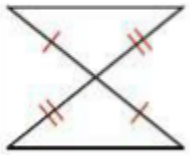
Day 3 HW - Pg. 230 3-4, 11-14, 21, 24-26, 35

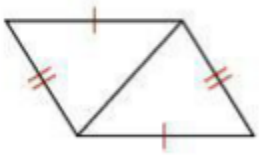
Name the postulate you would use to prove the triangles congruent.

3.



SAS

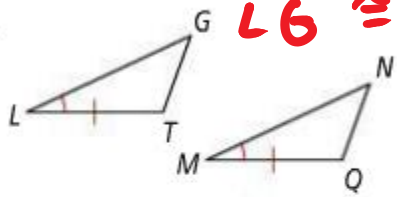
4.



SSS

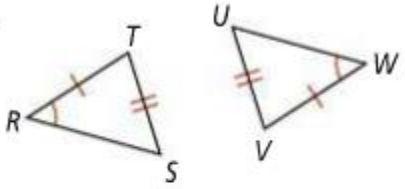
What other information, if any, do you need to prove the two triangles congruent by SAS? Explain.

11.



$\overline{LG} \cong \overline{MN}$

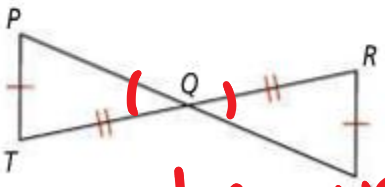
12.



$\angle T \cong \angle V$

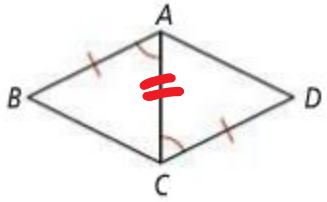
Would you use SSS or SAS to prove the triangles congruent? If there is not enough information to prove the triangles congruent by SSS or SAS, write *not enough information*. Explain your answer.

13.



Not enough info

14.



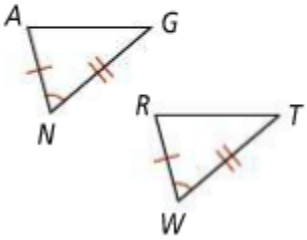
SAS

21. Writing List three real-life uses of congruent triangles. For each real-life use, describe why you think congruence is necessary.

roof trusses for a house
sections of a ferris wheel

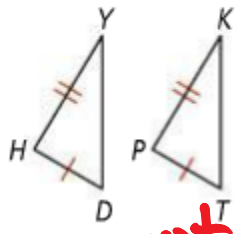
Can you prove the triangles congruent? If so, write the congruence statement and name the postulate you would use. If not, write *not enough information* and tell what other information you would need.

24.



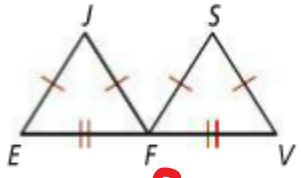
SAS
$\triangle ANG \cong \triangle RWT$

25.



Not enough

26.

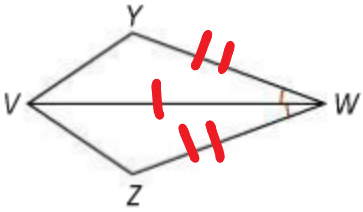


SSS
$\triangle JEF \cong \triangle SFV$

35. What additional information do you need to prove that $\triangle VWY \cong \triangle VWZ$ by SAS?

(A) $\overline{YW} \cong \overline{ZW}$ (C) $\angle Y \cong \angle Z$

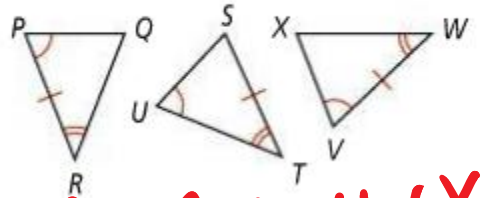
(B) $\angle WVY \cong \angle WVZ$ (D) $\overline{VZ} \cong \overline{VY}$



p. 238 8-9, 16-18, 23, 32,

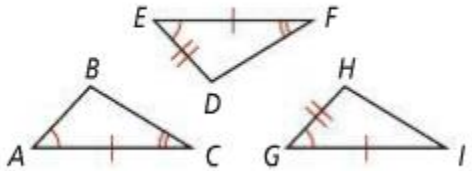
Name two triangles that are congruent by ASA. See Prob

8.



$\triangle PRQ \cong \triangle VWX$

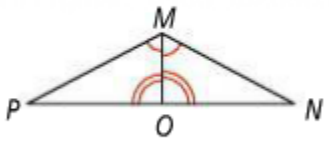
9.



$\triangle ABC \cong \triangle EDF$

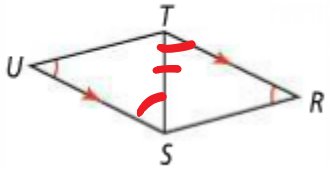
Determine whether the triangles must be congruent. If so, name the postulate or theorem that justifies your answer. If not, explain. See Pro

16.



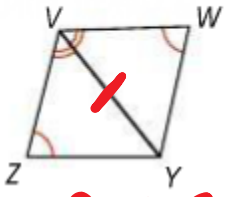
ASA

17.



AAS

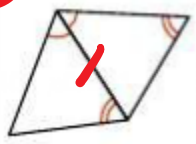
18.



AAS

23. Reasoning Can you prove that the triangles at the right are congruent? Justify your answer.

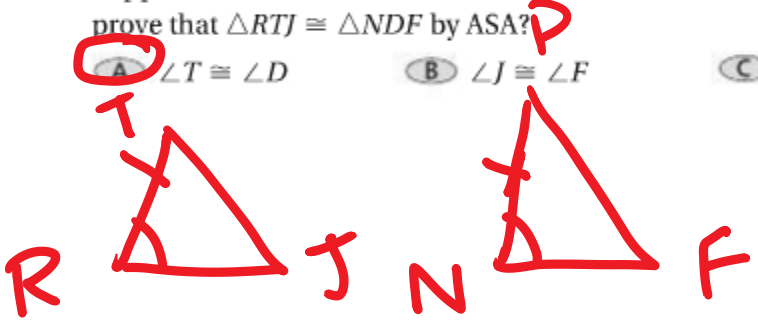
NO



~~**24. Writing** Anita says that you can rewrite any proof that uses the AAS Theorem as a~~

32. Suppose $\overline{RT} \cong \overline{ND}$ and $\angle R \cong \angle N$. What additional information do you need to prove that $\triangle RTJ \cong \triangle NDF$ by ASA?

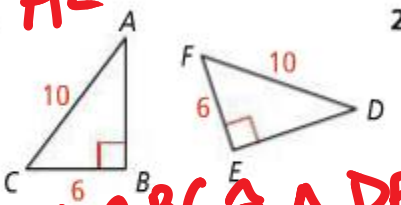
(A) $\angle T \cong \angle D$ (B) $\angle J \cong \angle F$ (C) $\angle J \cong \angle D$ (D) $\angle T \cong \angle F$



p.261 1-4, 7, 25,

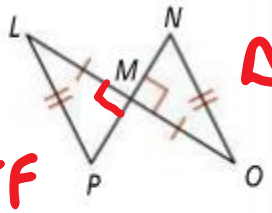
Are the two triangles congruent? If so, write the congruence statement.

1. HL



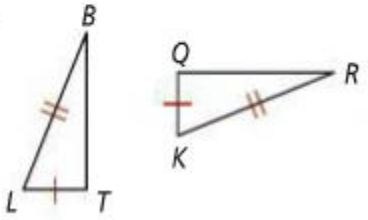
△ABC ≅ △DEF

2. HL



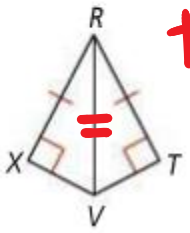
△PML ≅ △NMO

3.



NO

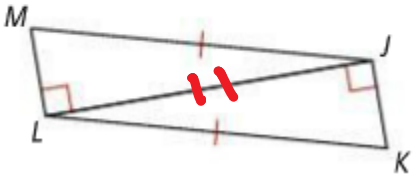
4. HL



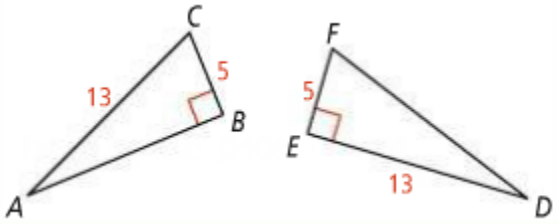
△RXV ≅ △RTV

7. Error Analysis Your classmate says that there is not enough information to determine whether the two triangles below are congruent. Is your classmate correct? Explain.

NO ≅ by HL



25. Reasoning Are the triangles congruent? Explain.



NO we only have one side and one ∠ ≅.