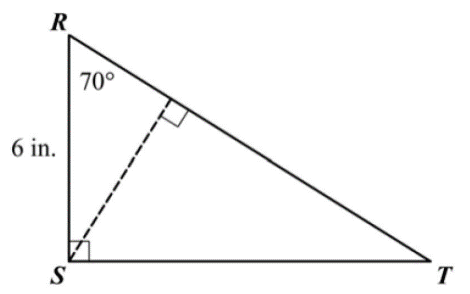
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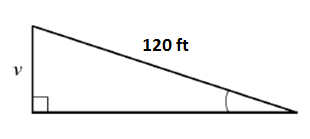
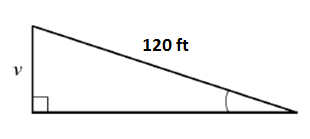
Geometry – Unit 3 Right Triangle Trigonometry

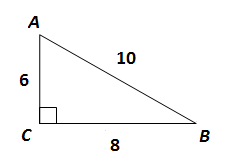
**Trigonometric Ratios Study Guide**

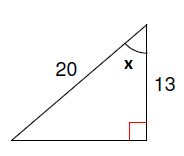
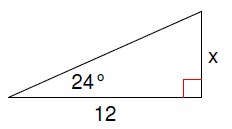
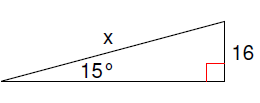
**Sine = Cosine = Tangent =**

1. What does it mean for two angles to be complementary?
2. Find tan34 and find measure of angle A if cosA=0.906307787.
3. Angle and angle are complementary angles in a right triangle. The value of is . What is the value of ?
4. Triangle is a right triangle with right angle , as shown. What is the area of triangle ?



1. A road ascends a hill at an angle of . For every 120 feet of road, how many feet does the road ascend?
2. Given triangle , what is ?



1. In a right triangle, if , what is ?
2. In right triangle , if  and  are the acute angles, and , what is ?
3. Find the measure of angle . Round your answer to the nearest degree.
4. Solve for .
5. You are given that . What is the measure of angle ?
6. Solve for .

1. A ladder is leaning against a house so that the top of the ladder is 18 feet above the ground. The angle with the ground is 47°. How far is the base of the ladder from the house?
2. Given an equilateral triangle has a perimeter of 36 cm, what is the length of its altitude?
3. What is the area of a square with a diagonal of 12 units?
4. Give a right triangle FUN and sin=5/12, find sin( and cos(90-.

**DON’T FORGET YOU NEED TO BE ABLE TO SOLVE FOR A RIGHT TRIANGLE GIVEN 2 SIDES OR GIVEN AN ANGLE AND A SIDE.**

* IF YOU ARE GIVEN **2 SIDES**, USE THE PYTHAGOREAN THEOREM TO FIND THE THIRD SIDE AND THEN INVERSE TRIG RATIOS TO FIND THE ANGLES.
* IF YOU ARE GIVEN **ONE SIDE AND ONE ANGLE**, THEN YOU WILL HAVE TO USE TRIG RATIOS TO FIND ONE OF THE TWO REMAINING SIDES AND THEN YOU CAN USE PYTHAOREAN THEOREM TO FIND THE THRID.

\*Look back over old worksheets, Quiz and notes to solve more practice problems!