NAME _____ DATE _____

Practice B

For use with pages 102–107

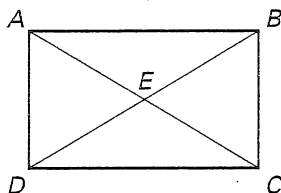**Match the statement with the Property of Congruence.**

1. For any segment $\overline{XY}$, $\overline{XY} \cong \overline{XY}$

2. If $\overline{JK} \cong \overline{MN}$ and $\overline{MN} \cong \overline{CD}$, then $\overline{JK} \cong \overline{CD}$.

3. If $\overline{BN} \cong \overline{TR}$, then $\overline{TR} \cong \overline{BN}$.

A. Transitive Property

B. Symmetric Property

C. Reflexive Property
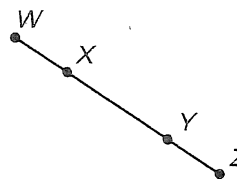
Mark the diagram with the given information.

4. $LM = 5$, $LP = 5$
   $MN = 3$, $PN = 3$
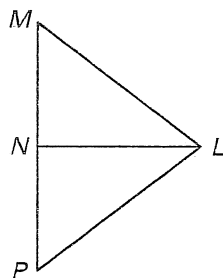
5. E is the midpoint of $\overline{AC}$.
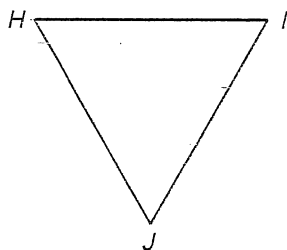 E is the midpoint of $\overline{BD}$.

6. $\overline{WX} \cong \overline{YZ}$

Complete the argument, giving a reason for each step.

7. Given: $HI = 8$, $IJ = 8$, $\overline{IJ} \cong \overline{JH}$

   Prove: $\overline{HI} \cong \overline{JH}$

Statements	Reasons
1. $HI = 8$	1. ?
2. $IJ = 8$	2. ?
3. $HI = IJ$	3. ?
4. $\overline{HI} \cong \overline{IJ}$	4. ?
5. $\overline{IJ} \cong \overline{JH}$	5. ?
6. $\overline{HI} \cong \overline{JH}$	6. ?

8. Given: $AL = SK$

   Prove: $AS = LK$

Statements	Reasons
1. $AL = SK$	1. ?
2. $LS = LS$	2. ?
3. $AL + LS = SK + LS$	3. ?
4. $AL + LS = AS$	4. ?
5. $SK + LS = LK$	5. ?
6. $AS = LK$	6. ?

9. Write an argument for Exercise 7 in the form of a paragraph proof.