

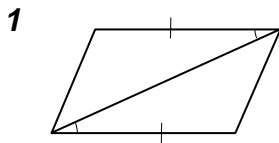
Study Guide

Proving Triangles Congruent

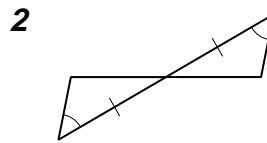
You can show two triangles are congruent with the following:

SSS Postulate (Side–Side–Side)	Three sides of one triangle are congruent to the sides of a second triangle.
SAS Postulate (Side–Angle–Side)	Two sides and the included angle of one triangle are congruent to two sides and an included angle of another triangle.
ASA Postulate (Angle–Side–Angle)	Two angles and the included side of one triangle are congruent to two angles and the included side of another triangle.

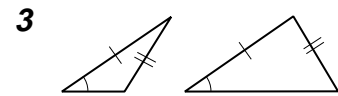
Examples: Determine whether each pair of triangles are congruent. If they are congruent, indicate the postulate that can be used to prove their congruence.



SAS Postulate

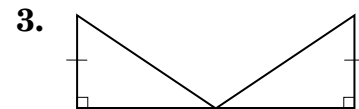
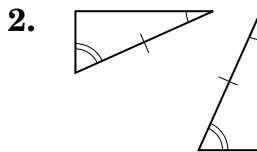
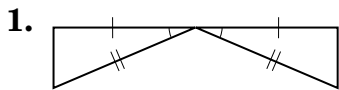


ASA Postulate

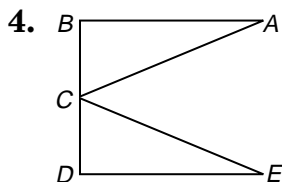


not congruent

Determine which postulate can be used to prove the triangles are congruent. If it is not possible to prove that they are congruent, write not possible.

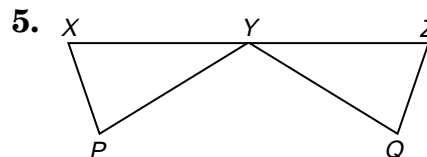


Mark all congruent parts in each figure, complete the prove statement, and identify the postulate that proves their congruence.



Given: $\angle BCA \cong \angle DCE$
 $\angle B$ and $\angle D$ are right angles.
 $BC \cong CD$

Prove: $\triangle CAB \cong$ _____



Given: $\overline{XY} \cong \overline{YZ}$
 $\overline{PY} \cong \overline{QY}$
 $\overline{XP} \cong \overline{ZQ}$

Prove: $\triangle XYP \cong$ _____