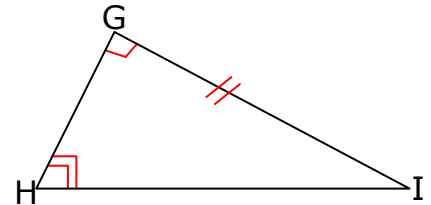
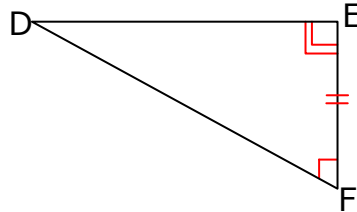
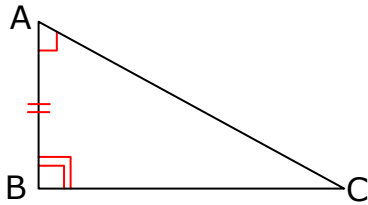


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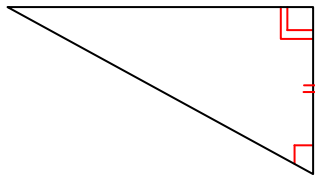
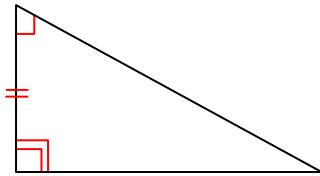
Congruent Triangles: ASA and AAS Theorems- Step-by-Step Lesson

Which two triangles are congruent by the ASA Theorem? Complete the congruence statement.



\triangle \cong \triangle

Explanation:



ASA (angle-side- angle)

Two sides and the side between them are congruent.

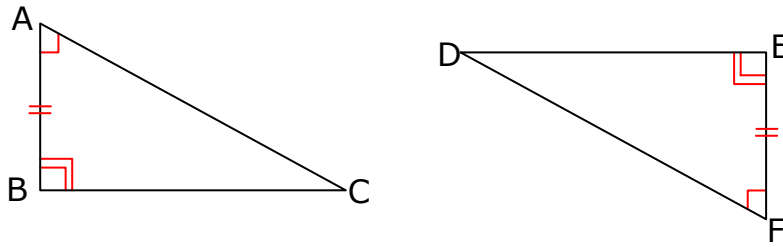
The ASA Theorem states that two triangles are congruent if and only if two angles and the included side of one triangle are congruent to two angles and the included side of the other triangle.



Name _____

Date _____

Find the two triangles with two pairs of congruent angles and congruent included sides.



$$\angle A \cong \angle F \quad \text{Angle}$$

$$\angle AC \cong \angle FD \quad \text{Side}$$

$$\angle B \cong \angle E \quad \text{Angle}$$

Two angles and the included side of $\triangle CAB$ are congruent to two angle and the included side of $\triangle DFE$, so these triangle are congruent by the ASA theorem.

To write the congruence statement, match the corresponding vertices. Since $\angle A \cong \angle F$ and $\angle B \cong \angle E$, A corresponds to F and B corresponds to E. Therefore, C corresponds to D and $\triangle CBA \cong \triangle DFE$.

