



### Congruence of Triangles

#### Today's Standard

HSG.CO.B7 - Use the definition of congruence in terms of rigid motions to show that two triangles are congruent if and only if corresponding pairs of sides and corresponding pairs of angles are congruent.

#### Real-World Applications for this Standard

Architectural design; Engineering structures; Computer graphics; Robotics; Art and pattern design

#### Today I Learned

Today, we learned about triangle congruence. This means that two triangles are exactly the same in size and shape because all their sides and angles match.

#### Common Stumbling Blocks

Some students might think that triangles are the same if they just look alike. But they need to check all sides and angles. Others might think they can check just one side or angle, but they need to check all of them.

#### Quiz Me

- What does it mean for triangles to be congruent?
- What are rigid motions?
- How do we prove two triangles are congruent?
- Can triangles be congruent if only one side matches?
- Why is triangle congruence important?

#### Help Me

Triangle congruence means the triangles are exactly the same in every way. We use this idea in real life, like in building things where shapes need to fit together perfectly, like in bridges or buildings.