

Trigonometric Ratios – Finding Sides

Since Trig is done with angles and angles are measured in degrees, then the calculator needs to be set in the right mode. All calculators are default to radian mode. The mode for trig is degree mode. If the calculator is not set to degree mode, then every answer will be wrong.

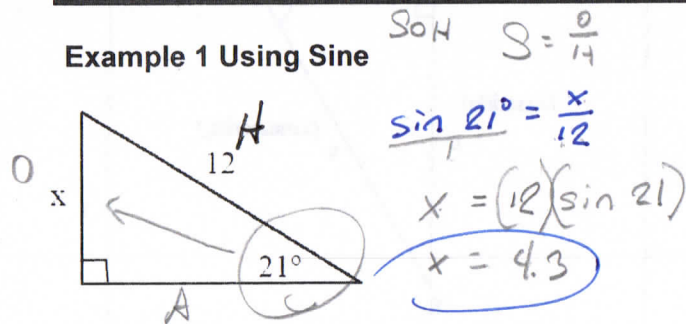
***If we know one side length of a right triangle and an acute angle then we can find the missing side lengths.**

Each one is worked a different way, so be careful.

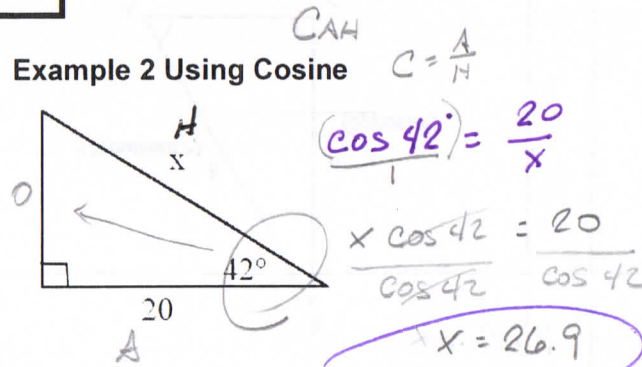
How to find the missing sides using trigonometry.

1. Circle the angle given.
2. Label the sides as opposite, adjacent, and hypotenuse from the angle that you circled.
3. Identify which Trigonometric Function to use. Sine, Cosine, or Tangent.
4. Set up the equation.
5. Solve

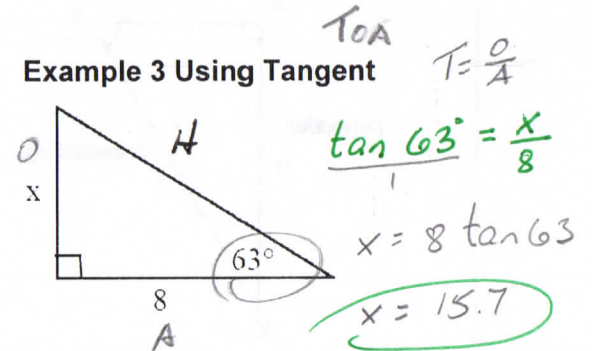
Example 1 Using Sine



Example 2 Using Cosine

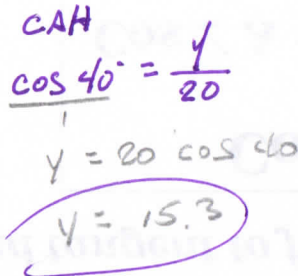
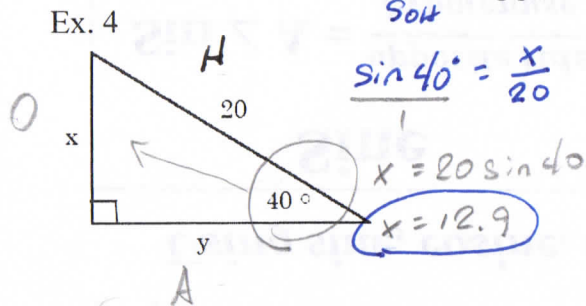


Example 3 Using Tangent



Determine the values of the missing parts:

Ex. 4



Ex. 5

