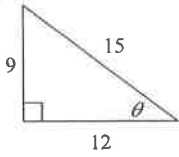


Law of Sin and Law of Cos Study Guide

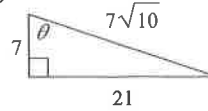
Find the value of the trig function indicated.

1) $\sin \theta$



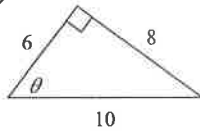
$\sin \theta = \underline{\hspace{2cm}}$

2) $\tan \theta$



$\tan \theta = \underline{\hspace{2cm}}$

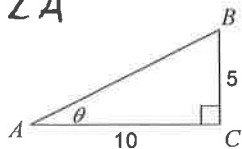
3) $\cos \theta$



$\cos \theta = \underline{\hspace{2cm}}$

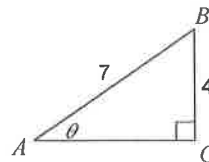
Find the measure of each angle indicated. Round to the nearest tenth. Be sure to show your equations.

4) $\angle A$



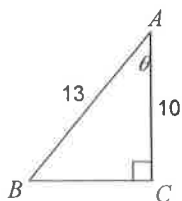
$\angle A = \underline{\hspace{2cm}}^\circ$

5)



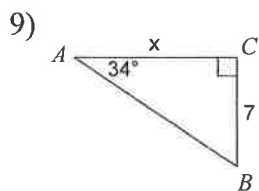
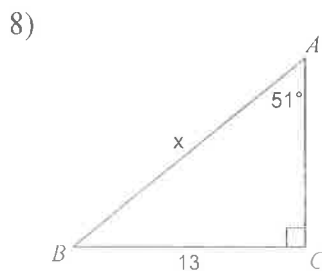
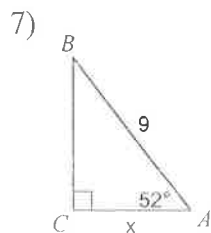
$\angle A = \underline{\hspace{2cm}}^\circ$

6)

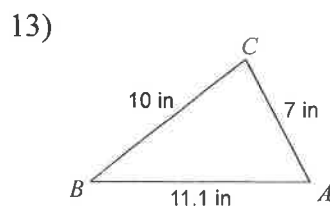
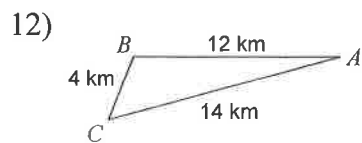
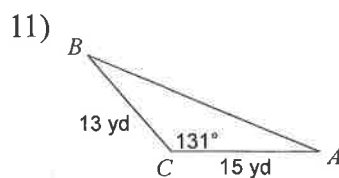
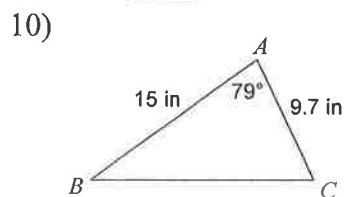


$\angle A = \underline{\hspace{2cm}}^\circ$

Find the measure of each side indicated. Round to the nearest tenth. Be sure to show your equations.

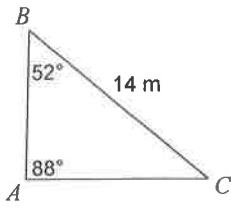


Find the area of each triangle to the nearest tenth. Be sure to show your equations.



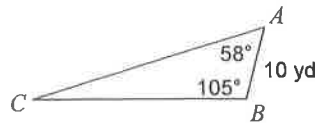
Solve each triangle. Round the angles to the nearest degree and sides to the nearest tenth. Be sure to show your equations.

14)



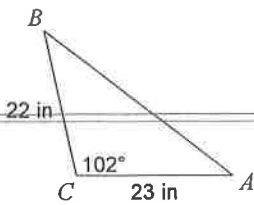
$A = \underline{\quad}^\circ$ $a = \underline{\quad}$
 $B = \underline{\quad}^\circ$ $b = \underline{\quad}$
 $C = \underline{\quad}^\circ$ $c = \underline{\quad}$

15)



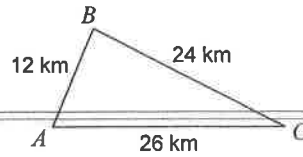
$A = \underline{\quad}^\circ$ $a = \underline{\quad}$
 $B = \underline{\quad}^\circ$ $b = \underline{\quad}$
 $C = \underline{\quad}^\circ$ $c = \underline{\quad}$

16)



$A = \underline{\quad}^\circ$ $a = \underline{\quad}$
 $B = \underline{\quad}^\circ$ $b = \underline{\quad}$
 $C = \underline{\quad}^\circ$ $c = \underline{\quad}$

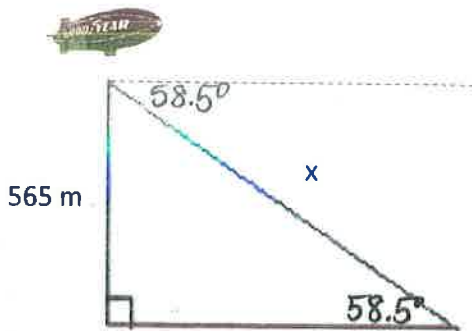
17)



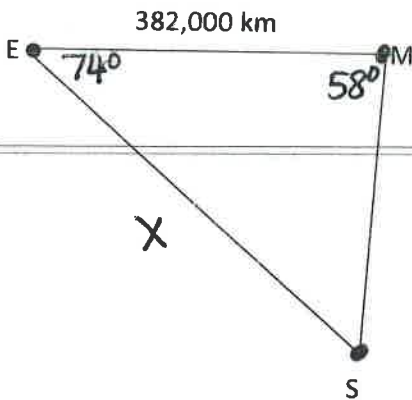
$A = \underline{\quad}^\circ$ $a = \underline{\quad}$
 $B = \underline{\quad}^\circ$ $b = \underline{\quad}$
 $C = \underline{\quad}^\circ$ $c = \underline{\quad}$

Solve for the missing part of the triangle. Be sure to set up your equations. Round the angles to the nearest degree and sides to the nearest tenth.

- 18) The Goodyear Blimp is 565 m above the ground during a Super Bowl game. The angle of depression of the north goal line from the blimp is 58.5° . How far is the observer in the blimp from the goal line.



- 19) On a space flight, astronaut Neil Armstrong reports that the angle formed by his lines of sight to the earth and to the moon was 58° . At the same time, the observer on the earth reports that the angle formed by her lines of sight to the spaceship and to the moon is 74° . If the moon is 382,000 km from the earth, how far is the spaceship from the tracking station?



- 20) A hockey net is 1.83m wide. A player shoots from a point where the puck is 13m from one goal post and 11.5m from the other. Within what angle must he make his shot to score?

