## Week 4 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.SRT.3 Use the properties of similarity transformations to develop the Angle-Angle criteria for proving two triangles are similar.
- G.SRT.4 Use AA, SAS, and SSS similarity theorems to prove triangles are similar.

Use triangle similarity to prove that a line parallel to one side of a triangle divides the other two sides of the triangle proportionally, and it's converse

Use triangle similarity to prove that if a line intersects a triangle so that two of its sides are divided proportionally, the line is parallel to the third side of the triangle.

Use triangle similarity to prove the Pythagorean Theorem.

- G.SRT.5 Use congruent and similar triangles to solve problems. Use congruent and similar triangles in proofs
- G.SRT.6 Using a corresponding angle of similar right triangles, show that the relationships of the side ratios are the same.
  Define the trigonometric ratios for acute angles of a right triangle.
  Use relationships in special right triangles (30-60-90 and 45-45-90) to find missing measures.
- G.SRT.7 Determine the relationship between the sine of an acute angle and the cosine of its complement.
- G.SRT.8 Apply both trigonometric ratios and Pythagorean Theorem to solve application problems involving right triangles.