



## Triangle Similarity Transformations

### Today's Standard

HSG.SRT.A2 - 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.

Cues	Notes
What is similarity?	Similarity involves both equal angles and proportional sides.
How do similarity transformations work?	Similarity transformations include translations, rotations, and reflections.
What is the difference between similarity and congruence?	Similarity requires proportional sides, while congruence requires equal sides and angles.
What are the properties of similar triangles?	Properties of similar triangles: all corresponding pairs of angles are equal, and all corresponding pairs of sides are proportional.
How can similarity be applied in real-world scenarios?	Real-world applications: architectural design, map reading, modeling, art, and engineering.

### Summary

Understanding similarity involves recognizing both equal angles and proportional sides in geometric figures. This concept is crucial for solving complex problems and has various real-world applications.