Name:_____ Period:_____ SCORE:_____ / _____ = _____ % = _____

9-6 HW – ASA, AAS and HL Triangle Congruence

State the third postulate that must be given to prove that $\Delta DEF \cong \Delta MNO$ using the indicated postulate or theorem.

1. Given: $\overline{FE} \cong \overline{ON}$, $\angle F \cong \angle O$

Method: AAS Congruence Theorem

2. Given: $\overline{DF} \cong \overline{MO}$, $\angle F \cong \angle O$

Method: ASA Congruence Postulate

3. Given: $\angle D \cong \angle M$, $\angle E \cong \angle N$

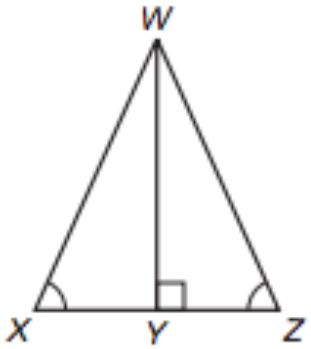
Method: AAS Congruence Theorem

4. Given: $\angle D \cong \angle M$, $\angle E \cong \angle N$

Method: ASA Congruence Postulate

Is it possible to prove that the triangles are congruent? If so, state the postulate or theorem you would use. Explain your reasoning.

5.



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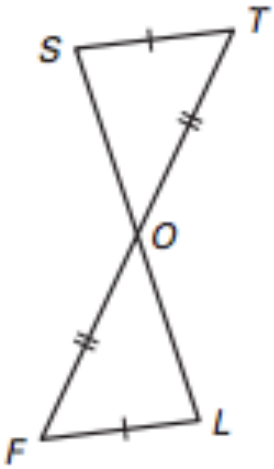

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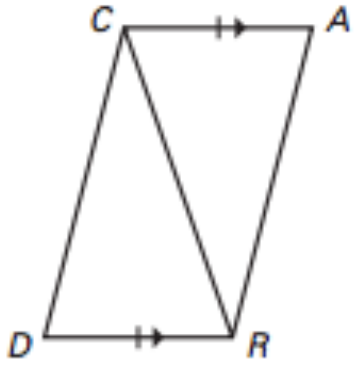
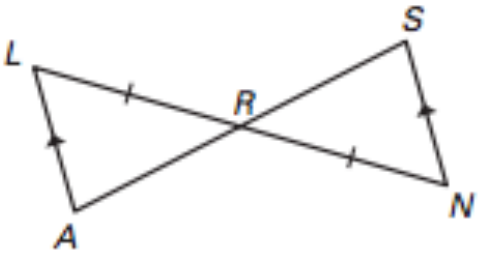


Is it possible to prove that the triangles are congruent? If so, state the postulate or theorem you would use. Explain your reasoning.

8.



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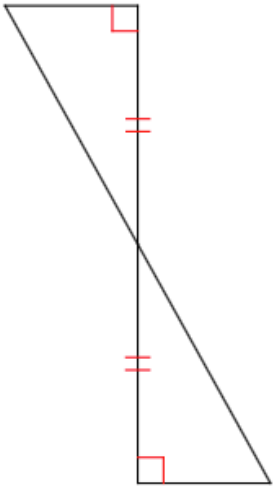

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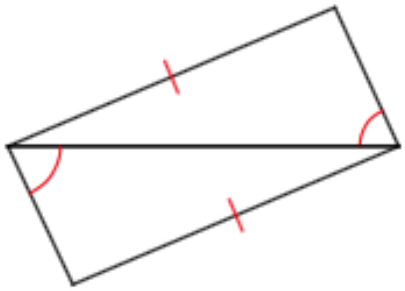

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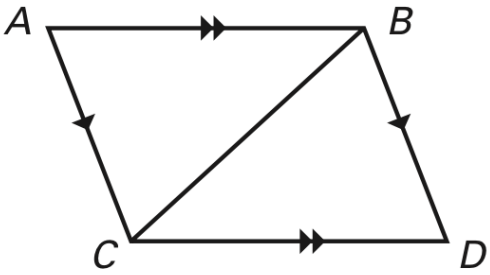

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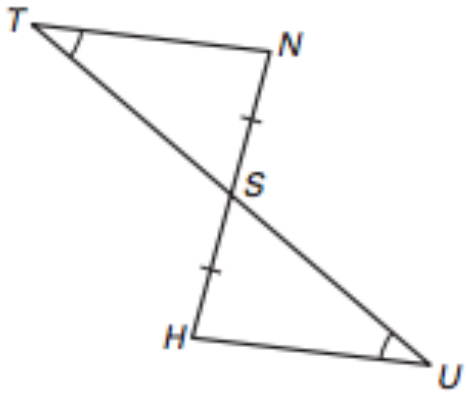

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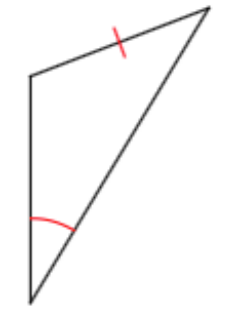

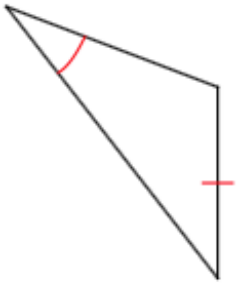

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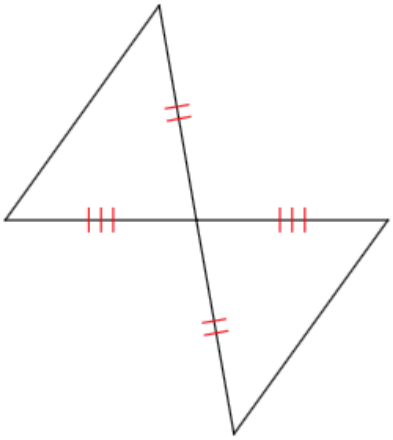

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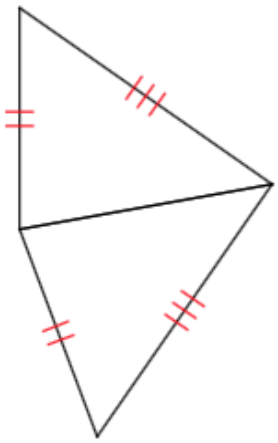
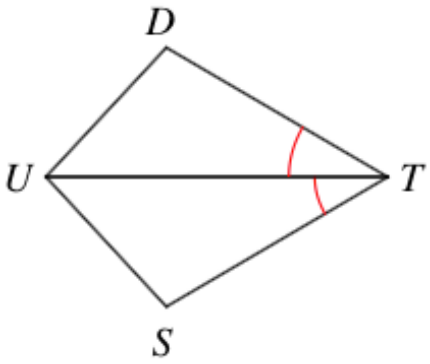
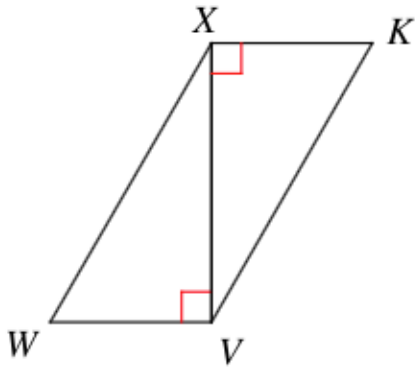


In each of the following pairs of triangles, add the required markings in order to know that the triangles are congruent by the given postulate or theorem.

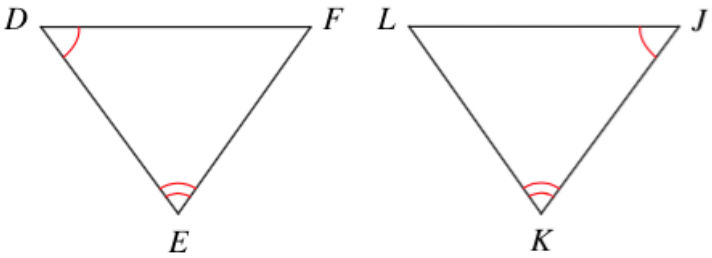
16. ASA



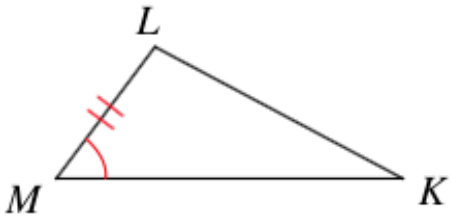
17. HL

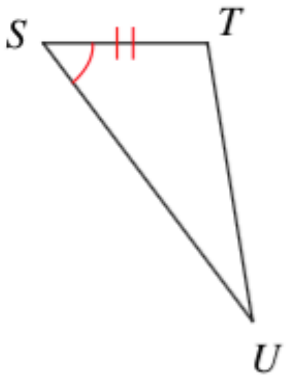


18. AAS

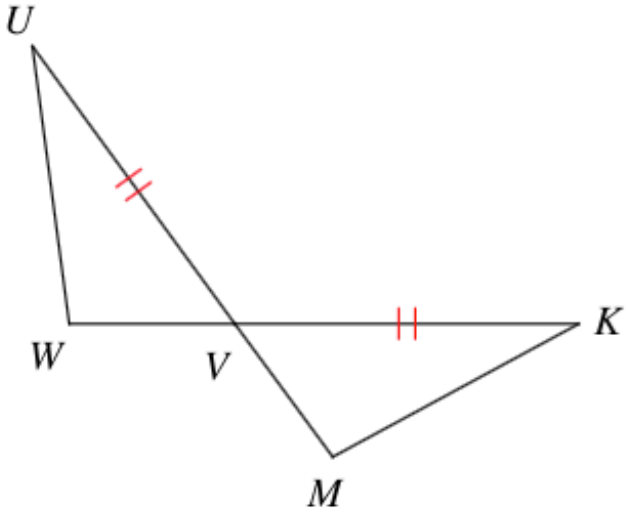


19. ASA





20. SAS



21. SSS