Name _____ Date _____

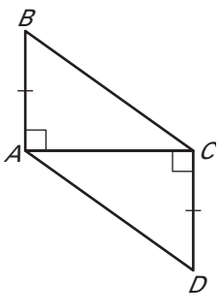
LESSON 4.6

Practice B

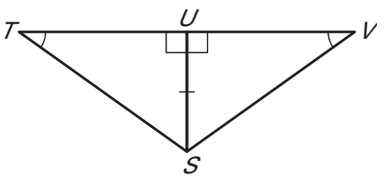
For use with pages 256–263

Tell which triangles you can show are congruent in order to prove the statement. What postulate or theorem would you use?

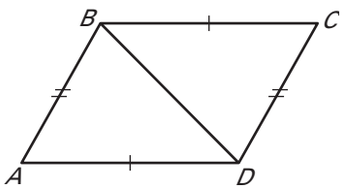
1. $\overline{BC} \cong \overline{AD}$



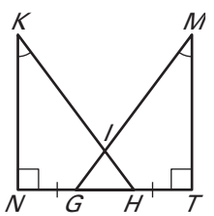
2. $\geq TSU \cong \geq VSU$



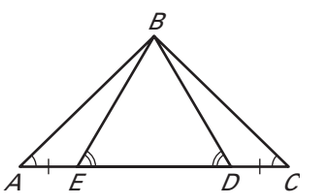
3. $\geq ADB \cong \geq CBD$



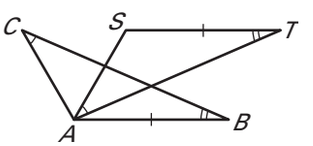
4. $\geq KHN \cong \geq MGT$



5. $\overline{BD} \cong \overline{BE}$

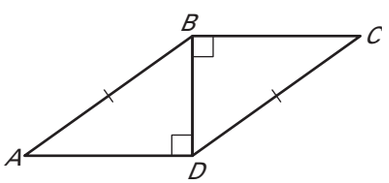


6. $\overline{BC} \cong \overline{AT}$

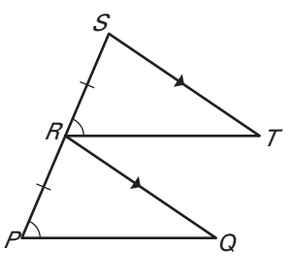


Use the diagram to write a plan for a proof.

7. **PROVE:** $\geq DAB \cong \geq BCD$



8. **PROVE:** $\overline{ST} \cong \overline{RQ}$



Use the vertices of $\triangle ABC$ and $\triangle DEF$ to show that $\geq A \cong \geq D$. *Explain* your reasoning.

9. $A(1, 2)$, $B(4, -3)$, $C(2, 5)$, $D(4, 7)$, $E(7, 2)$, $F(5, 10)$

10. $A(2, 3)$, $B(2, 9)$, $C(6, 6)$, $D(8, 5)$, $E(8, 11)$, $F(12, 8)$

Name _____ Date _____

LESSON 4.6

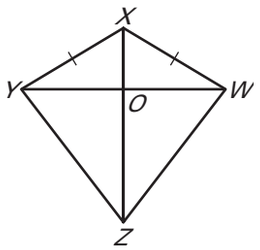
Practice B *continued*

For use with pages 256–263

11. Proof Complete the proof.

GIVEN: $\overline{YX} \cong \overline{WX}$
$\overline{ZX}$ bisects $\angle YXW$.

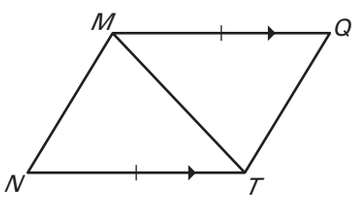
PROVE: $\overline{YZ} \cong \overline{WZ}$



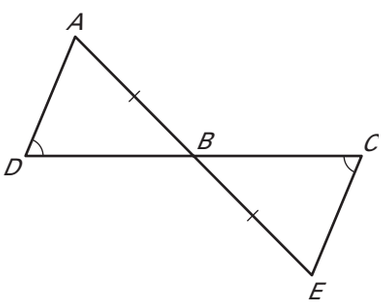
Statements	Reasons
1. $\overline{YX} \cong \overline{WX}$	**1.** ?
2. $\overline{ZX}$ bisects $\angle YXW$.	**2.** ?
3. $\angle YXZ \cong \angle WXZ$	**3.** ?
4. $\overline{XZ} \cong \overline{XZ}$	**4.** ?
5. $\triangle YXZ \cong \triangle WXZ$	**5.** ?
6. $\overline{YZ} \cong \overline{WZ}$	**6.**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

Use the information given in the diagram to write a proof.

12. PROVE: $\overline{MN} \cong \overline{TQ}$



13. PROVE: $\overline{DB} \cong \overline{CB}$



LESSON 4.6