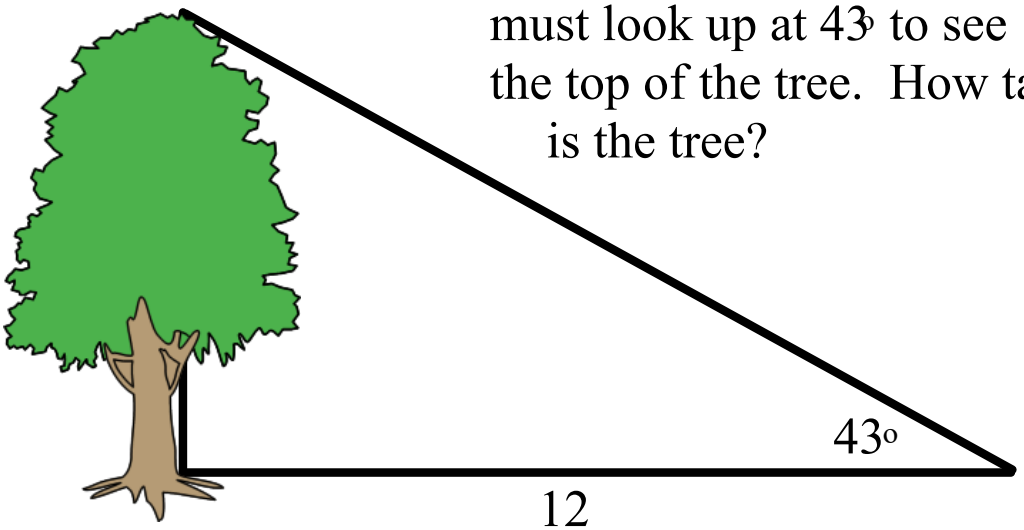
Standing 12 from a tree you must look up at 43° to see the top of the tree. How tall is the tree?



Dec 16-9:39 AM

9-1 Right-Triangle Trigonometry

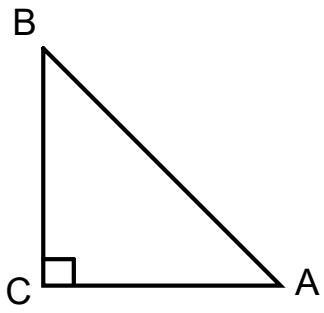
Objectives:

1. I can identify trigonometric functions
2. I can evaluate using trigonometric functions

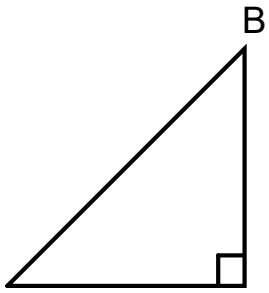
Feb 26-11:19 AM

The angles are usually in capital letters with their opposite side in small letters. You only use acute angles with the trigonometric functions.

1. Label the sides (a, b, c)



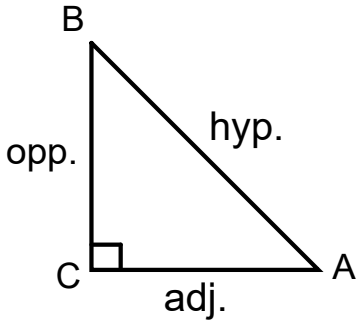
2. Label the sides. (opp, adj, hyp)



Feb 26-11:20 AM

A **trigonometric ratio** is a ratio of the lengths of two sides of a right triangle

Write the ratio of the sides with their letter names.



Trigonometric Functions of

$$\sin A = \frac{opp.}{hyp.} = \qquad \csc A = \frac{hyp.}{opp.} =$$

$$\cos A = \frac{adj.}{hyp.} = \qquad \sec A = \frac{hyp.}{adj.} =$$

$$\tan A = \frac{opp.}{adj.} = \qquad \cot A = \frac{adj.}{opp.} =$$

Feb 26-11:49 AM

Trigonometric Functions of

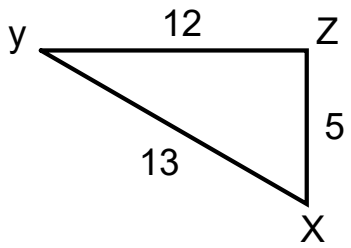
$$\sin A = \frac{opp.}{hyp.} = \qquad \csc A = \frac{hyp.}{opp.} =$$

$$\cos A = \frac{adj.}{hyp.} = \qquad \sec A = \frac{hyp.}{adj.} =$$

$$\tan A = \frac{opp.}{adj.} = \qquad \cot A = \frac{adj.}{opp.} =$$

Apr 12-9:18 AM

Example 1. Find the values the trigonometric functions of $\angle X$ for ΔXYZ

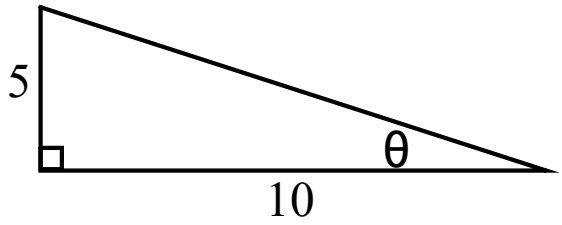


sin x =

cos x =

tan x =

Feb 26-11:54 AM



Find all trig ratios for the given triangle:

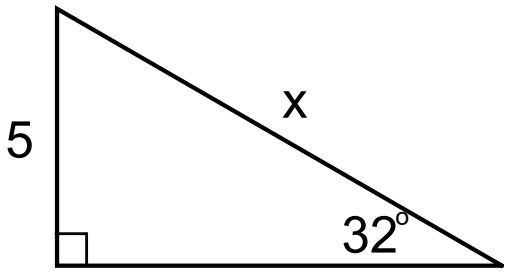
sin x =

cos x =

tan x =

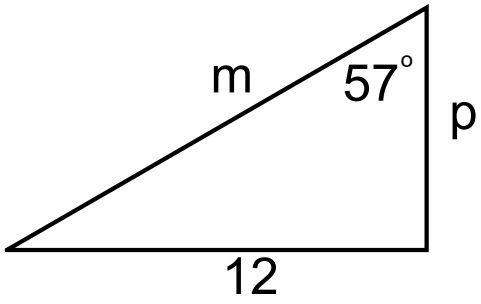
Dec 16-9:30 AM

Solve for x



Jan 26-2:26 PM

Solve for p



Jan 26-2:30 PM

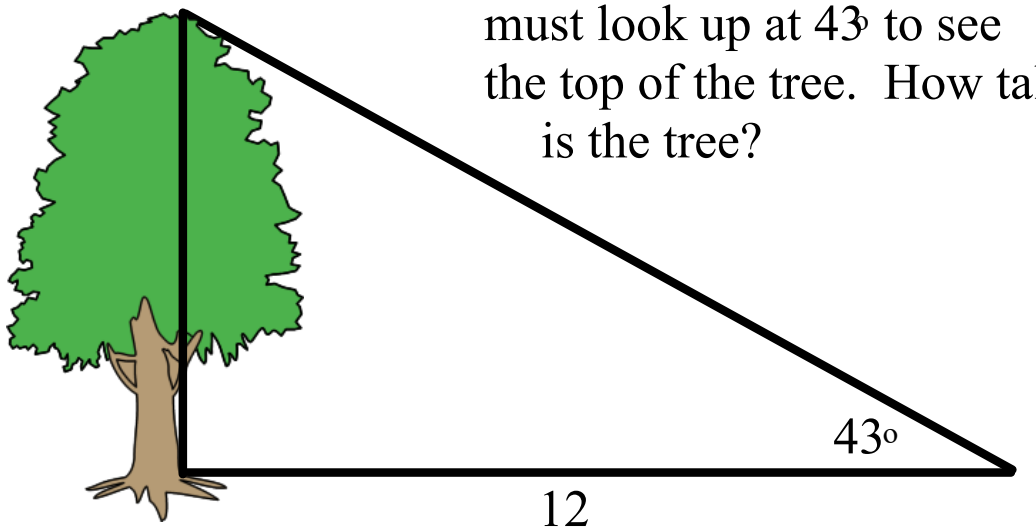
Evaluate the following on a calculator and round to 3 decimal places

$\sin 58^\circ$ $\sin 60^\circ$

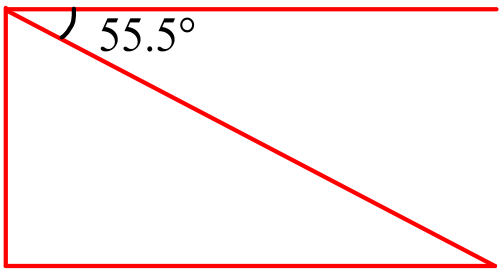
$\cos 27^\circ$ $\cos 120^\circ$

$\tan 123^\circ$ $\tan 315^\circ$

Mar 31-1:43 PM



Dec 16-9:39 AM



A bird sitting on a 30' tower looks at a boat from an angle of depression of 55.5°. How far is the boat from the tower?

Dec 16-9:39 AM

A tipping platform is a ramp used to unload trucks. How high is the end of a 80 inch ramp when it is tipped by a 30º angle? By a 45º angle?

Mar 31-10:11 AM

Mar 24-1:22 PM