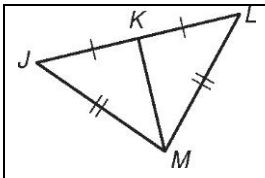
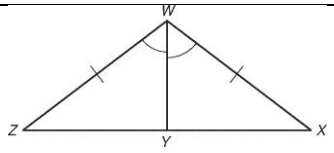
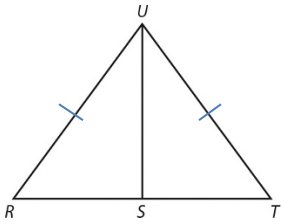
Name _____

Instructions: Decide which congruence shortcut, if any, can be used to prove the triangles congruent. Explain your reasoning.

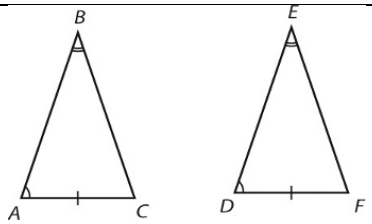
If the triangles are congruent, write the congruence statement. For example: $\Delta ABC \cong \Delta EDF$

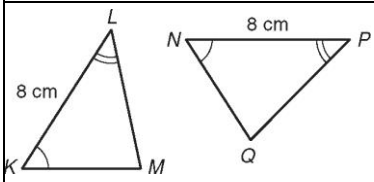


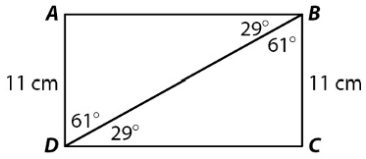


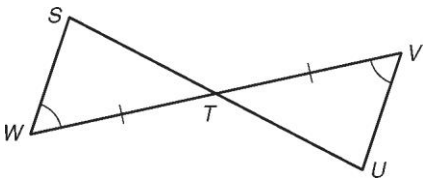


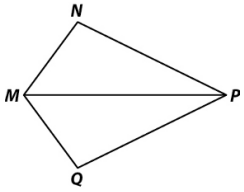
S is the midpoint of $\overline{RT}$





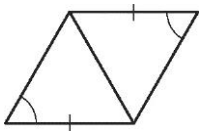






MP bisects $\angle NMQ$ and $\angle NPQ$.

Write which of the congruence shorcuts can be used to prove the triangles congruent.
If no shortcuts can be used, write NONE.



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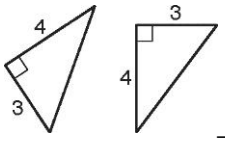

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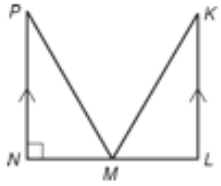
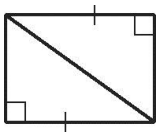


M is the midpoint of $\overline{NL}$

_____



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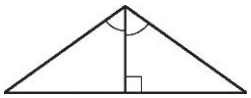

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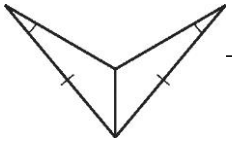

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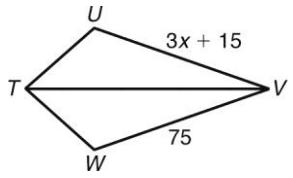
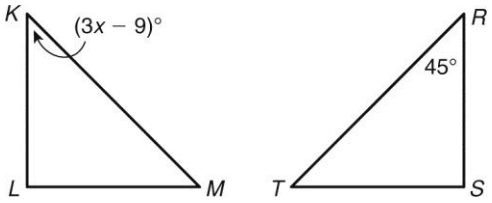
Find the value of x so that the triangles are congruent. Show all work!



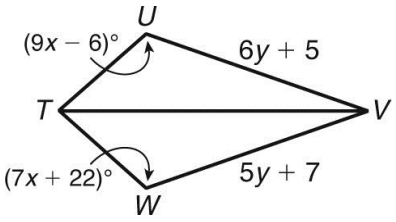
Given: $\triangle TUV \cong \triangle TWV$.

$x =$ _____



Given: $\triangle KLM \cong \triangle RST$

$x =$ _____



$m\angle U =$ _____

$UV =$ _____

Given: $\triangle TUV \cong \triangle TWV$.

Write a proof. You may write a paragraph proof, flow chart proof, or two-column proof.

Given: C is the midpoint of $\overline{AD}$ and $\overline{BE}$.

Prove: $\triangle ABC \cong \triangle DEC$