

Name _____

Date _____

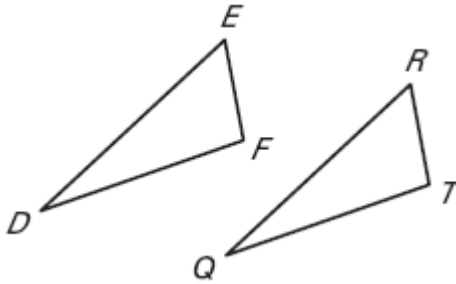
LESSON 4.5

Practice C

For use with pages 249–255

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

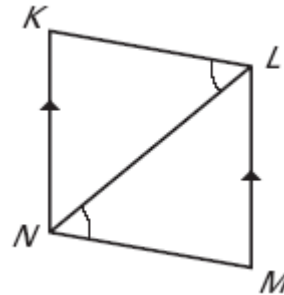
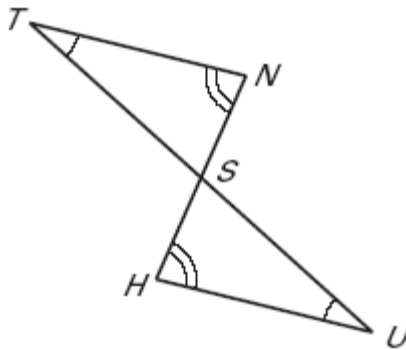
1. **GIVEN:** $\angle D \cong \angle Q$, $\angle F \cong \angle T$, $\underline{\quad? \quad} \cong \underline{\quad? \quad}$ Use the AAS Congruence Theorem.
2. **GIVEN:** $\angle E \cong \angle R$, $\overline{EF} \cong \overline{RT}$, $\underline{\quad? \quad} \cong \underline{\quad? \quad}$ Use the ASA Congruence Postulate.
3. **GIVEN:** $\overline{DE} \cong \overline{QR}$, $\angle D \cong \angle Q$, $\underline{\quad? \quad} \cong \underline{\quad? \quad}$ Use the SAS Congruence Postulate.



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

4. $\triangle TNS \cong \triangle UHS$

5. $\triangle KLN \cong \triangle MNL$

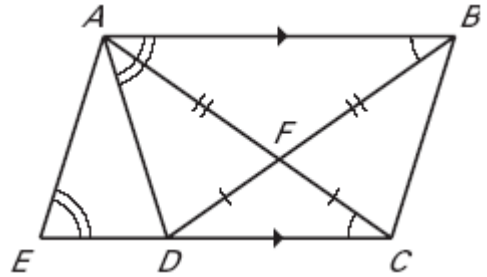


Tell whether you can use the given information to determine whether $\triangle JRM \cong \triangle XYZ$. Explain your reasoning.

6. $\overline{JM} \cong \overline{XZ}$, $\angle M \cong \angle Y$, $\angle J \cong \angle X$
7. $\overline{JM} \cong \overline{XZ}$, $\overline{JR} \cong \overline{YZ}$, $\angle J \cong \angle X$
8. $\angle J \cong \angle X$, $\angle M \cong \angle Z$, $\overline{RM} \cong \overline{YZ}$
9. $\overline{JR} \cong \overline{YZ}$, $\overline{RM} \cong \overline{ZX}$, $\overline{MJ} \cong \overline{XY}$

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

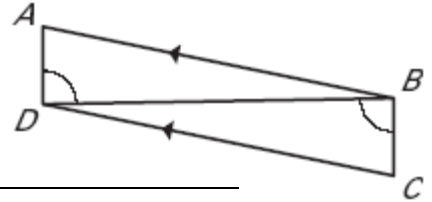
- 10. $\triangle AFD \cong \triangle BFC$ by SAS
- 11. $\triangle ACE \cong \triangle DBA$ by AAS
- 12. $\triangle ACD \cong \triangle BDC$ by ASA



13. **Proof** Write a proof

GIVEN: $\overline{AB} \parallel \overline{DC}$, $\angle ADB \cong \angle CBD$

PROVE: $\triangle ABD \cong \triangle CDB$



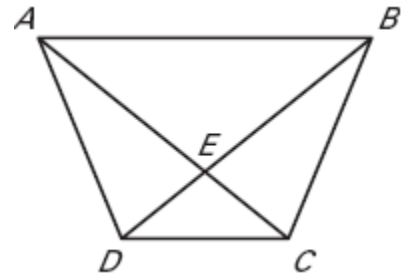
Statements

Reasons

14. **Proof** Complete the proof.

GIVEN: $\overline{DE} \cong \overline{CE}$, $\angle ADE \cong \angle BCE$

PROVE: $\angle DAE \cong \angle CBE$



Statements

Reasons