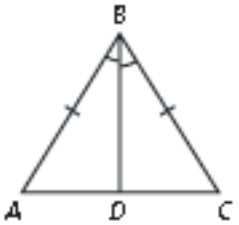
Name_____ Class_____ Date_____

Practice 4-2

Triangle Congruence by SSS and SAS

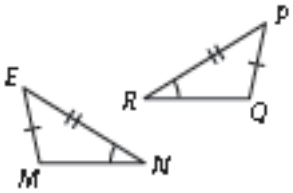
Decide whether you can use the SSS or SAS Postulate to prove the triangles congruent. If so, write the congruence statement, and identify the postulate. If not, write *not possible.*

1.



2.

3.



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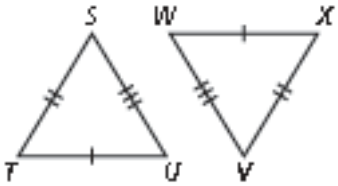

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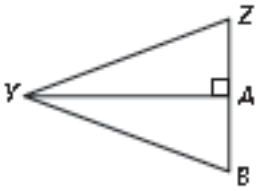

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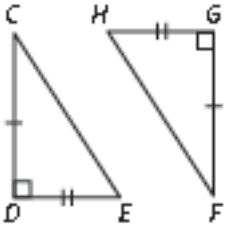

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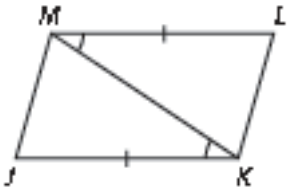

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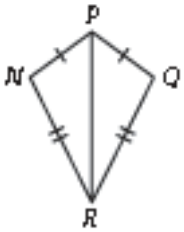
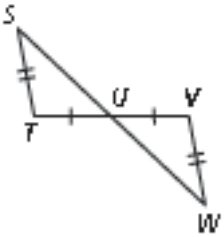


9.



Draw a triangle. Label the vertices *A*, *B*, and *C*.

10. What angle is between $\overline{BC}$ and $\overline{AC}$?

11. What sides include $\angle B$?

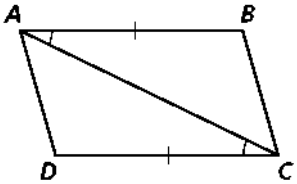
12. What angles include $\overline{AB}$?

13. What side is included between $\angle A$ and $\angle C$?

14. **Developing Proof** Supply the reasons in this proof.

Given: $\overline{AB} \cong \overline{DC}$, $\angle BAC \cong \angle DCA$

Prove: $\Delta ABC \cong \Delta CDA$

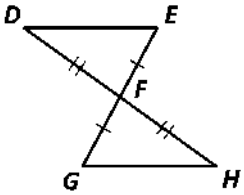


Statements	*Reasons*
1. $\overline{AB} \cong \overline{DC}$, $\angle BAC \cong \angle DCA$	a. ?
2. $\overline{AC} \cong \overline{CA}$	b. ?
3. $\Delta ABC \cong \Delta CDA$	c. ?

15. Write a proof.

Given: $\overline{EF} \cong \overline{FG}$, $\overline{DF} \cong \overline{FH}$

Prove: $\Delta DFE \cong \Delta HFG$



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