Name _____ Date _____

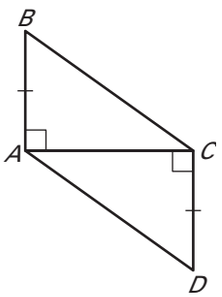
LESSON 4.6

Practice

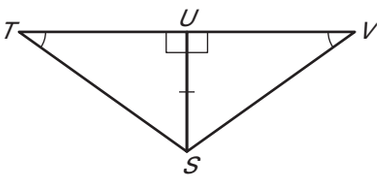
For use with pages 256–263

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

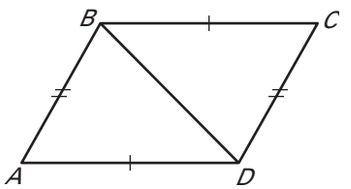
1. $\overline{BC} \cong \overline{AD}$



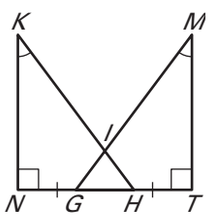
2. $\geq TSU \cong \geq VSU$



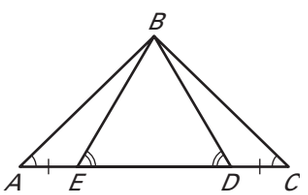
3. $\geq ADB \cong \geq CBD$



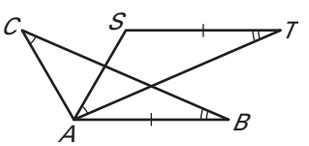
4. $\geq KHN \cong \geq MGT$



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

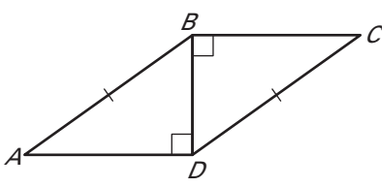


6. $\overline{BC} \cong \overline{AT}$

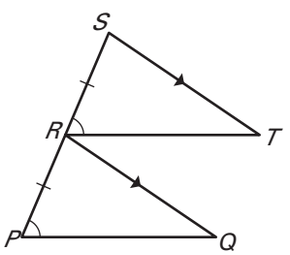


Use the diagram to write a plan for a proof.

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



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



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LESSON 4.6

Practice *continued*

For use with pages 256–263

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

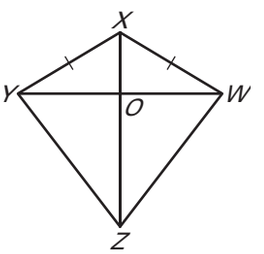
9. $A(1, 2)$, $B(4, -3)$, $C(2, 5)$, $D(4, 7)$, $E(7, 2)$, $F(5, 10)$

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

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.** ?

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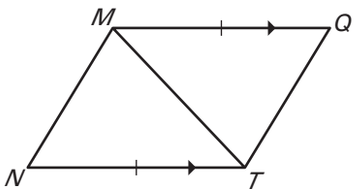
LESSON 4.6

Practice *continued*

For use with pages 256–263

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

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



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