

Common Core State Standards for Mathematics		
Domain: Trigonometric Functions		
Trigonometric Identities (F-TF.8-9)		
High School		
Score 4.0	In addition to Score 3.0, in-depth inferences and applications that go beyond instruction to the standard. The student will: <ul style="list-style-type: none"> <li>prove the addition and subtraction formulas for sine, cosine and tangent and uses them to solve problems (F-TF.9)</li> <li>use the Pythagorean identity <math>\sin^2\theta + \cos^2\theta = 1</math> to prove the other Pythagorean identities</li> </ul>	Example Activities
	3.5 In addition to score 3.0 performance, in-depth inferences and applications with partial success.	
Score 3.0	<p><b>The student will:</b></p> <ul style="list-style-type: none"> <li>prove the Pythagorean identity <math>\sin^2(q) + \cos^2(q) = 1</math> (F-TF.8)</li> <li>prove the addition and subtraction formulas for sine, cosine and tangent and uses them to solve problems (F-TF.9)</li> </ul> <p><b>The student exhibits no major errors or omissions.</b></p>	<u>Pythagorean identity Proofing</u> – Students will be given the Pythagorean identity 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.
	2.5 No major errors or omissions regarding 2.0 content and partial knowledge of the 3.0 content	
Score 2.0	<p><b>There are no major errors or omissions regarding the simpler details and processes as the student will:</b></p> <ul style="list-style-type: none"> <li>recognize or recall specific vocabulary, such as: <ul style="list-style-type: none"> <li>Pythagorean identity</li> </ul> </li> <li>perform basic processes, such as: <ul style="list-style-type: none"> <li>use the Pythagorean identity <math>\sin^2(q) + \cos^2(q) = 1</math> to find <math>\sin(\theta)</math>, <math>\cos(\theta)</math> or <math>\tan(\theta)</math> given <math>\sin(\theta)</math>, <math>\cos(\theta)</math> or <math>\tan(\theta)</math> and the quadrant of the angle (F-TF.8)</li> </ul> </li> </ul> <p><b>However, the student exhibits major errors or omissions regarding the more complex ideas and processes.</b></p>	<p><u>Simultaneous Response Solving</u> -</p> <p>Students will utilize a simultaneous response method (white boards, socrative, etc.) in order to use the Pythagorean identity <math>\sin^2(q) + \cos^2(q) = 1</math> to find <math>\sin(\theta)</math>, <math>\cos(\theta)</math> or <math>\tan(\theta)</math> given <math>\sin(\theta)</math>, <math>\cos(\theta)</math> or <math>\tan(\theta)</math> and the quadrant of the angle and submit to the teacher for immediate feedback. Students who consistently provide incorrect solutions will be grouped to work in a small group setting with the teacher while those who are proficient in this skill progress to a previewing activity of the next material.</p>
	1.5 Partial knowledge of the 2.0 content but major errors or omissions regarding the 3.0 content	
Score 1.0	With help, a partial understanding of some of the simpler details and processes and some of the more complex ideas and processes.	
	0.5 With help, a partial understanding of the 2.0 content but not the 3.0 content	
Score 0.0	Even with help, no understanding or skill demonstrated.	