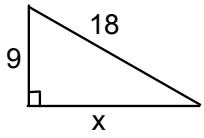
Explain (in words) two ways to solve for the value of x.



Feb 21-2:23 PM

Unit 9 Day 6:

Trigonometry

(9.4/9.5) Sine, Cosine and Tangent

Today's I Can Statements:

TR- 5: I can determine the sine, cosine, and tangent ratios.

Feb 18-7:52 AM

Last time, we learned about special right triangles. We were able to find the missing sides of a triangle without using the pythagorean theorem. But, what if the triangle was not a special triangle? What if we were only given one side of the triangle, but it did not fit any of our known relationships?

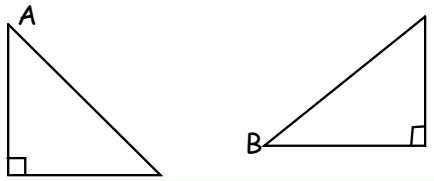
-->We use TRIG!!

Feb 18-7:53 AM

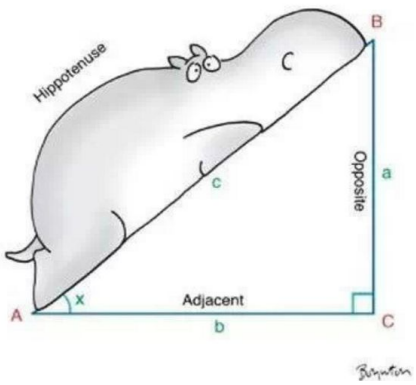
Naming the sides of the triangle.

_____, _____, and _____

The name of the legs is dependent on the angle that you are looking at



Feb 18-7:53 AM



Aug 22-12:11 PM

A _____is a ratio of the lengths of two sides in a right triangle.

There are _____ common Trigonometric Ratios

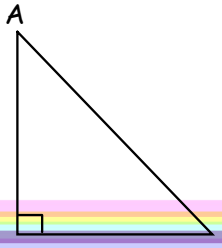
_____, _____, and _____

Feb 18-7:53 AM

Sine = _____/_____

Cosine = _____/_____

Tangent = _____/_____



Feb 18-7:58 AM

Sine Cosine Tangent

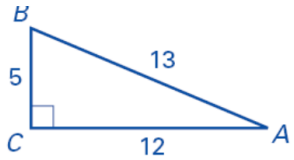
Opposite Adjacent Opposite

Hypotenuse Hypotenuse Adjacent

Feb 18-8:26 AM

Example

Find Sin, Cos, and Tan, of <A



Feb 18-8:28 AM

Get out your handy dandy calculator!
(Don't have one? You really need one! Please go buy one)

Check MODE (needs to be in Degree Mode)

Find:

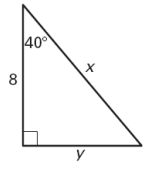
cos 32 =

Feb 17-9:25 PM

Finding missing sides of a right triangle using the trig. functions.

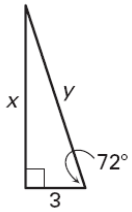
1. Figure out what _____ to use.
2. _____ the trig function with the _____.
3. Solve the _____ for the missing variable.

Example



Feb 18-8:28 AM

Try this one: Example

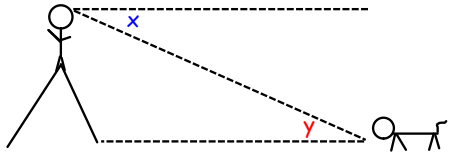


Feb 18-8:29 AM

Terms:

_____: looking up

_____: looking down



Feb 17-9:27 PM

Example

You are measuring the height of a building. You stand 100 feet from the base of the building. You measure the angle of elevation from a point on the ground to the top of the building to be 48°. Estimate the height of the building.

If no picture is given, draw one!

Feb 18-8:30 AM

You are 6ft tall looking up at the top of 50 ft flagpole and you measure the angle of elevation to be 61 degrees. How far away are you standing from the base of the flagpole to the nearest foot.

Feb 18-8:32 AM

Bentley is throwing a water balloon (from the ground) at his father's head. Bentley figured out that he is throwing at an angle of 35^0. His father is 6 ft tall. What is the distance the water balloon traveled?

Jan 2-1:03 PM

Tonight's Assignment:

Page 491 #3, 6-10, 15

Page 498 #7, 8, 17-20, 27-30

Planning Ahead:

Unit 9 Quiz will be...

Tuesday 3/3 Wednesday 3/4

Today's I Can Statements:

TR- 5: I can determine the sine, cosine, and tangent ratios.

Feb 18-8:33 AM

Feb 11-9:23 PM