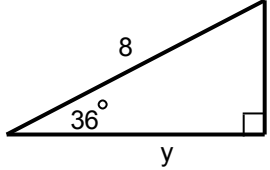
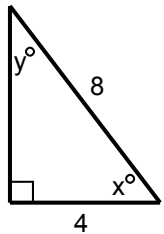
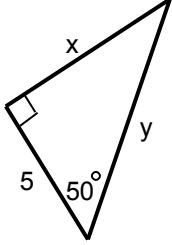
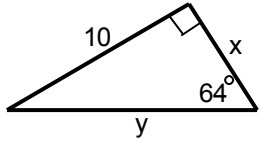
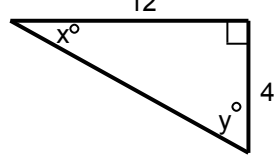
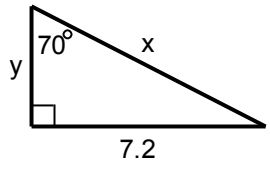
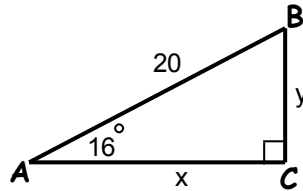


Unit 2 Day 1 HW(3)  
SOHCAHTOA Sides and Angles

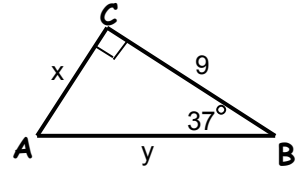
For each of the following, write the equation to find the missing value. Then rewrite the equation that you will enter in your calculator. Round your final answer to the nearest tenth.

<p>1.  <math>x \approx</math> _____  <math>y \approx</math> _____</p> 	<p>2.  <math>x \approx</math> _____  <math>y \approx</math> _____</p> 
<p>3.  <math>x \approx</math> _____  <math>y \approx</math> _____</p> 	<p>4.  <math>x \approx</math> _____  <math>y \approx</math> _____</p> 
<p>5.  <math>x \approx</math> _____  <math>y \approx</math> _____</p> 	<p>6.  <math>x \approx</math> _____  <math>y \approx</math> _____</p> 

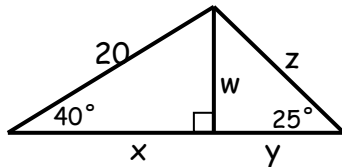
7.  
 $x \approx$  \_\_\_\_\_  
 $y \approx$  \_\_\_\_\_  
 $m\angle B =$  \_\_\_\_\_



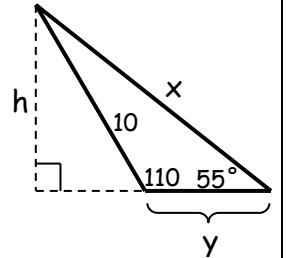
8.  
 $x \approx$  \_\_\_\_\_  
 $y \approx$  \_\_\_\_\_  
 $m\angle A =$  \_\_\_\_\_



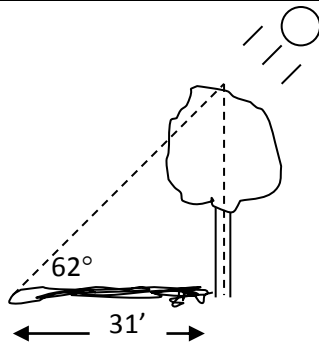
9.  
 $w \approx$  \_\_\_\_\_  
 $x \approx$  \_\_\_\_\_  
 $y \approx$  \_\_\_\_\_  
 $z \approx$  \_\_\_\_\_



10.  
 $h \approx$  \_\_\_\_\_  
 $x \approx$  \_\_\_\_\_  
 $y \approx$  \_\_\_\_\_



11. How tall is the tree?



12. A man who is 6 feet tall is flying a kite. The kite string is 75 feet long. If the angle that the kite string makes with the line horizontal to the ground is  $35^\circ$ , how far above the ground is the kite?

13. A ladder 14 feet long rests against the side of a building. The base of the ladder rests on level ground 2 feet from the side of the building. What angle does the ladder form with the ground?

14. A 24-foot ladder leaning against a building forms an  $18^\circ$  angle with the side of the building. How far is the base of the ladder from the base of the building?
15. A road rises 10 feet for every 400 feet along the pavement (not the horizontal). What is the measurement of the angle the road forms with the horizontal?
16. A 32-foot ladder leaning against a building touches the side of the building 26 feet above the ground. What is the measurement of the angle formed by the ladder and the ground?
17. The directions for the use of a ladder recommend that for maximum safety, the ladder should be placed against a wall at a  $75^\circ$  angle with the ground. If the ladder is 14 feet long, how far from the wall should the base of the ladder be placed?