Triangle Congruence and Similarity

Today's Standard

HSG.SRT.B5 - Use congruence and similarity criteria for triangles to solve problems and to prove relationships in geometric figures.

Cues	Notes
What are the criteria for triangle congruence? How do you prove triangles are similar? What is the difference between congruent and similar triangles? How can triangle similarity be applied in real life? What are common misconceptions about triangle similarity and congruence?	Criteria for triangle congruence include SSS, SAS, ASA, and AAS. Triangle similarity can be proven using AA, SSS, and SAS criteria. Congruent triangles are identical in size and shape; similar triangles have proportional sides and identical angles. Applications include architecture, engineering, and navigation. Misconceptions include thinking all similar triangles are congruent and confusing the criteria for similarity and congruence.

Summary

Understanding the criteria for triangle congruence and similarity helps solve geometric problems and prove relationships. Congruent triangles are identical, while similar triangles have proportional sides. This knowledge is applicable in various real-world contexts.