

## Common Core Standards - Resource Page

The resources below have been created to assist teachers' understanding and to aid instruction of this standard.

Domain	Standard: G.SRT.8 - Use trigonometric ratios and the Pythagorean Theorem to solve right triangles in applied problems. *(Modeling Standard)
<p><b><u>Similarity, Right Triangles, and Trigonometry</u></b>  <b>Define trigonometric ratios and solve problems involving right triangles</b></p>	<p><u>Questions to Focus Learning</u>            What does it mean to "solve" a triangle?</p> <p>Right triangles properties can be applied to solve problems.</p> <p><u>Student Friendly Objectives</u></p> <p><i>Knowledge Targets</i></p> <p>I know the sine, cosine, and tangent of 0, 30, 45, 60, and 90 degrees.</p> <p><i>Reasoning Targets</i></p> <p>I can use the trigonometric functions to find the unknown sides of a right triangle.            I can use the trigonometric inverses to find the unknown angles of a right triangle.            I can find all of the unknown sides and angles of a right triangle.            I can solve right triangles in applied problems using trigonometric ratios and the Pythagorean Theorem.</p> <p><u>Vocabulary</u></p> <p>arc functions            inverse            solve a triangle</p> <p><u>Teacher Tips</u></p>

	<p><u>Vertical Progression</u></p> <p>G.SRT.9 - Derive the formula <math>A = \frac{1}{2} ab \sin(C)</math> for the area of a triangle by drawing an auxiliary line from a vertex perpendicular to the opposite side.</p> <p>G.SRT.10 - Prove the Laws of Sines and Cosines and use them to solve problems.</p> <p>G.SRT.11 - Understand and apply the Law of Sines and the Law of Cosines to find unknown measurements in right and non-right triangles (e.g., surveying problems, resultant forces).</p>
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The above information and more can be accessed for free on the [Wiki-Teacher](#) website.

Direct link for this standard: [G.SRT.8](#)