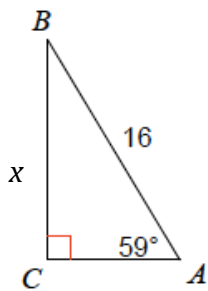


## Review Unit 2

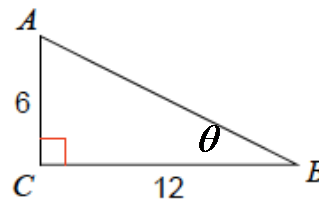
### Right Triangle Trigonometry

Find the missing side or angle. Show all work. Round your answer to the nearest hundredth.

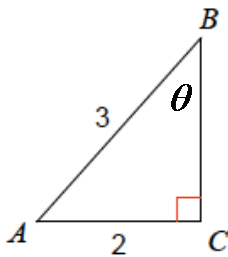
1.



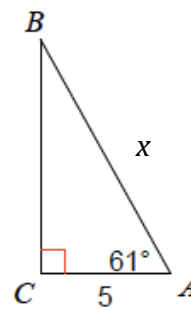
2.



3.

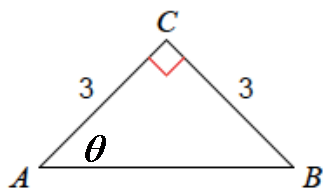


4.

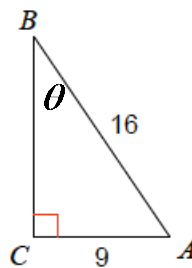


Find all six trig functions values for angle  $\theta$ . Leave your answer in simplest radical form.

5.



6.



7.  $\tan \theta = \frac{5}{12}$

8.  $\csc \theta = 3$

9. An observer on top of a 60-foot tall lighthouse sees a boat in distress at a  $5^\circ$  angle of depression. How far is the boat from the base of the lighthouse?
10. A tree casts a shadow 70 feet long at an angle of elevation of  $30^\circ$ . How tall is the tree?
11. You are looking up at a fourth story window, 40 feet up in a building. You are 100 feet away from the building, across the street. What is the angle of elevation?
12. A square has a diagonal of 20 feet. What is the area of this square?

13. Fill in the chart below with the exact values for each of the trigonometric functions at the special angles given.

$\theta$ in degrees	$\theta$ in radians	$\text{Sin}\theta$	$\text{Cos}\theta$	$\text{Tan}\theta$
$0^\circ$				
$30^\circ$				
$45^\circ$				
$60^\circ$				
$90^\circ$				