

Name: \_\_\_\_\_ Period: \_\_\_\_\_

## Geometry

### Proficiency Scale: Right Triangle Trigonometry

<b>Essential Learning Target:</b> I can use sine, cosine, tangent and special right triangles to set up an equation and solve for missing measurements in right triangles.																																	
<b>Scoring Guideline</b>																																	
<b>Score 4.0</b>	<p>In addition to Score 3.0, in-depth inferences and applications that go beyond what was taught.</p> <p><input type="checkbox"/> The student will use trigonometric ratios, the Pythagorean Theorem, and the relationship between sine, cosine, and tangent to solve right triangles in applied non-routine problems.</p> <p>The student will use trigonometry in problems requiring students to prove that two triangles are similar or congruent.</p>																																
<b>Score 3.0</b>	<p>The Student:</p> <p><input type="checkbox"/> Students will apply trigonometric ratios, the Pythagorean Theorem, and its converse to solve problems.</p> <p>The student exhibits no major errors or omissions.</p>																																
<b>Score 2.0</b>	<p>There are no major errors or omissions regarding the simpler details and processes as the student:</p> <p>Recognizes or recalls specific terminology as:</p> <table style="width: 100%; border: none;"> <tr> <td><input type="checkbox"/> Pythagorean Triple</td> <td><input type="checkbox"/> Cosine</td> <td><input type="checkbox"/> Theta</td> <td><input type="checkbox"/> Opposite</td> </tr> <tr> <td><input type="checkbox"/> Hypotenuse</td> <td><input type="checkbox"/> Tangent</td> <td><input type="checkbox"/> Alpha</td> <td><input type="checkbox"/> Adjacent</td> </tr> <tr> <td><input type="checkbox"/> <math>45^\circ - 45^\circ - 90^\circ</math></td> <td><input type="checkbox"/> Inverse Sine</td> <td><input type="checkbox"/> Reference Angle</td> <td><input type="checkbox"/> Degree</td> </tr> <tr> <td><input type="checkbox"/> <math>30^\circ - 60^\circ - 90^\circ</math></td> <td><input type="checkbox"/> Inverse Cosine</td> <td><input type="checkbox"/> Angle of Elevation</td> <td><input type="checkbox"/> Degree Mode</td> </tr> <tr> <td><input type="checkbox"/> Sine</td> <td><input type="checkbox"/> Inverse Tangent</td> <td><input type="checkbox"/> Angle of Depression</td> <td><input type="checkbox"/> Trigonometric Ratio</td> </tr> </table> <p>Performs basic processes, such as:</p> <table style="width: 100%; border: none;"> <tr> <td><input type="checkbox"/> Simplify radicals.</td> <td><input type="checkbox"/> Find the missing angle of a triangle given two angles.</td> </tr> <tr> <td><input type="checkbox"/> Rationalize a denominator.</td> <td><input type="checkbox"/> Find a missing side of a right triangle using Pythagorean Theorem.</td> </tr> <tr> <td><input type="checkbox"/> Evaluate a trigonometric function using a calculator.</td> <td><input type="checkbox"/> Identify Pythagorean Triples.</td> </tr> <tr> <td><input type="checkbox"/> Evaluate an inverse trigonometric function using a calculator.</td> <td><input type="checkbox"/> Determine the missing side of a special right triangle.</td> </tr> <tr> <td><input type="checkbox"/> Set up a right triangle trigonometric proportion.</td> <td><input type="checkbox"/> Set up a right triangle that models a real world situation.</td> </tr> <tr> <td><input type="checkbox"/> Identify whether a situation involves an angle of elevation or an angle of depression.</td> <td></td> </tr> </table>	<input type="checkbox"/> Pythagorean Triple	<input type="checkbox"/> Cosine	<input type="checkbox"/> Theta	<input type="checkbox"/> Opposite	<input type="checkbox"/> Hypotenuse	<input type="checkbox"/> Tangent	<input type="checkbox"/> Alpha	<input type="checkbox"/> Adjacent	<input type="checkbox"/> $45^\circ - 45^\circ - 90^\circ$	<input type="checkbox"/> Inverse Sine	<input type="checkbox"/> Reference Angle	<input type="checkbox"/> Degree	<input type="checkbox"/> $30^\circ - 60^\circ - 90^\circ$	<input type="checkbox"/> Inverse Cosine	<input type="checkbox"/> Angle of Elevation	<input type="checkbox"/> Degree Mode	<input type="checkbox"/> Sine	<input type="checkbox"/> Inverse Tangent	<input type="checkbox"/> Angle of Depression	<input type="checkbox"/> Trigonometric Ratio	<input type="checkbox"/> Simplify radicals.	<input type="checkbox"/> Find the missing angle of a triangle given two angles.	<input type="checkbox"/> Rationalize a denominator.	<input type="checkbox"/> Find a missing side of a right triangle using Pythagorean Theorem.	<input type="checkbox"/> Evaluate a trigonometric function using a calculator.	<input type="checkbox"/> Identify Pythagorean Triples.	<input type="checkbox"/> Evaluate an inverse trigonometric function using a calculator.	<input type="checkbox"/> Determine the missing side of a special right triangle.	<input type="checkbox"/> Set up a right triangle trigonometric proportion.	<input type="checkbox"/> Set up a right triangle that models a real world situation.	<input type="checkbox"/> Identify whether a situation involves an angle of elevation or an angle of depression.	
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Proficiency Scale Assessment Date: \_\_\_\_\_

Proficiency Scale Self-Assessment & Reflection

<b>Essential Learning Target:</b> I can use sine, cosine, tangent and special right triangles to set up an equation and solve for missing measurements in right triangles.			
<b>Date</b>	<b>Skill Level (1-4)</b>	<b>I Have a Strong Understanding Of</b>	<b>I Still Need To Work On</b>