

Unit 7: Congruence

B. Congruence

| CCSS | 4 – Mastery | 3 – Proficient | 2 - Basic | 1 – Below Basic | 0 – No Evidence |
|--|--|---|---|---|--|
| <p>Predict and decide congruency (G.CO.6)</p> <p>Corresponding sides and angles (G.CO.7)</p> | <p>Can extend thinking beyond the standard, including tasks that may involve one of the following:</p> <ul style="list-style-type: none"> • Designing • Connecting • Synthesizing • Applying • Justifying • Critiquing • Analyzing • Creating • Proving | <p>Use descriptions of rigid motions to predict the effect of a rigid motions on a figure</p> <p>Use the definition of congruence in terms of rigid motions to:</p> <ul style="list-style-type: none"> • decide if two given figures are congruent • prove that corresponding sides are congruent and corresponding angles are congruent in a pair of congruent triangles | <p>Use descriptions of rigid motions to show the effect of a rigid motions on a figure</p> <p>Use the definition of congruence in terms of rigid motions to:</p> <ul style="list-style-type: none"> • decide if two given figures are congruent • show that corresponding sides are congruent and corresponding angles are congruent in a pair of congruent triangles | <p>Use descriptions of rigid motions to identify the effect of a rigid motions on a figure</p> <p>Use the definition of congruence in terms of rigid motions to:</p> <ul style="list-style-type: none"> • decide if two given figures are congruent • identify that corresponding sides are congruent and corresponding angles are congruent in a pair of congruent triangles | <p>Little evidence of reasoning or application to solve the problem</p> <p>Does not meet the criteria in a level 1</p> |
| <p>Explain triangle congruence (G.CO.8)</p> | | <p>Prove SSS, SAS, and ASA triangle congruence using rigid motion.</p> | <p>Identify all SSS, SAS, ASA, AAS, and HL triangle congruence using rigid motion</p> <p>Identify missing parts based on a congruence postulate.</p> | <p>Identify if triangles are congruent and by which method (SSS, SAS, ASA, AAS or HL)</p> | |

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.

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.

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.