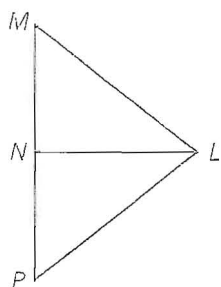


Match the statement with the Property of Congruence.

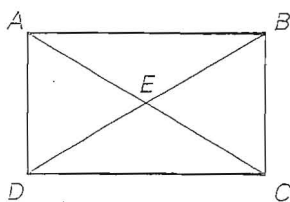
- | | |
|--|------------------------|
| 1. For any segment \overline{XY} , $\overline{XY} \cong \overline{XY}$ | A. Transitive Property |
| 2. If $\overline{JK} \cong \overline{MN}$ and $\overline{MN} \cong \overline{CD}$, then $\overline{JK} \cong \overline{CD}$. | B. Symmetric Property |
| 3. If $\overline{BN} \cong \overline{TR}$, then $\overline{TR} \cong \overline{BN}$. | C. Reflexive Property |

Mark the diagram with the given information.

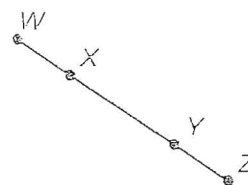
4. $LM = 5$, $LP = 5$
 $MN = 3$, $PN = 3$



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.

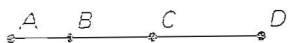
Complete the argument, giving a reason for each step.

1.

Given: B is between A and D .

C is between B and D .

Prove: $AD = AB + BC + CD$



1. B is between A and D .

C is between B and D .

2. $AD = AB + BD$

3. $BD = BC + CD$

4. $AD = AB + BC + CD$

1. Given

2.

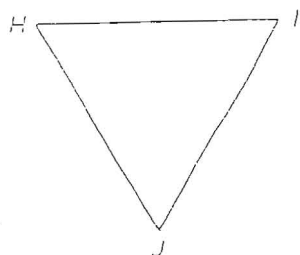
3.

4.

2.

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

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



1. $HI = 8$

2. $IJ = 8$

3. $HI = IJ$

4. $\overline{HI} \cong \overline{IJ}$

5. $\overline{IJ} \cong \overline{JH}$

6. $\overline{HI} \cong \overline{JH}$

1. Given

2.

3.

4.

5.

6.

3.

Given: $AL = SK$

Prove: $AS = LK$

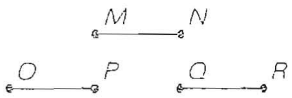


- | | |
|------------------------|------|
| 1. $AL = SK$ | 1. _ |
| 2. $LS = LS$ | 2. _ |
| 3. $AL + LS = SK + LS$ | 3. _ |
| 4. $AL + LS = AS$ | 4. _ |
| 5. $SK + LS = LK$ | 5. _ |
| 6. $AS = LK$ | 6. _ |

4.

Given: $OP = MN$, $MN = QR$

Prove: $\overline{OP} \cong \overline{QR}$

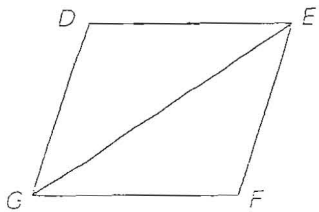


- | | |
|--|------|
| 1. $OP = MN$, $MN = QR$ | 1. _ |
| 2. $OP = QR$ | 2. _ |
| 3. $\overline{OP} \cong \overline{QR}$ | 3. _ |

5.

Given: $DG = 8$, $GF = 8$, $\overline{GF} \cong \overline{EF}$

Prove: $\overline{DG} \cong \overline{EF}$



- | | |
|--|------|
| 1. $DG = 8$, $GF = 8$ | 1. _ |
| 2. $DG = GF$ | 2. _ |
| 3. $\overline{DG} \cong \overline{GF}$ | 3. _ |
| 4. $\overline{GF} \cong \overline{EF}$ | 4. _ |
| 5. $\overline{DG} \cong \overline{EF}$ | 5. _ |