**Objective:**

**Do Now:**

**Place post it here**

What is the length of the leg **opposite** (across) from your pink angle?

What is the length of the leg **adjacent** to your pink angle?

What is the length of the **hypotenuse** of your triangle?

**Guided Practice:**

Complete the following ratios for the triangle in your do now. Express each ratio as a fraction and a decimal.

= = =

Compare the ratios from your right triangle to those of the student next to you. Describe what you notice: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Why do you think this might occur? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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**Example 1:**

1. Use the Pythagorean theorem to find the missing side length in the right triangle

13

1. Find the values for the trig ratios below:

Sin(α) = Cos(α) = Tan(α) =

5

Sin(β) = Cos(β) = Tan(β) =

**Example 2:**

Given: Sin(x) =

1. Label the side lengths of the triangle provided in your given.

x

1. Find the missing side length using the Pythagorean theorem.
2. Find values for the remaining trig functions: Cos(x) = Tan(x) =