape made from the given cut**

2. Below each figure, draw the shape that you think would be created if the dotted line represents a cut that a plane made through the figure.

3. Below each cylinder, draw the shape that you think would be created if the dotted line represents a plane that cuts through the figure.

4. Below each cone, draw the shape that you think would be created if the dotted line represents a plane that cuts through the figure.

**When slicing a cross section that is parallel to the base, the cross section shape will always**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.**