## Practice A

For use with pages 102-107

## Match the statement with the Property of Congruence.

1. If $\overline{C D} \cong \overline{P M}$ and $\overline{P M} \cong \overline{R V}$, then $\overline{C D} \cong \overline{R V}$.
A. Symmetric Property
2. For any segment $\overline{D S}, \overline{D S} \cong \overline{D S}$.
B. Reflexive Property
3. If $\overline{R A} \cong \overline{D B}$, then $\overline{D B} \cong \overline{R A}$.
C. Transitive Property

## Mark the diagram with the given information.

4. $\overline{A B} \cong \overline{A C}$
5. $\overleftrightarrow{T R} \perp \overleftrightarrow{M N}$
6. $M A=5, A T=5$

7. $\begin{aligned} G Q & =4, M Q=4 \\ T Q & =6, P Q=6\end{aligned}$
8. $A$ is the midpoint of $\overline{S R}$
9. $\overline{B N} \cong \overline{D M}$



Complete the argument, giving a reason for each step.
10. Given: $\overline{J K} \cong \overline{S H}, \overline{S H} \cong \overline{M N}$

Prove: $\overline{J K} \cong \overline{M N}$

| Statements | Reasons |
| :--- | :--- |
| 1. $\overline{J K} \cong \overline{S H}$ | 1. + |
| 2. $\overline{S H} \cong \overline{M N}$ | 2. $\frac{?}{?}$ |
| 3. $\overline{J K} \cong \overline{M N}$ | 3. $?$ |

11. Given: $B$ is between $A$ and $D$.
$C$ is between $B$ and $D$.
Prove: $A D=A B+B C+C D$


| Statements | Reasons |
| :--- | :--- |
| 1. $B$ is between $A$ and $D$. | 1. Given |
| $\quad C$ is between $B$ and $D$. |  |
| 2. $A D=A B+B D$ | 2. $?$ |
| 3. $B D=B C+C D$ | 3. $\frac{?}{?}$ |
| 4. $A D=A B+B C+C D$ | 4. ? |

12. Write an argument for Exercise 11 in the form of a paragraph proof.
