**Trigonometry Review**

The Pythagorean Theorem

When dealing with vectors in Physics, we often see\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_,

and this is when we would use Pythagorean Theorem. We use this to solve for the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

of the different sides of the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ triangle.

“\_\_\_\_\_\_\_\_” and “\_\_\_\_\_\_\_\_\_\_\_\_” are the lengths of the legs of the right triangle and “\_\_\_\_\_\_\_\_\_\_” is the length of the hypotenuse of the right triangle.

Solve:

5 m

X

1.) 2.)

2.3 m

X

7 m

14 m

X

3.) 4.)

1.8 m

X

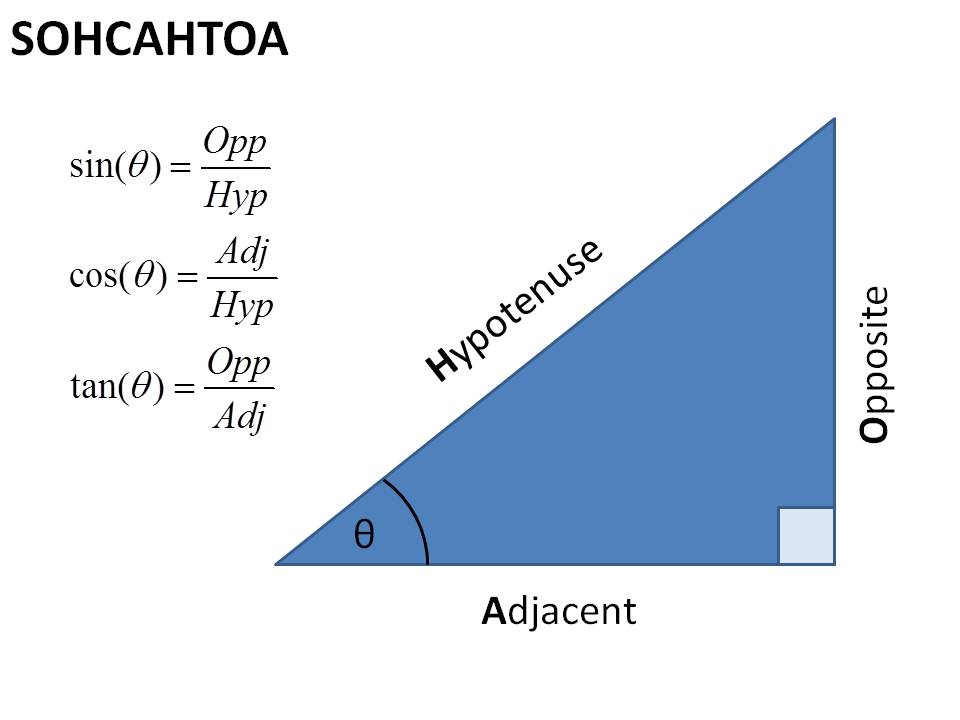
12.2 m

3.7 m

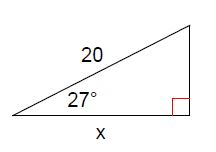
4.6 m

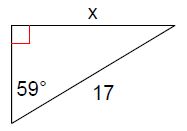
Now that you can find the hypoteneuse of a right triangle, let’s see how we find the length of the sides if we are given an angle of the triangle.

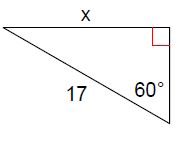
Remember:

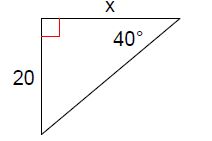


Solve:

1.) 2.)





3.)  4.)

We can also use inverse trig functions to solve for the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ if we have 2 sides of the right triangle.

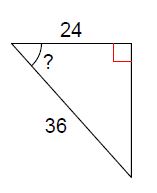
For example: If we are given the length of the hypotenuse and the length of the adjacent side, our triangle would look like this:

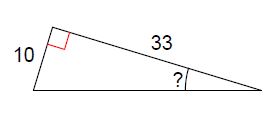
14 m

Ө

10.5 m

We can solve for Ө (the angle) by using SOHCAHTOA…. Inverse trig functions.

Solve:

1.) 2.) 

3.) 