

# 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

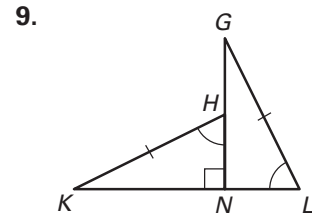
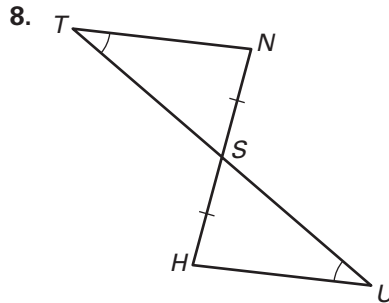
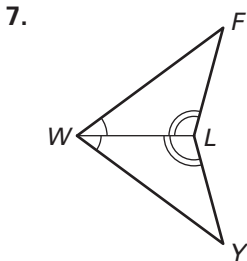
5. Given:  $\angle A \cong \angle X$   
 $\overline{AB} \cong \overline{XY}$

Method: ASA Congruence Postulate

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

Method: AAS Congruence Theorem

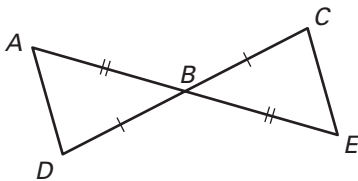
Is it possible to prove that the triangles are congruent? If so, state the postulate or theorem you would use. Explain your reasoning.



Write a two-column or a paragraph proof.

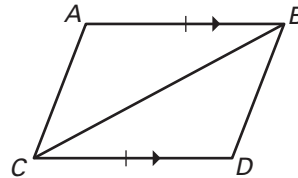
10. Given:  $B$  is the midpoint of  $\overline{AE}$ .  
 $B$  is the midpoint of  $\overline{CD}$ .

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:  $\triangle WXU \cong \triangle YZV$

