

## 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.1b - Verify experimentally the properties of dilations given by a center and a scale factor: the dilation of a line segment is longer or shorter in the ratio given by the scale factor.
<p><b><u>Similarity, Right Triangles, and Trigonometry</u></b>  <b>Understand similarity in terms of similarity transformations</b></p>	<p><u>Questions to Focus Learning</u></p> <p>What are the key properties of dilations? How do dilations affect the various parts of a figure and their relationship to each other?</p> <p>Dilations are transformations that preserve angle measure but not distance.</p> <p><u>Student Friendly Objectives</u></p> <p><i>Knowledge Targets</i></p> <p>I know dilations preserve angle measure.            I know dilations preserve collinearity.            I know dilations preserve betweenness.            I know dilations do not preserve distance.</p> <p><i>Reasoning Targets</i></p> <p>I can analyze the relationship between the measure of line segments and their scale factors.            I can carry out one- and two-step dilations in a plane.            I can carry out a sequence of transformations that includes one or more dilations.            I can create a sequence of transformations, including one or more dilations, that maps a pre-image to an image.            I can determine the scale factor of dilations using side lengths and ratios.</p>

	<p><u>Vocabulary</u></p> <p>contraction dilation expansion identity transformation mapping proportion ratio scale factor</p> <p><u>Teacher Tips</u></p> <p><u>Vertical Progression</u></p> <p>G.SRT.2 - Given two figures, use the definition of similarity in terms of similarity transformations to decide if they are similar; explain using similarity transformations the meaning of similarity for triangles as the equality of all corresponding pairs of angles and the proportionality of all corresponding pairs of sides.</p> <p>G.SRT.3 - Use the properties of similarity transformations to establish the AA criterion for two triangles to be similar.</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.1b](#)