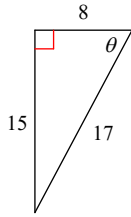


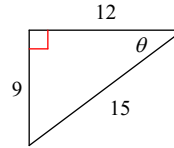
Trigonometry Review

Find the value of the trig function indicated. *Hint: find the fraction. Think SOH-CAH-TOA.

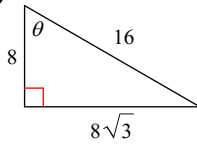
1) $\sin \theta$



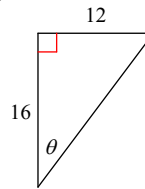
2) $\tan \theta$



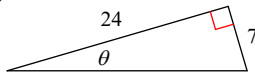
3) $\cos \theta$



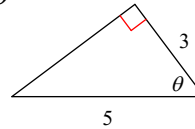
4) $\sin \theta$



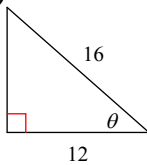
5) $\cos \theta$



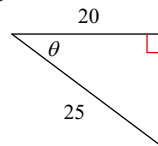
6) $\tan \theta$



7) $\cos \theta$

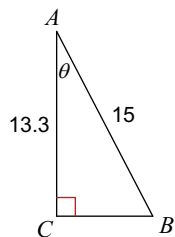


8) $\tan \theta$

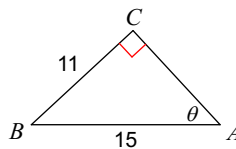


In each problem, angle C is a right angle. Find the measure of the angle indicated to the nearest tenth.

9)



10)

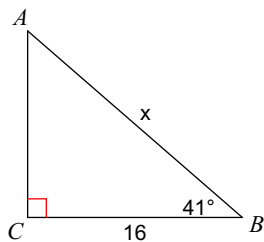


11) Find $m\angle B$ if $b = 4$, $c = 11$

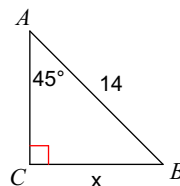
12) Find $m\angle B$ if $b = 7$, $c = 11$

In each problem, angle C is a right angle. Find the measure of the side indicated to the nearest tenth.

13)



14)



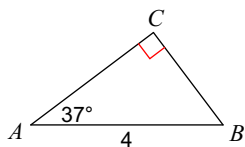
15) Find a if $m\angle A = 40^\circ$, $c = 7$

16) Find c if $m\angle A = 19^\circ$, $a = 6$

In each problem, angle C is a right angle. Solve each triangle. Round answers to the nearest tenth.

*Hint: Find EVERYTHING!

17)



18) $m\angle B = 59^\circ$, $b = 7.1$

Find the value of the two remaining trig functions.

19) If $\tan \theta = \frac{5}{12}$

then $\sin \theta =$ _____

and $\cos \theta =$ _____

20) If $\cos \theta = \frac{15}{17}$

then $\sin \theta =$ _____

and $\tan \theta =$ _____

21) If $\cos \theta = \frac{4}{5}$

then $\sin \theta =$ _____

and $\tan \theta =$ _____

22) If $\sin \theta = \frac{12}{13}$

then $\cos \theta =$ _____

and $\tan \theta =$ _____

Draw and label a triangle, then find the missing information using trig functions. Round all answers to the nearest whole number. Remember your units!

- 23) A kite with a string 150 feet long makes an angle of 45° with the ground, Assuming the string is straight, how high is the kite off the ground?
- 24) A great white shark is swimming 22 feet below sea level. If the shark is 67.7 feet away from a sailboat, what is the angle of depression from the boat to the shark?
- 25) A tree 10 meters high casts a 17.3 meter shadow. Find the angle of elevation.
- 26) A tourist in Washington D.C. is sitting in the grass gazing up at the Washington Monument. The angle of elevation to the top of the monument is 25° . Given that the Washington Monument is 555 feet tall, find her approximate distance from the base of the monument.
- 27) A meteorologist reads radio signals to get information from a weather balloon. The last alert indicated that the angle of depression of the weather balloon to the meteorologist was 41° and the balloon was 1,810 meters away from his location on the diagonal. How high above the ground was the balloon?