

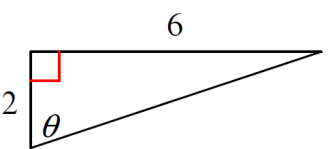
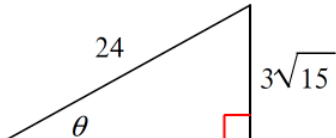
Part A – The following problems will be MULTIPLE-CHOICE on the test.

I. Complete each sentence with the correct vocabulary word from your RT Trigonometry notes.

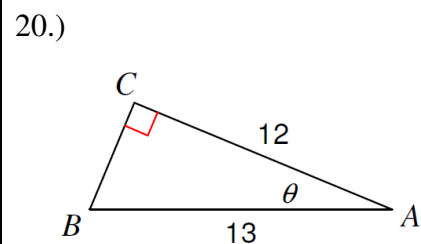
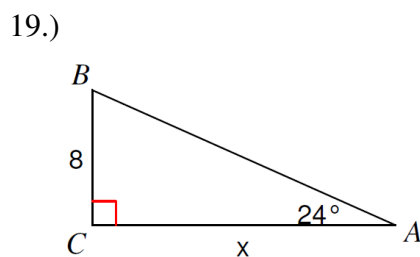
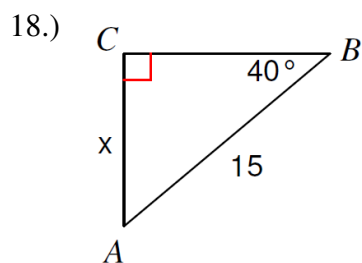
- 1.) A (n) _____ is an angle that equals 90° .
- 2.) Use _____ trigonometric functions to find the measures of angles in right triangles.
- 3.) The angle of _____ represents the angle from the horizontal downward of an object.
- 4.) The longest side in a right triangle is called the _____.
- 5.) The _____ ratio is adjacent / hypotenuse.
- 6.) The _____ side refers to the side that's directly across from the referred angle in a right triangle.
- 7.) The _____ Theorem can be only used in right triangles.
- 8.) The _____ ratio is opposite / hypotenuse.
- 9.) The _____ side refers to the side that's directly next to the referred angle in a right triangle.
- 10.) The _____ ratio is opposite / adjacent.
- 11.) The angle of _____ represents the angle from the horizontal upward of an object.
- 12.) To simplify a radical where make denominator produce an exact root is called _____.
- 13.) The name of the Greek symbol that is commonly used to indicate angles is called _____.
- 14.) The relationship between angle of elevation and angle of depression is that they are _____.
- 15.) When asked to _____ a right triangle, must find all missing parts of the triangle (3 answers).

II. Complete the table for finding the remaining side and the value of all THREE trig ratios.

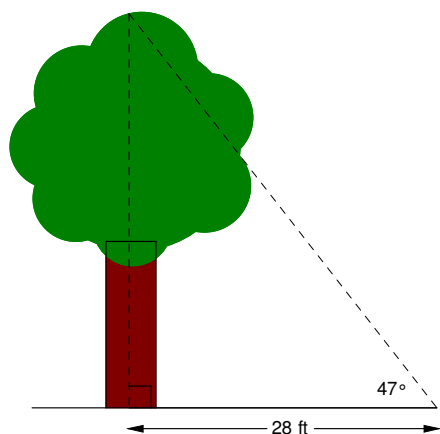
Make sure your answers are completely simplified in fractional and radical form (No decimals)!

Given Right Triangle	Work to Find Missing Side	THREE trig ratios for angle θ
16.) 		$\sin \theta = \underline{\hspace{2cm}}$
		$\cos \theta = \underline{\hspace{2cm}}$
		$\tan \theta = \underline{\hspace{2cm}}$
17.) 		$\sin \theta = \underline{\hspace{2cm}}$
		$\cos \theta = \underline{\hspace{2cm}}$
		$\tan \theta = \underline{\hspace{2cm}}$

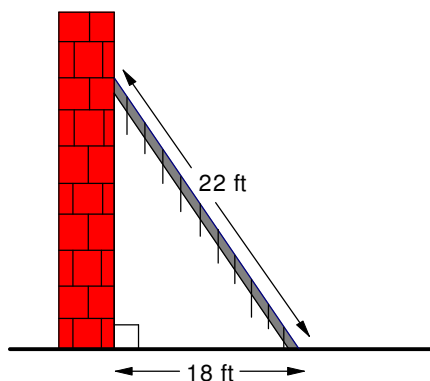
**III. Find the value of each indicated side x , indicated angle θ , or what is asked.
Show work and round to nearest tenth.**



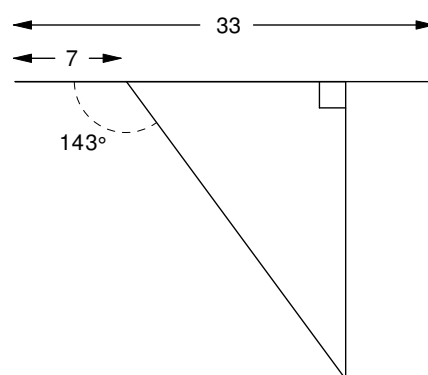
21.) Find the height of the tree.



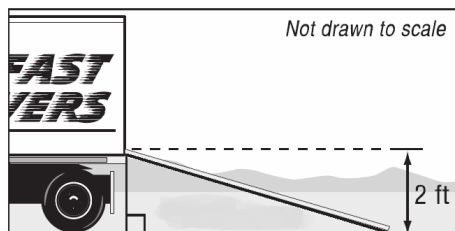
22.) Find angle formed by the ladder and the wall.



23.) Find the length of the hypotenuse.

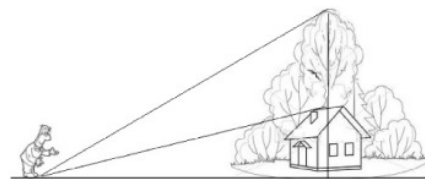


24.) The tailgate of a moving truck is 2 feet above the ground. The incline of the ramp used for loading the truck is 15° . What is the length of ramp in inches?



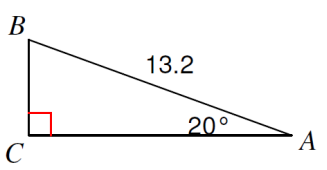
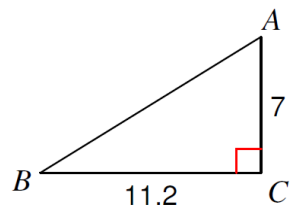
25.) An airplane is starting to descend to a local airport's 3 mile runway. The airplane is 7 miles from the end of the runway. What is the plane's angle of depression to the end of the runway?

26.) From his viewpoint, Larry estimates that there is a 25° angle to the top of his house. At the same time, he estimates that there is a 65° angle to the top of a nearby 83-foot tree. What is the height of Larry's house?

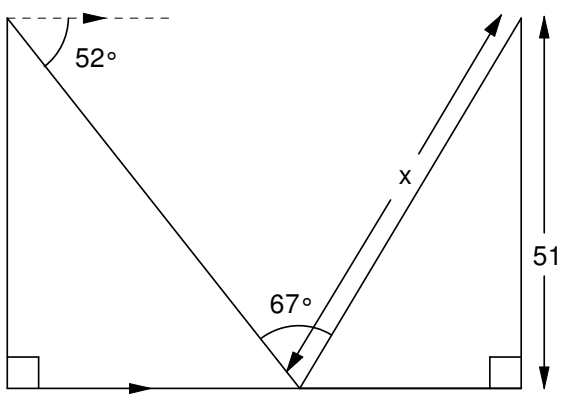
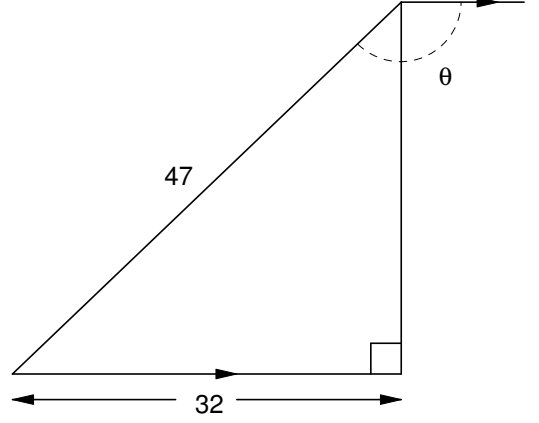
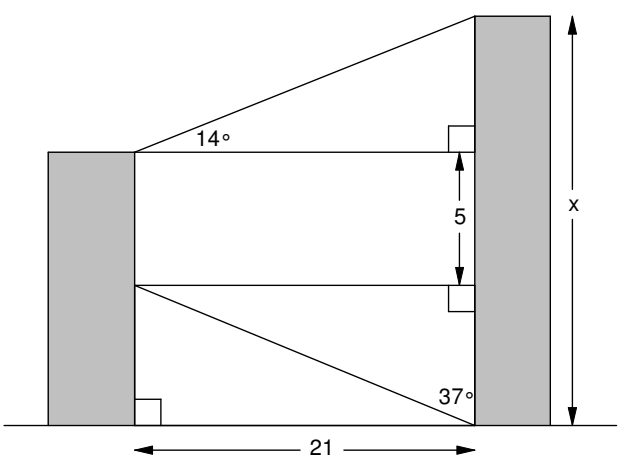


Part B – The following problems will be SHORT ANSWER on the test.

**IV. Solve each triangle. Make sure to use the appropriate letters. Round to nearest tenth.
Must show appropriate work for FULL CREDIT!!**

<p>27.) _____ _____ _____</p> 	<p>28.) _____ _____ _____</p> 
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**V. Critical Thinking Problems – Find the indicated side or angle for each given diagram.
Note: These diagrams are NOT DRAWN to SCALE!!**

<p>29.)</p> 	<p>30.)</p> 
<p>31.)</p> 	<p>32.)</p> 