Mr. Baroody's Web Page
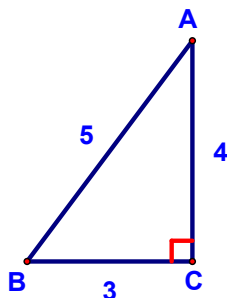
Lesson 9.10 - Trigonometric Ratios

Here's our warmup!

Find the sine and cosine of ∠A and ∠B

Compare sin A and cos B

Compare sin B and cos A

Write a generalization that your answers to the previous two questions suggest

Today, we will continue to look at how to use the Trigonometric ratios in different types of problems. The most important type for now is how to find the measure of an angle, given the appropriate sides. For example, consider the following problem:
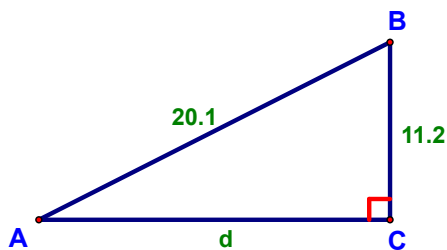
Find m∠A to the nearest degree.

How did we find the measure of ∠A? We started by figuring out that the sin∠A (opp/hyp) = .5572. From here, we could do one of two things - look up that value in the Trig Ratios Values chart (the last page of your classwork packet) to see what the closest angle is, or by taking the inverse sine (or arcsine or $\sin^{-1}$) of the value by using the appropriate button on our calculators. With this information, we are able to "Solve the rest of the right triangle" by finding d (could you also find ∠B?).

Find d to the nearest tenth.

That's it for trig for this year...you'll get plenty more next year and during your junior year! For now, you should be able to "solve a right triangle" given any two of its parts.