

## Common Core Standards - Resource Page

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

<b>Domain</b>	<b>Standard:</b> G.CO.6 - Use geometric descriptions of rigid motions to transform figures and to predict the effect of a given rigid motion on a given figure; given two figures, use the definition of congruence in terms of rigid motions to decide if they are congruent.
<b><u>Congruence</u> Understand congruence in terms of rigid motions</b>	<p><u>Questions to Focus Learning</u></p> <p>How can congruence be represented through the transformations of figures?</p> <p>Rigid motions can be used to determine if two figures are congruent.</p> <p><u>Student Friendly Objectives</u></p> <p><i>Knowledge Targets</i></p> <p>I know the definition of congruence in terms of rigid motion.</p> <p><i>Reasoning Targets</i></p> <p>I can apply the definition of congruency in terms of rigid motion to understand that there are multiple sequences of rigid motions that map one figure onto another.</p> <p>I can show two figures are congruent if there is a sequence of rigid motions that map one figure to another.</p> <p>I can show if two figures are congruent then they have the same size and shape.</p> <p><u>Vocabulary</u></p> <p>mapping</p> <p><u>Teacher Tips</u></p> <p>Rigid motions are at the foundation of the definition of congruence. Students reason from the basic properties of rigid motions (that they preserve distance and angle), which are assumed without proof. Rigid motions and their assumed properties can be used to establish the usual triangle congruence criteria, which can then be used to prove other theorems.</p>

	<p><u>Vertical Progression</u></p> <p>G.CO.7 - Use the definition of congruence in terms of rigid motions to show that two triangles are congruent if and only if corresponding pairs of sides and corresponding pairs of angles are congruent.</p> <p>G.CO.8 - Explain how the criteria for triangle congruence (ASA, SAS, and SSS) follow from the definition of congruence in terms of rigid motions.</p>
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The above information and more (e.g., additional resources) can be accessed for free on the [Wiki-Teacher](#) website.

Direct link for this standard: [G.CO.6](#)