

Geometry 2-5; Proving Angles Congruent
CA Standards: 1, 2, 4 (Proofs and Logic)

Vertical Angles Theorem

Vertical angles are congruent.

Congruent Supplements Theorem

If two angles are supplements of the same angle, then the two angles are congruent.

Congruent Complements Theorem

If two angles are complements of the same angle, then the two angles are congruent.

All right angles are congruent.

1. A person is caught by cannibals. The chief offers the captive a choice. If the captive tells the truth, then he will be set free. If the captive tells a lie, then he will be eaten. The captive thinks for a moment and then says, "I will be eaten."

Think! What will happen to our captive?

2. You are walking down the road and you come to a split in the road. Only one path will take you to where you want to go. There are two brothers who live in a house on the split. One always lies, and the other always tells the truth, but you don't know who is who. If you were to ask them one question to determine which path to go down, what would it be? (You can only ask one of the brothers!) You can only ask one question to only one of them. You're asking the question to find which road to go down.