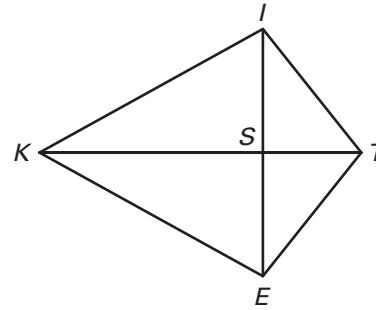Lesson 4.5

NAME _____ DATE _____

Practice A

For use with pages 229–235

Use the diagram to answer the following.

1. What triangles appear to be congruent?

2. To prove $\angle IKS \cong \angle EKS$, which triangles must you prove to be congruent?

3. To prove $\angle TIS \cong \angle TES$, which triangles must you prove to be congruent?

4. To prove $\overline{KI} \cong \overline{KE}$, which triangles must you prove to be congruent?


Use the diagram to answer the following.

5. If $\triangle PDA \cong \triangle RDL$, then $\angle 1$ corresponds to $\angle$ __?__.

6. If $\triangle PRA \cong \triangle RPL$, then $\angle 1$ corresponds to $\angle$ __?__.

7. If $\triangle PDL \cong \triangle RDA$, then name 3 pair of corresponding angles.

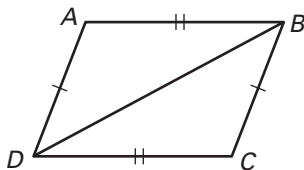8. If $\triangle PDL \cong \triangle RDA$, then name 3 pair of corresponding sides.
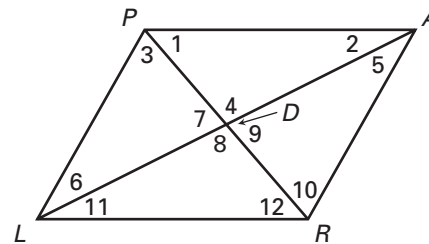
Use the marked diagram to state the method used to prove the triangles congruent. Name the additional corresponding parts that could then be concluded to be congruent.

9.

10.

11.
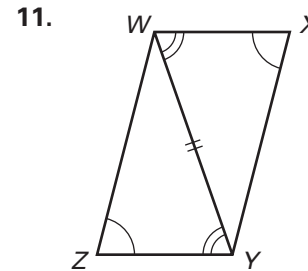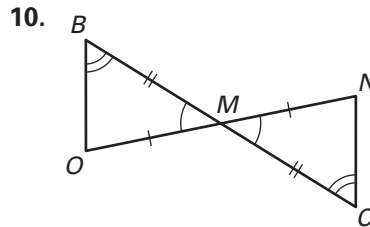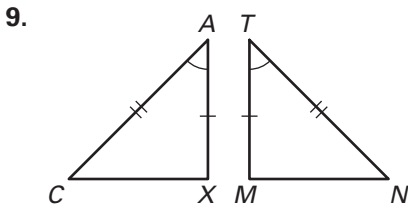
Complete the proof by supplying the reasons.

12. **Given:** $\overline{AB} \cong \overline{DC}, \overline{AD} \cong \overline{BC}$

Prove: $\angle A \cong \angle C$

Statements	Reasons
1. $\overline{AB} \cong \overline{DC}$	1. __?__
2. $\overline{AD} \cong \overline{BC}$	2. __?__
3. $\overline{BD} \cong \overline{BD}$	3. __?__
4. $\triangle ABD \cong \triangle CDB$	4. __?__
5. $\angle A \cong \angle C$	5. __?__

Write a two-column or a paragraph proof.

13. **Given:** $\overline{AC} \cong \overline{DC}, \angle A \cong \angle D$

Prove: $\angle B \cong \angle E$