MFM2PI – *Unit 8: Geometry – Lesson 7*  Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Surface Area of Pyramids and Cones**

1. **How is Surface Area Different When Going From Prisms and Cylinders to Pyramids and Cones?**

Excellent question! As with the surface area of prisms and cylinders, you can use the formulas for surface area of pyramids and cones on the formula sheet. However, the most challenging part is ensuring that no sides were left behind, which means we will need to learn how to sketch the “nets” of these two new shapes.

Before we begin sketching, let’s look at the *general* surface area differences between pairs of these shapes:

***Prisms and Pyramids Cylinders and Cones***

**Summarize**! The sides of a prism are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_; the sides of a pyramid are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_!

**Summarize**! The side of a cylinder is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_; the side of a cone is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_!

Now let’s try some sketches of the pyramid and cone from above!

Here are correct versions of the nets drawn in the examples from the front of this lesson.



1. **Calculating Surface Area**

*Calculate the surface area of the following shapes. Make a sketch of the net to ensure that you include all sides in your calculations. Don’t forget to include the proper units!*

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**HW: *Unit 8 Lesson 7 Worksheet***