

Common Core Standards - Resource Page

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

Domain	<p>Standard: G.SRT.4 - Prove theorems about triangles. Theorems include: a line parallel to one side of a triangle divides the other two proportionally, and conversely; the Pythagorean Theorem proved using triangle similarity.</p>
<p><u>Similarity, Right Triangles, and Trigonometry</u> Prove theorems involving similarity</p>	<p><u>Questions to Focus Learning</u> What relationships among sides and other segments in a triangle are always true? In triangles, certain relationships among sides and other segments are always true.</p> <p><u>Student Friendly Objectives</u> <i>Reasoning Targets</i></p> <p>I can prove the geometric mean relationships in a triangle using similarity. I can prove the angle bisector theorem in a triangle using similarity. I can prove the Pythagorean Theorem using similarity. I can prove the triangle proportionality theorem (side splitting theorem) using similarity. I can prove that perimeters in similar triangles are proportional. I can prove that the square root of the areas in similar triangles is proportional. I can prove that special segments in similar triangles are proportional.</p> <p><u>Vocabulary</u></p> <p>altitude angle bisector geometric mean median perpendicular bisector Pythagorean Theorem proportional</p> <p><u>Teacher Tips</u></p> <p><u>Vertical Progression</u></p>

The above information and more can be accessed for free on the [Wiki-Teacher](#) website.
Direct link for this standard: [G.SRT.4](#)