

GEOMETRY CONGRUENT TRIANGLES PROOFS

STATEMENTS

1. $\angle BAC$ is a right angle

REASONS

Given

$$2. m \angle BAC = 90^\circ$$

STATEMENTS

Definition of Right Angle

REASONS

STATEMENTS

$$3. m \angle 1 + m \angle 2 = m \angle BAC$$

REASONS

Angle Addition Postulate

$$4. m \angle 1 + m \angle 2 = 90^\circ$$

STATEMENTS

Substitution Property (Steps 2 and 3)

REASONS

STATEMENTS

$$5. \angle 2 \cong \angle 3$$

REASONS

Given

$$6. m \angle 2 = m \angle 3$$

STATEMENTS

Definition of Congruent Angles

REASONS

STATEMENTS

$$7. m \angle 1 + m \angle 3 = 90^\circ$$

REASONS

Substitution Property (Step 4 and 6)

8. $\angle 1$ and $\angle 3$ are complementary

STATEMENTS

Definitions of Complementary Angles

REASONS