

Notes Trig Ratios in Right Triangles (sides)

Name: _____ Date: _____ Period: _____

Learning Target: _____

If a triangle is not a special right triangle we can use something called trig ratios to find missing sides and angles. There are three trig ratios:

- _____
- _____
- _____
- *SOH CAH TOA (acronym to help you remember)*

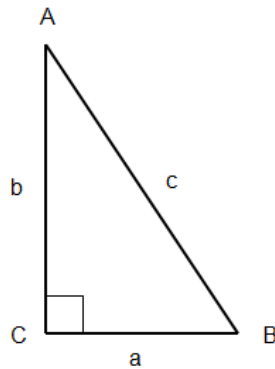
**Only works for acute angles in right triangle!*

Diagram

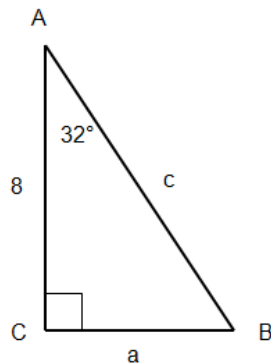
$$\sin A = \quad \cos A =$$

$$\tan A = \quad \sin B =$$

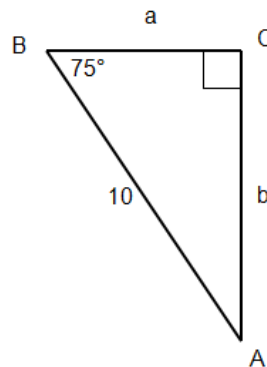
$$\cos B = \quad \tan B =$$



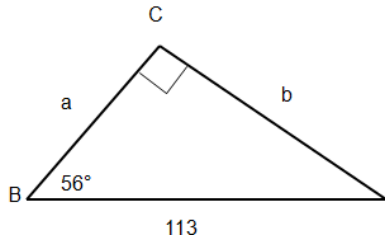
Example 1: Use trig ratios to solve for missing sides and angles



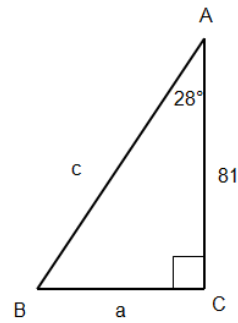
Example 2: Use trig ratios to solve for missing sides and angles



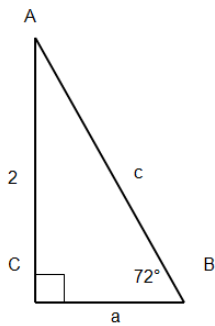
Example 3: Use trig ratios to solve for missing sides and angles



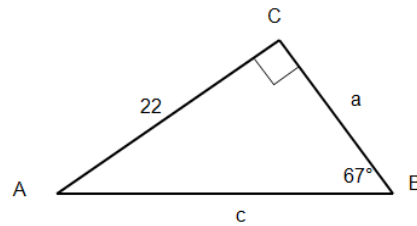
Example 4: Use trig ratios to solve for missing sides and angles



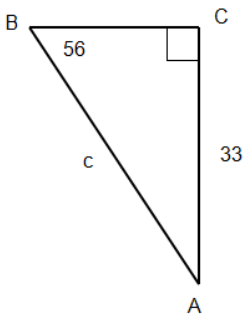
Example 5: Use trig ratios to solve for missing sides and angles



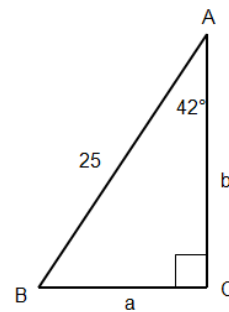
Practice 1: Use trig ratios to solve for missing sides and angles



Practice 2: Use trig ratios to solve for missing sides and angles



Practice 3: Use trig ratios to solve for missing sides and angles



Show me you know it!

How do you decide which trig ratio to use? _____
