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.1a - Verify experimentally the properties of dilations given by a center and a scale factor: a dilation takes a line not passing through the center of the dilation to a parallel line, and leaves a line passing through the center unchanged.
Similarity, Right Triangles, and Trigonometry **Understand similarity in terms of similarity transformations**	Questions to Focus Learning What are the key properties of dilations? How do dilations affect the various parts of a figure and their relationship to each other? Dilations are transformations that preserve angle measure but not distance. Student Friendly Objectives *Knowledge Targets* I know dilations preserve angle measure. I know dilations preserve collinearity. I know dilations preserve betweenness. I know dilations do not preserve distance. *Reasoning Targets* I can find the center of dilation. *Product Targets* I can do an experiment with a preimage and image to discover that the identity transformation has a scale factor of one. e.g. experiment by construction, patty paper, or graph I can explore the result of a dilation when the center of the dilation is either inside, on, or outside the preimage. 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.

	Vocabulary angle measure betweenness center of dilation collinearity contraction dilation expansion identity transformation image mapping preimage scale factor Teacher Tips Vertical Progression 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. G.SRT.3 - Use the properties of similarity transformations to establish the AA criterion for two triangles to be similar.

The above information and more can be accessed for free on the Wiki-Teacher website.
Direct link for this standard: G.SRT.1a