

Cornell Mote

Triangle Congruence Criteria

Today's Standard

HSG.CO.B8 - Explain how the criteria for triangle congruence (ASA, SAS, and SSS) follow from the definition of congruence in terms of rigid motions.

| Cues | Notes |
|---------------------|---|
| Triangle Congruence | Triangle congruence criteria: ASA, SAS, SSS. |
| ASA | ASA: Angle-Side-Angle congruence criterion. |
| SAS | SAS: Side-Angle-Side congruence criterion. |
| SSS | SSS: Side-Side congruence criterion. |
| Rigid Motions | Rigid motions include translations, rotations, and reflections. |
| | Congruence is based on size and shape, not orientation. |

Summary

Triangle congruence criteria (ASA, SAS, and SSS) are derived from the concept of rigid motions, which include translations, rotations, and reflections. These criteria are essential for proving geometric theorems and solving problems involving congruent figures.