Name: _____ Date: _____ Period: _____

5.3 Proving Triangles Congruent by SAS CYU

☑ Use when you get it right all by yourself

S Use when you did it all by yourself, but made a silly mistake

H Use when you could do it alone with a little help from teacher or peer

G Use when you completed the problem in a group

X Use when a question was attempted but wrong (get help)

N Use when a question was not even attempted

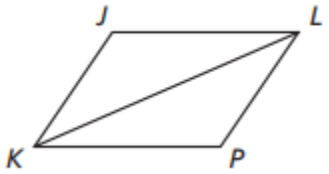
CONCEPTS	BASIC	INTERMEDIATE	ADVANCED
Included angles	1 - 3		
SAS Congruence Theorem	4, 5, 8	6, 7, 9	
Triangle Congruence Statement	12	13	
SAS Proofs	10	11	14

Name the included angle between the pair of sides given.

1. $\overline{JK}$ & $\overline{KL}$

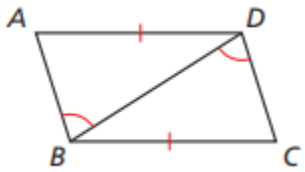
2. $\overline{PK}$ & $\overline{KL}$

3. $\overline{LP}$ & $\overline{KL}$

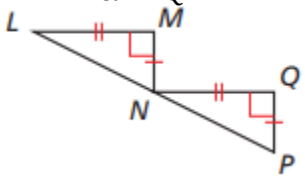


Decide whether enough information is given to prove that the triangles are congruent using the SAS Congruence Theorem. Explain.

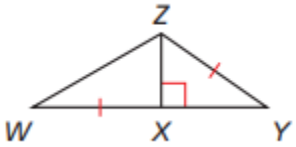
4. Δ ABD & ΔCDB



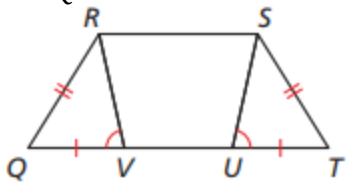
5. Δ LMN & ΔNQP



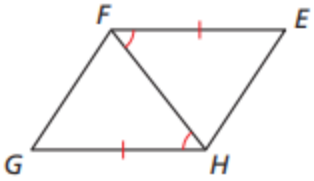
6. Δ YXZ & ΔWXZ



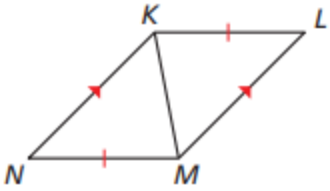
7. Δ QRV & ΔTSU



8. Δ EFH & ΔGHF

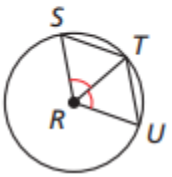


9. Δ KLM & ΔMNK

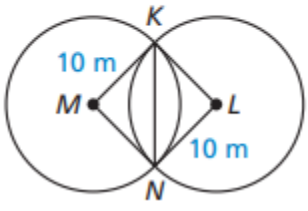


Use the given information to name two triangles that are congruent. Explain your reasoning.

10. $\angle SRT \cong \angle URT$, and R is the center of the circle.

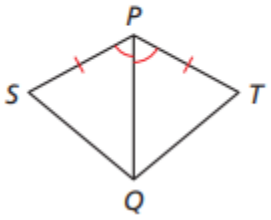


11. $\overline{MK} \perp \overline{MN}, \overline{KL} \perp \overline{NL}$, and M and L are centers of circles.

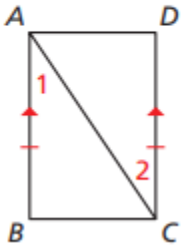


Write a two-column proof.

10. **Given** $\overline{PQ}$ bisects $\angle SPT, \overline{SP} \cong \overline{TP}$
Prove $\triangle SPQ \cong \triangle TPQ$

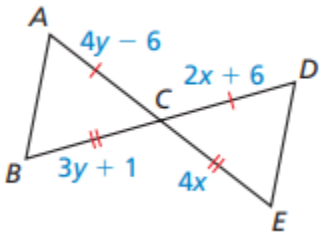


11. **Given** $\overline{AB} \cong \overline{CD}, \overline{AB} \parallel \overline{CD}$
Prove $\triangle ABC \cong \triangle CDA$



Use a two-column proof to prove that $\Delta\, ABC \cong \Delta DEC$. *Then find the values of x and y. Show all work for full credit.*

14.



CYU Reflection: *How far can you go: basic, intermediate, or advanced?*

Rate your mastery level!

How confident are you with the skills this CYU covered? Circle the score you would give yourself.