

Practice B

For use with pages 220–227

State the third congruence that must be given to prove that $\triangle DEF \cong \triangle MNO$, using the indicated postulate or theorem.

1. Given: $\overline{DE} \cong \overline{MN}$
 $\angle M \cong \angle D$

Method: SAS Congruence Postulate

2. Given: $\overline{FE} \cong \overline{ON}$
 $\angle F \cong \angle O$

Method: AAS Congruence Theorem

3. Given: $\overline{DF} \cong \overline{MO}$
 $\angle F \cong \angle O$

Method: ASA Congruence Postulate

State the third congruence that must be given to prove that $\triangle ABC \cong \triangle XYZ$, using the indicated postulate or theorem.

4. Given: $\angle A \cong \angle X$
 $\angle B \cong \angle Y$

Method: AAS Congruence Theorem

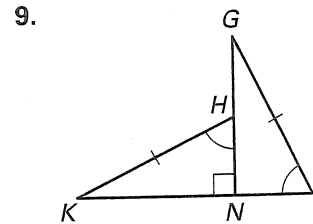
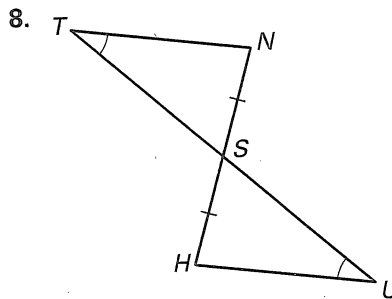
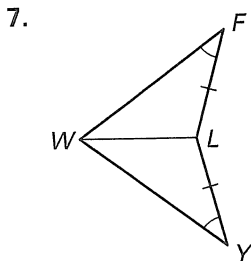
5. Given: $\angle A \cong \angle X$
 $\overline{AB} \cong \overline{XY}$

Method: ASA Congruence Postulate

6. Given: $\angle C \cong \angle Z$
 $\overline{BC} \cong \overline{YZ}$

Method: AAS Congruence Theorem

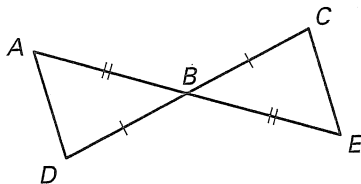
Is it possible to prove that the triangles are congruent? If so, state the postulate or theorem you would use. Explain your reasoning.



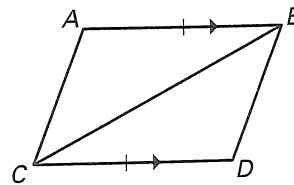
Write a two-column or a paragraph proof.

10. Given: B is the midpoint of \overline{AE} .
 B is the midpoint of \overline{CD} .

Prove: $\triangle ABD \cong \triangle ECB$



11. Given: $\overline{AB} \parallel \overline{CD}$, $\overline{AB} \cong \overline{CD}$
 Prove: $\triangle ABC \cong \triangle DCB$



12. Given: $\overline{WU} \parallel \overline{YV}$, $\overline{XU} \parallel \overline{ZV}$
 $\overline{WX} \cong \overline{YZ}$

Prove: $\triangle WXU \cong \triangle YZV$

