

Common Core State Standards for Mathematics			
Domain: Similarity, Right Triangles and Trigonometry			
Apply Trigonometry (apply trigonometry to general triangles) (G-SRT)			
High School			
Score 4.0	<b>In addition to Score 3.0, in-depth inferences and applications that go beyond instruction to the standard. The student will:</b> <ul style="list-style-type: none"> <li>• prove the Laws of Sines and Cosines (G-SRT.10)</li> <li>• derive the formula <math>A = \frac{1}{2}ab \sin(c)</math> for the area of a triangle by drawing an auxiliary line from the vertex perpendicular to the opposite side (G-SRT.9)</li> </ul>		<b>Example Activities</b> <u>Law of Sines and Cosines Proofing</u> – Students will be given the Law of Sines and/or Cosines with the correct solution worked out for them step by step. The students will be required to write a justification as to how or why each step of the solution was performed.
	3.5	In addition to score 3.0 performance, in-depth inferences and applications with partial success.	
Score 3.0	<b>The student will:</b> <ul style="list-style-type: none"> <li>• apply the Laws of Sines and Cosines to find unknown measurements in right and non-right triangles (G-SRT.11)</li> <li>• use the Laws of Sines and Cosines to solve problems (G-SRT.10)</li> </ul> <b>The student exhibits no major errors or omissions.</b>		<u>Laws of Sine/Cosine Solving Circuit</u> – Students will participate in a problem solving circuit involving right and non-right triangle problems that require the use of either the Law of Sines or Cosines. Students will be given a sheet of paper with all problems to be solved. The teacher will print each problem on an individual sheet of paper and post the problems on the wall around the classroom. Above each problem the teacher will tape the solution to one of the other problems from the set. All students will begin working at a different problem, as they solve the initial problem they will seek out that solution number posted around the room. The solution number will lead them to the next problem to work. This process will continue until the student correctly completes all posted problems. If a student’s solution is not found on the wall this alerts the student to the fact that they did not correctly solve the problem. The circuit embeds an immediate feedback feature that alerts the student to the accuracy of their work. The teacher will be circulating the room as students work to provide specific and immediate feedback to students as they solve the problems within the circuit.
	2.5	No major errors or omissions regarding 2.0 content and partial knowledge of the 3.0 content	
Score 2.0	<b>There are no major errors or omissions regarding the simpler details and processes as the student will:</b> <ul style="list-style-type: none"> <li>• recognize or recall specific vocabulary, such as:               <ul style="list-style-type: none"> <li>○ auxiliary line</li> </ul> </li> <li>• perform basic processes, such as:               <ul style="list-style-type: none"> <li>○</li> </ul> </li> </ul> <b>However, the student exhibits major errors or omissions regarding the more</b>		

	<b>complex ideas and processes.</b>	
	1.5	Partial knowledge of the 2.0 content but major errors or omissions regarding the 3.0 content
<b>Score 1.0</b>	<b>With help, a partial understanding of some of the simpler details and processes and some of the more complex ideas and processes.</b>	
	0.5	With help, a partial understanding of the 2.0 content but not the 3.0 content
<b>Score 0.0</b>	<b>Even with help, no understanding or skill demonstrated.</b>	