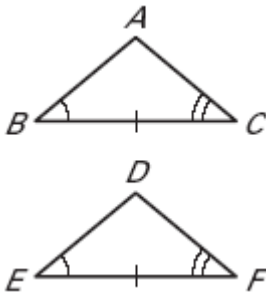


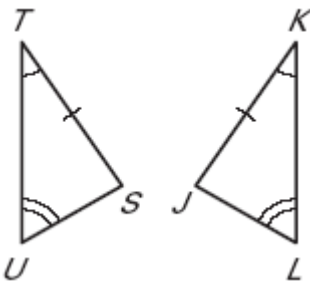
Assignment 33 LESSON 4.6

Is it possible to prove that the triangles are congruent? If so, state the postulate or theorem you would use.

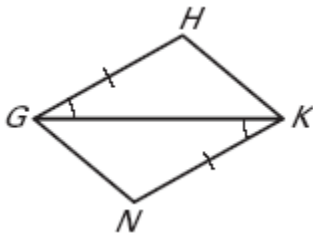
1.



2.



3.

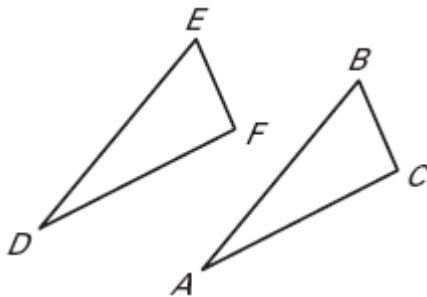


State the third congruence that is needed to prove that $\triangle DEF \cong \triangle ABC$ using the given postulate or theorem.

4. **GIVEN:** $\overline{DE} \cong \overline{AB}$, $\angle D \cong \angle A$. ? \cong ? Use the AAS Congruence Theorem.

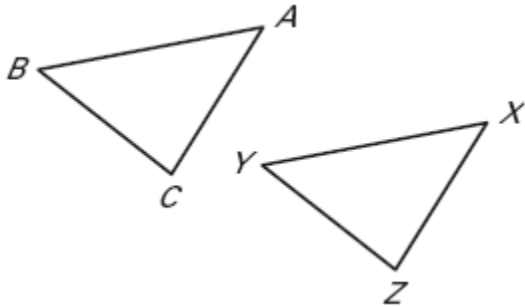
5. **GIVEN:** $\overline{FE} \cong \overline{CB}$, $\angle F \cong \angle C$. ? \cong ? Use the ASA Congruence Postulate.

6. **GIVEN:** $\overline{DF} \cong \overline{AC}$, $\angle F \cong \angle C$. ? \cong ? Use the SAS Congruence Theorem.



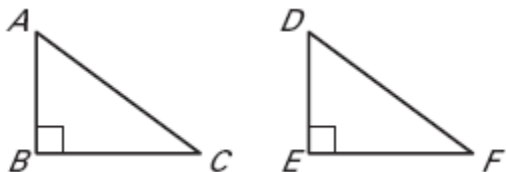
State the third congruence that is needed to prove that $\triangle ABC \cong \triangle XYZ$ using the given postulate or theorem.

7. **GIVEN:** $\angle C \cong \angle Z$, $\overline{AC} \cong \overline{XZ}$, $\underline{\quad?} \cong \underline{\quad?}$ Use the AAS Congruence Theorem.
8. **GIVEN:** $\angle B \cong \angle Y$, $\overline{AB} \cong \overline{XY}$, $\underline{\quad?} \cong \underline{\quad?}$ Use the ASA Congruence Postulate.
9. **GIVEN:** $\overline{BC} \cong \overline{YZ}$, $\angle B \cong \angle Y$, $\underline{\quad?} \cong \underline{\quad?}$ Use the SAS Congruence Theorem.



Tell whether you can use the given information to determine whether $\triangle JKL \cong \triangle RST$.

10. $\angle J \cong \angle R$, $\angle K \cong \angle S$, $\angle L \cong \angle T$
11. $\overline{JK} \cong \overline{RS}$, $\angle J \cong \angle R$, $\angle L \cong \angle T$
12. $\angle K \cong \angle S$, $\angle L \cong \angle M$, $\overline{KL} \cong \overline{ST}$
13. $\angle J \cong \angle R$, $\overline{KL} \cong \overline{ST}$
14. **Multiple Choice** Which postulate or theorem can you use to prove that $\triangle ABC \cong \triangle DEF$?
 - A. AAS
 - B. SA
 - C. SAS
 - D. Not enough information



Explain how you can prove that the indicated triangles are congruent using the given postulate or theorem.

15. $\triangle ABE \cong \triangle CDE$ by SAS
16. $\triangle ABE \cong \triangle CDE$ by ASA
17. $\triangle ABE \cong \triangle CDE$ by AAS

