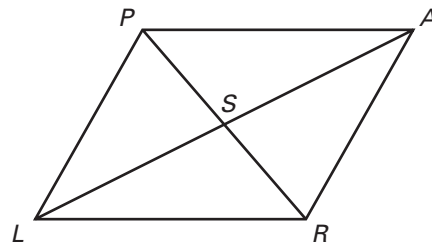NAME _____ DATE _____

## *Practice B*

**For use with pages 229–235**

### Use the diagram to answer the following.

1. What triangle appears to be congruent to $\triangle PAS$?

2. What triangle appears to be congruent to $\triangle PAR$?

3. If $\overline{PS} \cong \overline{RS}$ and $\overline{PL} \cong \overline{AR}$, what additional information would you need to prove $\triangle PSL \cong \triangle RSA$?

4. If $\angle LPA \cong \angle ARL$ and $\overline{PL} \cong \overline{AR}$, what additional information would you need to prove $\triangle LPA \cong \triangle ARL$?
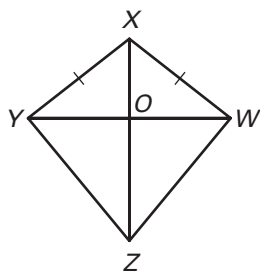
### Use the marked diagram to state the method used to prove the triangles congruent. Name the additional corresponding parts that could then be concluded to be congruent.

5. 

6. 

7. 
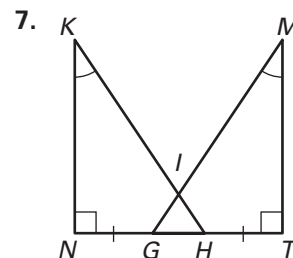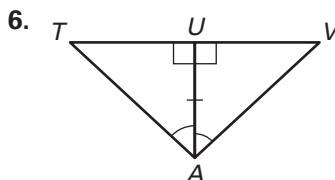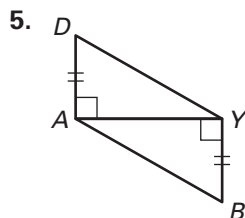
### Complete the proof by supplying the reasons.

8. **Given:** $\overline{YX} \cong \overline{WX}$
   $\overline{ZX}$ bisects $\angle YXW$.
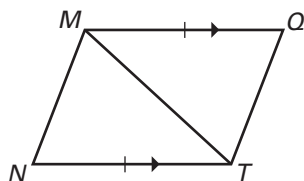
   **Prove:** $\overline{YZ} \cong \overline{WZ}$

| Statements | Reasons |
|---|---|
| 1. $\overline{YX} \cong \overline{WX}$ | 1. ___?___ |
| 2. $\overline{ZX}$ bisects $\angle YXW$. | 2. ___?___ |
| 3. $\angle YXZ \cong \angle WXZ$ | 3. ___?___ |
| 4. $\overline{XZ} \cong \overline{XZ}$ | 4. ___?___ |
| 5. $\triangle YXZ \cong \triangle WXZ$ | 5. ___?___ |
| 6. $\overline{YZ} \cong \overline{WZ}$ | 6. ___?___ |

### Write a two-column or a paragraph proof.

9. **Given:** $\overline{MQ} \cong \overline{NT}$
   $\overline{MQ} \parallel \overline{NT}$

   **Prove:** $\overline{MN} \cong \overline{TQ}$

10. **Given:** $O$ is the midpoint of $\overline{NP}$.
    $\angle N \cong \angle P$

    **Prove:** $O$ is the midpoint of $\overline{SR}$.