

8-6 HW Honors – ASA, AAS and HL Triangle Congruence

State the third postulate that must be given to prove that $\triangle DEF \cong \triangle MNO$ 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: $\angle D \cong \angle M$
 $\angle E \cong \angle N$

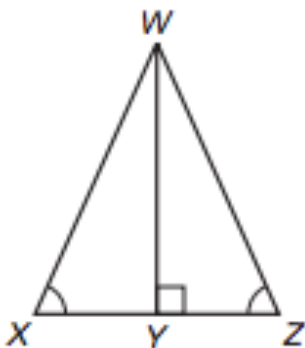
Method: AAS Congruence
 Theorem

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

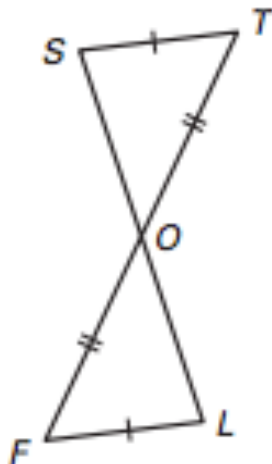
Method: ASA Congruence
 Postulate

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

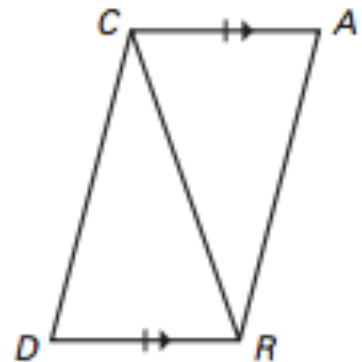
5.



6.

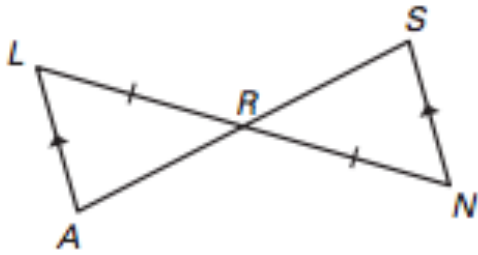


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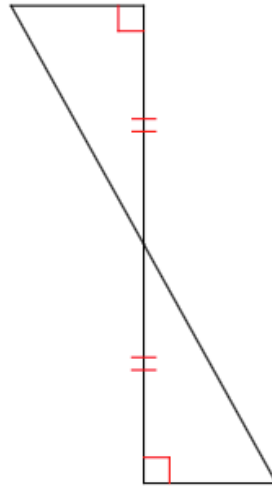


Is it possible to prove that the triangles are congruent? If so, state the postulate or theorem you would use. Explain your reasoning.

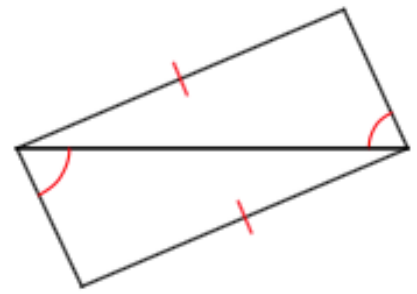
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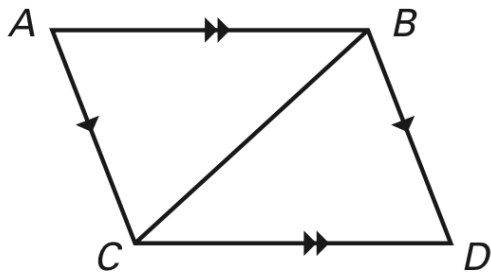
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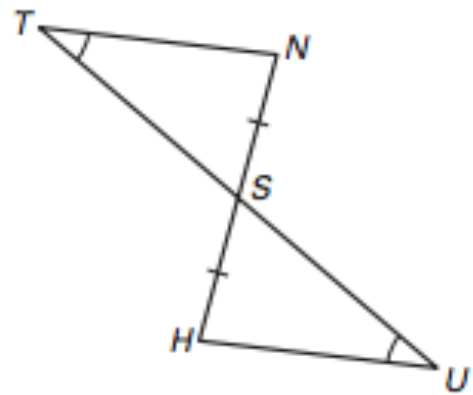
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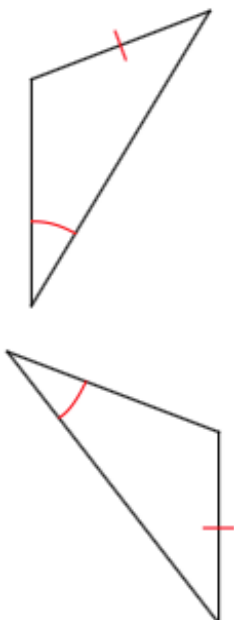
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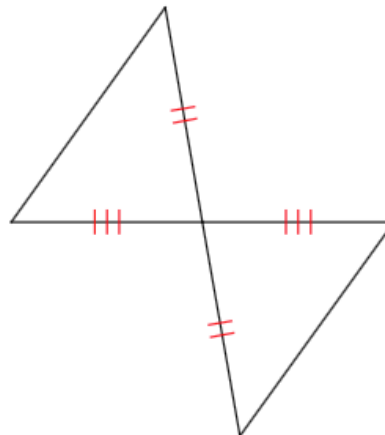
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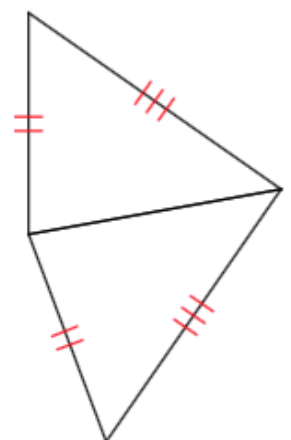
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14.

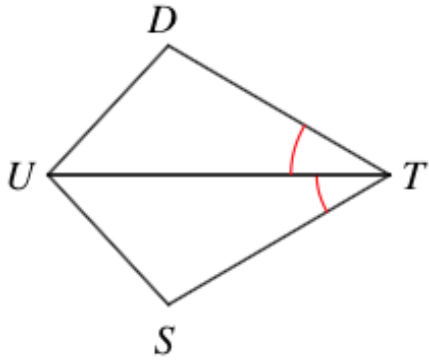


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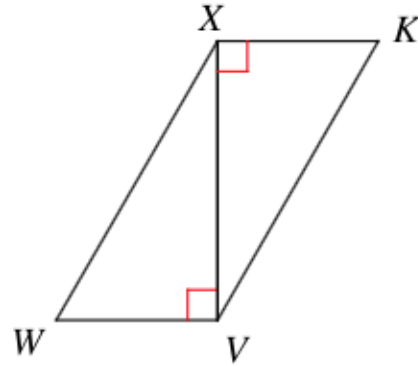


In each of the following pairs of triangles, add only the required markings in order to know that the triangles are congruent by the given postulate or theorem.

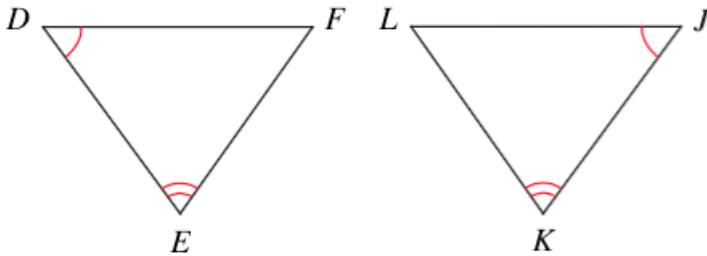
16. ASA



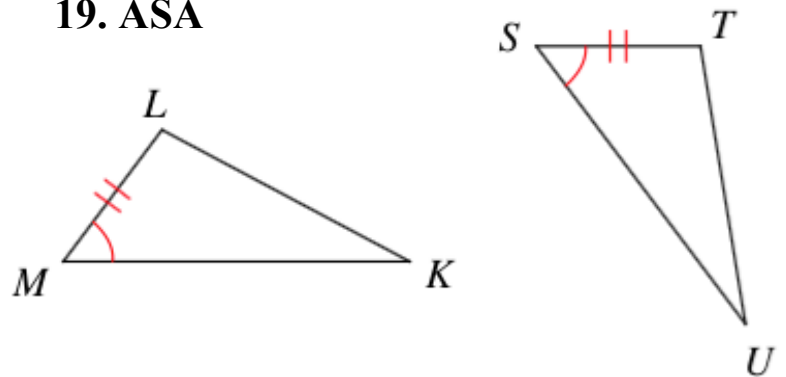
17. HL



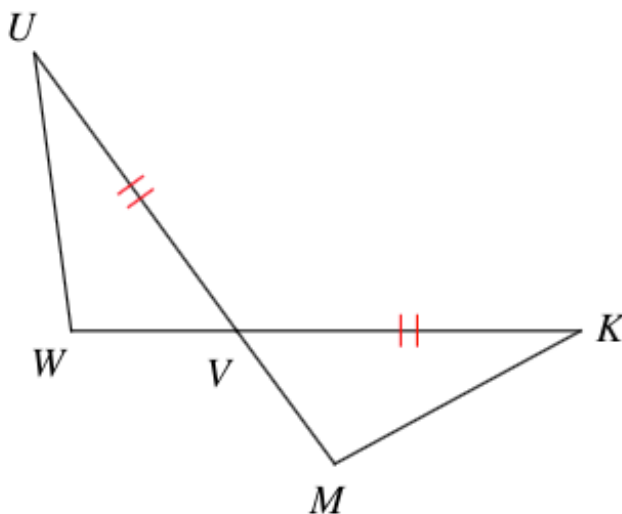
18. AAS



19. ASA



20. SAS



21. SSS

