Week 3 Standards

G.CO.6 Use geometric descriptions of rigid motion 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 motion to decide if they are congruent.

G.CO.7 Use the definition of congruence in terms of rigid motion 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, SSS, and SAS) follow from the definition of congruence in terms of rigid motions.

G.SRT.1 Verify experimentally the properties of dilations given by a center and a scale factor.

G.SRT.1.a Show that a dilation takes a line which does not pass through the center of the dilation to a parallel line. Show that a dilation leaves a line which does pass through the center of the dilation unchanged.

G.SRT.1.b Show that the dilation of a line segment is longer or shorter in the ratio given by the scale factor.

G.SRT.2 Use the idea of dilation transformations to develop the definition of similarity. Given two figures determine whether they are similar and explain their similarity based on the equality of corresponding angles and the proportionality of corresponding sides.