Name Date	Pd
-----------	----

## **Quiz Review 3.1 - 3.3: Lines and Transversals**

☑ Use when you get it right all by yourself

 ${m S}$  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

 ${\it G}$  Use when you completed the problem in a group

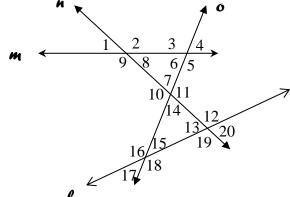
X Use when a question was attempted but wrong (get help)

NUse when a question was not even attempted

CONCEPTS	BASIC	INTERMEDIATE	ADVANCED
AEA	1 - 5	6 - 11	16 - 19
AIA	1 - 5	6 - 12	15 - 19
Corr. ∠'s	1 - 5	6 - 11	15 - 19
SSIA	1 - 5	6 - 11, 13	15 - 19
SSEA	1 - 5	6 - 11, 14	15 - 19
Transversal	1 - 11	6 - 14	15 - 22
Parallel Lines	6 - 11	6 - 14	14 - 22
System of Equations		13	
Quadratic Formula		12	
Factoring Quadratics		12	
Congruent Angles			21, 22
Transitive POE/POC			20, 21
Given			20 - 22
AIA Thm & Converse			20
Corr. ∠'s Them & Converse			21
AEA Thm & Converse			20
If-then format		13	20 - 22
Angle Bisector			21
Symmetric POE/POC			22
Def of Congruent Angles			22
Substitution POE			22
Subtraction POE			22
SSIA Thm & Converse		13	22
SSEA Thm & Converse			
Vertical Angles	12		15
Linear Pair Postulate			15

Identify the angle pair indicated <u>and</u> the transversal forming the angle pair, respectively. If no relation exists between the angles given, write "none".

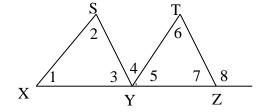
- 1. ∠9 and ∠7\_\_\_\_\_
- 2. ∠2 and ∠3 \_\_\_\_\_
- 3. ∠4 and ∠17\_\_\_\_\_
- 4. ∠13 and ∠16\_\_\_\_\_
- 5. ∠8 and ∠13 \_\_\_\_\_



In the figure,  $m \angle 6 = 72^{\circ}$  and  $m \angle 8 = 106^{\circ}$ . If  $\overline{XS} \parallel \overline{YT}$  and  $\overline{SY} \parallel \overline{TZ}$ , find the indicated angle measures.

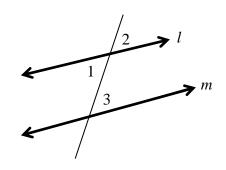
(HINT: find all angle measures first then fill in answers, ALSO mark your given.)

- 6. m∠1 = \_\_\_\_\_
- 9. m∠4 = \_\_\_\_\_
- 7. m∠2 = \_\_\_\_\_
- 10. m∠5 = \_\_\_\_\_
- 8. m∠3 = \_\_\_\_\_
- 11. m∠7 = \_\_\_\_\_



12. Determine the value(s) for x for which  $l / \! / \! m$  if

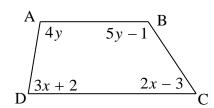
$$m \angle 1 = (x^2 - 7x)^{\circ}$$
  
$$m \angle 3 = (7x + 32)^{\circ}$$



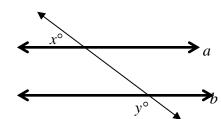
13.  $\overline{AB} \parallel \overline{DC}$ . Find x and y and give the geometric reason for your algebraic set up.

$$x =$$
\_\_\_\_\_  $y =$ \_\_\_\_\_

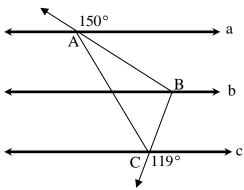
Geometric Reason: \_\_\_\_\_



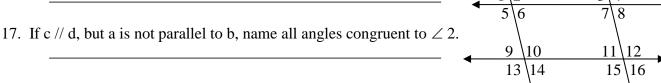
14. If a/b, state the value of y in terms of x.



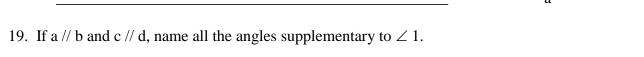
15. Given a  $\|b\|$  c. Which is larger, m $\angle$ ABC or m $\angle$ BAC + m $\angle$ BCA? Justify your answer with computations.



16. If a // b, but c is not parallel to d, name all angles congruent to  $\angle$  2.



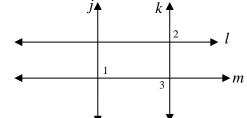
18. If a // b and c // d, name all the angles congruent to  $\angle$  1.



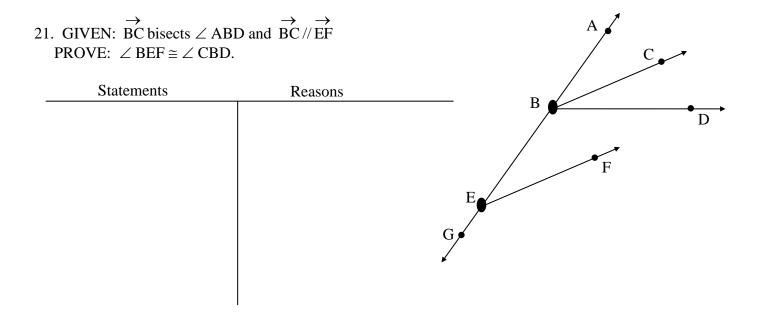
Be sure to draw a two-column proof. Label the statements and reasons. Then number each statement and reason when solving the proof. Once you write the statements MARK IT ON THE DIAGRAM!

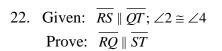
20. Given:  $l \setminus m$ ,  $\angle 1 \cong \angle 2$ 

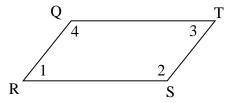
Prove:  $j \setminus k$ 

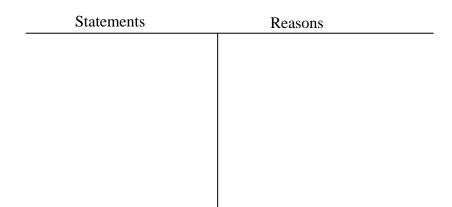


Statements Reasons









**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

