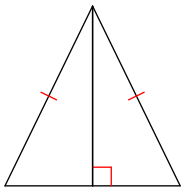
Geometry Honors - Mr. Allen-Black Name_____

Triangle Congruence

Date_____ Period____

State if the two triangles are congruent. If they are, state how you know.

1)



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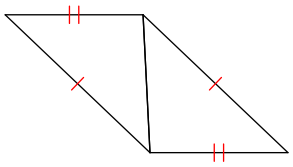

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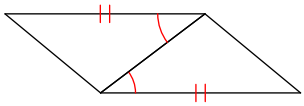

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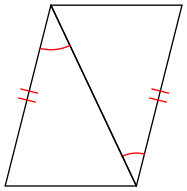

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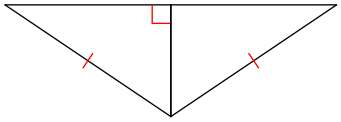

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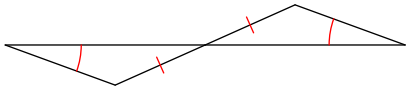

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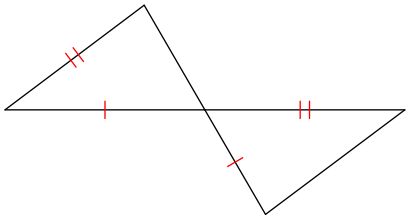

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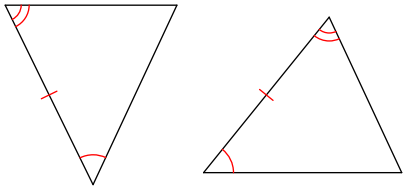

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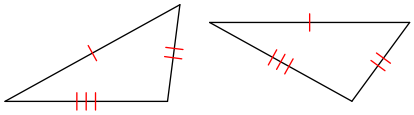

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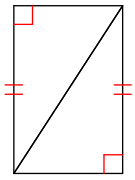

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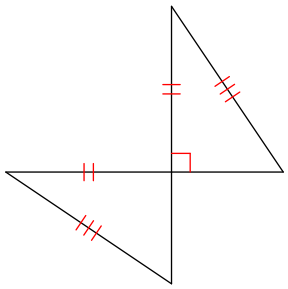

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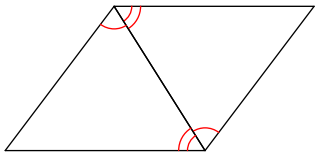

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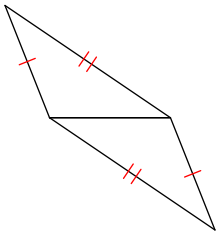

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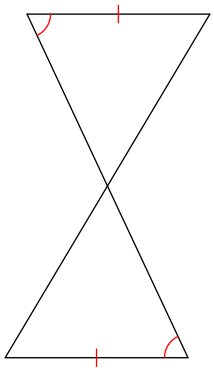

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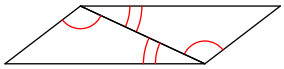

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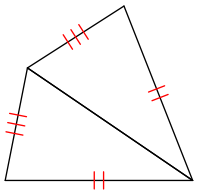

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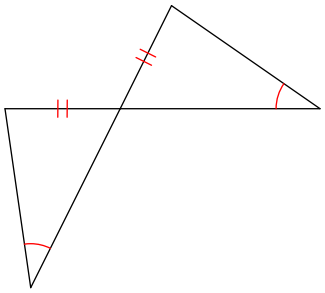

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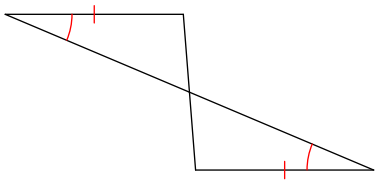

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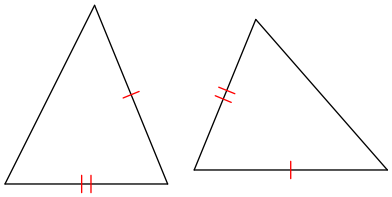

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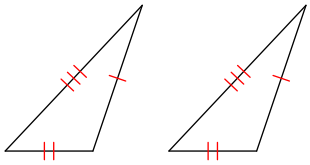
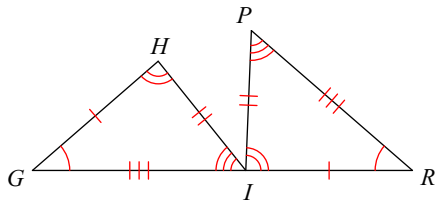


Write a statement that indicates that the triangles in each pair are congruent.

21)



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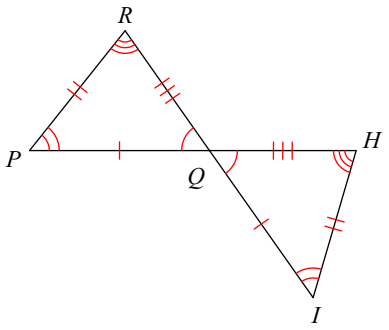

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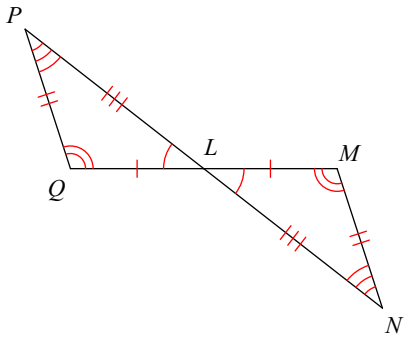

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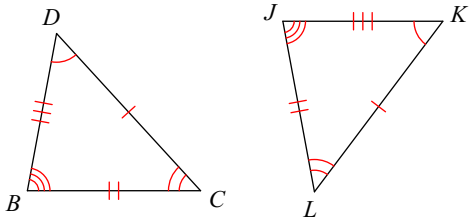

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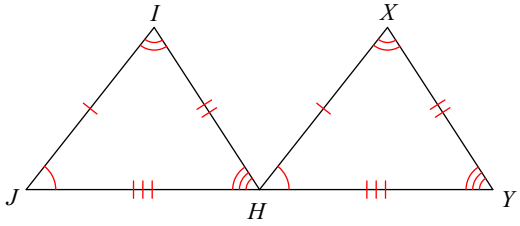

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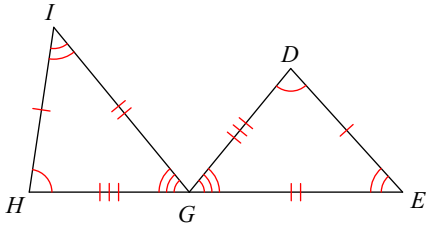

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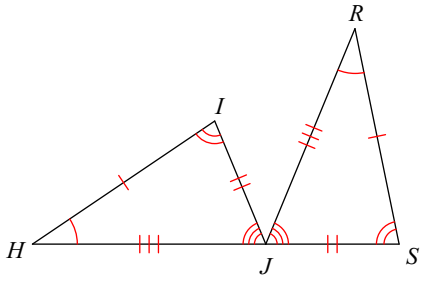

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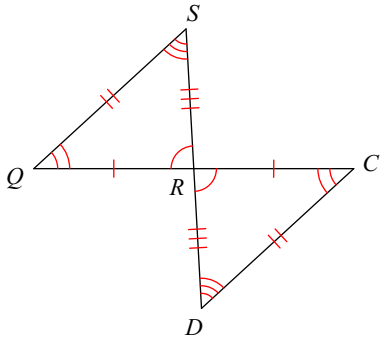
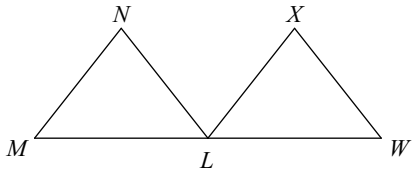


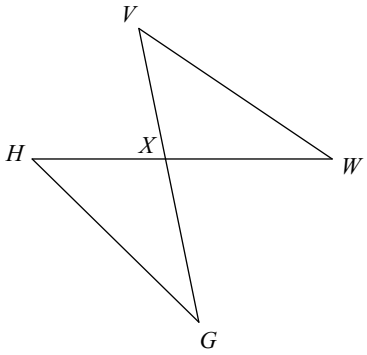
Complete each congruence statement by naming the corresponding angle or side.

29) $\triangle MNL \cong \triangle LXW$



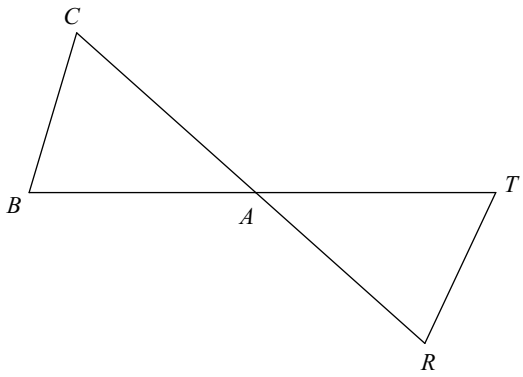
$\angle NLM \cong$?

30) $\triangle XVW \cong \triangle XHG$



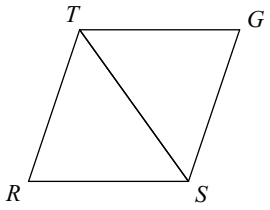
$\overline{VW} \cong$?

31) $\triangle ABC \cong \triangle ART$



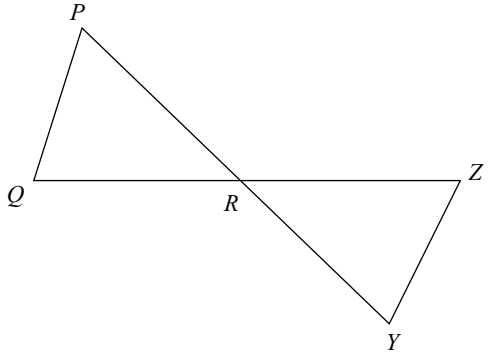
$\angle B \cong$?

32) $\triangle TSR \cong \triangle TSG$



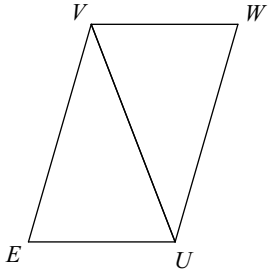
$\overline{SR} \cong$?

33) $\triangle RQP \cong \triangle RYZ$



$\overline{QP} \cong$?

34) $\triangle UVW \cong \triangle VUE$



$\overline{VW} \cong$?

Answers to Triangle Congruence

1) HL
3) SAS
5) HL
7) Not congruent
9) SSS
11) HL
13) SSS
15) ASA
17) AAS
19) Not congruent
21) $\triangle GHI \cong \triangle RIP$
23) $\triangle LMN \cong \triangle LQP$
25) $\triangle JIH \cong \triangle HXY$
27) $\triangle HIJ \cong \triangle RSJ$
29) $\angle W$
31) $\angle R$
33) $\overline{YZ}$