Name _____ Date _____

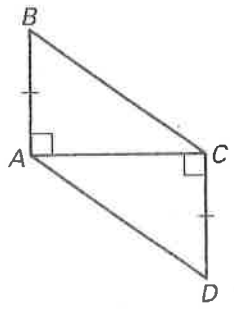
LESSON 4.6

Practice B

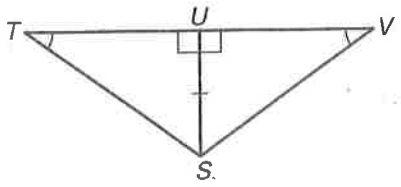
For use with pages 256–263

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

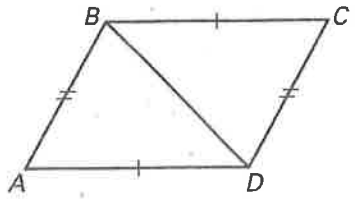
1. $\overline{BC} \cong \overline{AD}$



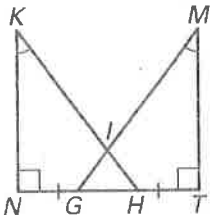
2. $\angle TSU \cong \angle VSU$



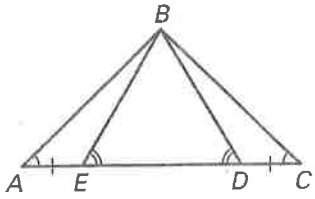
3. $\angle ADB \cong \angle CBD$



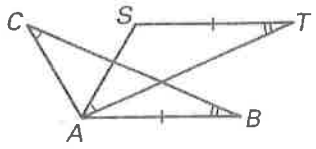
4. $\angle KHN \cong \angle MGT$



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

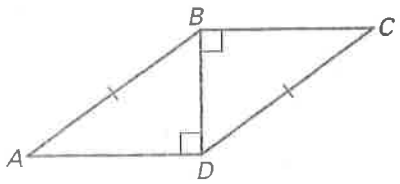


6. $\overline{BC} \cong \overline{AT}$

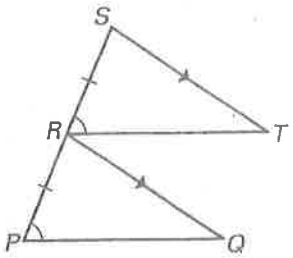


Use the diagram to write a plan for a proof.

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



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



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

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

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

LESSON 4.6

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LESSON 4.6

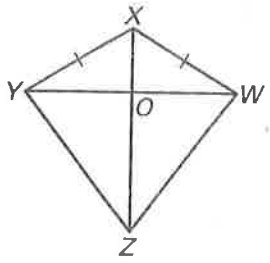
Practice B *continued*

For use with pages 256–263

11. Proof Complete the proof.

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

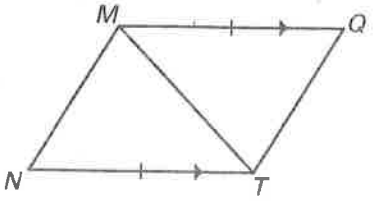
PROVE: $\overline{YZ} \cong \overline{WZ}$



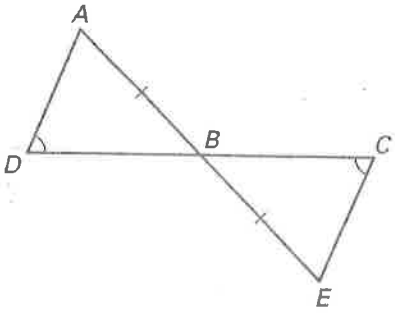
Statements	Reasons
1. $\overline{YX} \cong \overline{WX}$	1. ?
2. $\overline{ZX}$ bisects $\angle YXW$.	2. ?
3. $\angle YXZ \cong \angle WXZ$	3. ?
4. $\overline{XZ} \cong \overline{XZ}$	4. ?
5. $\triangle YXZ \cong \triangle WXZ$	5. ?
6. $\overline{YZ} \cong \overline{WZ}$	6. ?

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

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



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



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