

Name:

Date:

Period:

HW #5-11: Test Review Packet

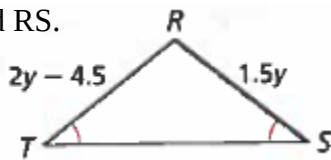
1. In $\triangle LMN$, $m\angle L = 8x^\circ$, $m\angle M = (2x + 1)^\circ$, and $m\angle N = (6x - 1)^\circ$. Find $m\angle N$.

2. Position each figure in the coordinate plane and give coordinates to each vertex.

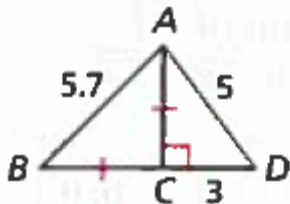
a. A right triangle with leg lengths r and s

b. a rectangle with length $2p$ and width p

3. Find RS .



4. Classify each triangle by its side lengths.

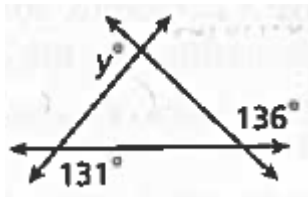


a. $\triangle ACD$

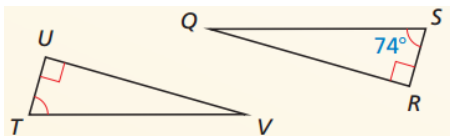
b. $\triangle ABC$

c. $\triangle ABD$

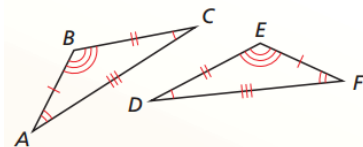
5. In the figure below, what is the value of y ?



6. Find $m\angle V$.

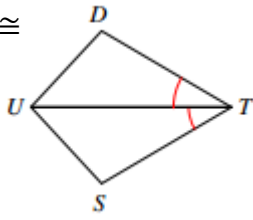


7. Write a congruency statement for the triangles.

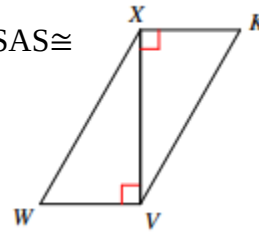


8. State the additional information that is required in order to know that the triangles are congruent for the reason given.

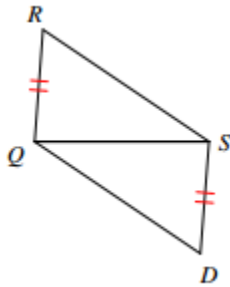
a. $ASA \cong$



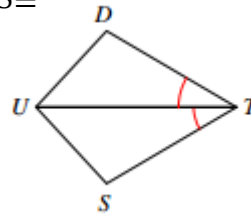
b. $SAS \cong$



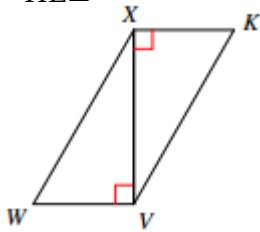
c. $SSS \cong$



d. $AAS \cong$

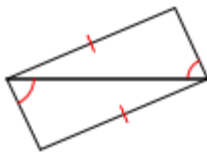


e. $HL \cong$

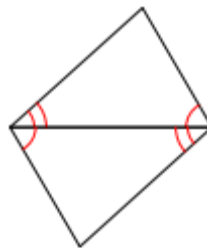


9. Determine whether you can conclude that the triangles are congruent. If you can, state the theorem used and write a congruency statement. If you cannot conclude that the triangles are congruent, say “not enough information.”

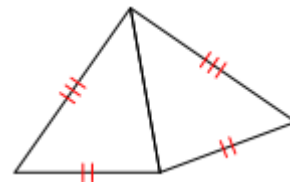
a.



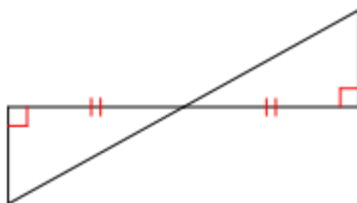
b.



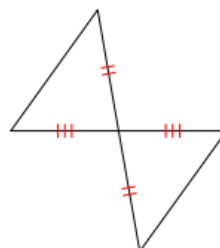
c.



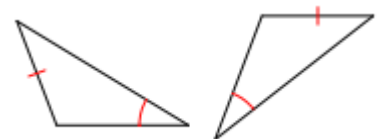
d.



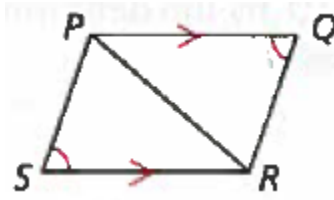
e.



f.



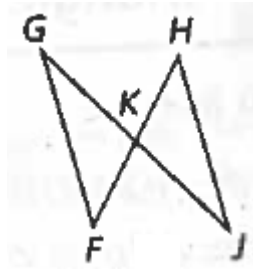
10. **Given:** $\overline{PQ} \parallel \overline{RS}$ and $\angle S \cong \angle Q$
Prove: $\overline{PS} \parallel \overline{QR}$



Statements

Reasons

11. **Given:** $\overline{GJ}$ bisects $\overline{FH}$ and $\overline{FH}$ bisects $\overline{GJ}$.
Prove: $\triangle FGK \cong \triangle HJK$



Statements

Reasons