

Name _____ Date _____ Pd _____

7.4 Rectangles 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
Classifying quadrilaterals	1, 2		
Properties of rectangles	3 - 8	15	16 - 22
Rectangle or NOT?	9, 10		
Rectangle diagonals	11 - 14		

Classify the quadrilateral. Explain your reasoning with properties.

1.



2.



For any rectangle $WXYZ$, decide whether the statement is always or sometimes true. Draw a diagram and explain your reasoning.

3. $\angle W \cong \angle X$

4. $\overline{WX} \cong \overline{YZ}$

5. $\overline{WX} \cong \overline{XY}$

6. $\overline{WY} \cong \overline{XZ}$

7. $\overline{WY} \perp \overline{XZ}$

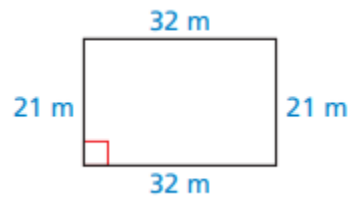
8. $\angle WXZ \cong \angle YXZ$

Determine whether the quadrilateral is a rectangle.

9.



10.



Find the lengths of the diagonals of the rectangle WXYZ.

11. $WY = 6x - 7$, $XZ = 3x + 2$

12. $WY = 14x + 10$, $XZ = 11x + 22$

13. $WY = 24x - 8$, $XZ = -18x + 13$

14. $WY = 16x + 2$, $XZ = 36x - 6$

15. **ERROR ANALYSIS** Quadrilateral PQRS is a rectangle. Describe and correct the error in finding the value of x.

$m\angle QSR = m\angle QSP$
 $x^\circ = 58^\circ$
 $x = 58$

The diagonals of rectangle QRST intersect at P. Given that $m\angle PTS = 34^\circ$ and $QS = 10$, find the indicated measure.

16. $m\angle QTR$

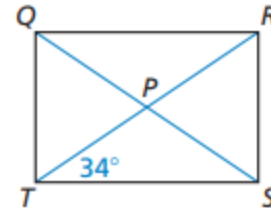
17. $m\angle QRT$

18. $m\angle SRT$

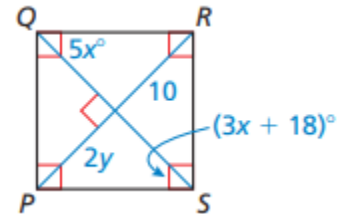
19. QP

20. RT

21. RP



22. **MATHEMATICAL CONNECTIONS** Classify the quadrilateral. Explain your reasoning. Then find the values of x and y.



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.

1 2 3 4 5 6 7 8
 Basic Intermediate Advanced Solved ALL!