

For #5-8, name the transversal that forms each pair of angles then identify the relationship of the angle pair. *or no name.*

5. $\angle 3$ and $\angle 10$ Transversal: _____

Relationship: _____

6. $\angle 2$ and $\angle 12$ Transversal: _____

Relationship: _____

7. $\angle 8$ and $\angle 14$ Transversal: _____

Relationship: _____

8. $\angle 9$ and $\angle 16$ Transversal: _____

Relationship: _____

For #9-20, refer to the image at the right. Identify each pair of angles as *alternate interior*, *alternate exterior*, *corresponding*, *consecutive interior*, *vertical*, *linear pair* or *no relationship*.

9. $\angle 1$ and $\angle 7$

10. $\angle 2$ and $\angle 10$

11. $\angle 8$ and $\angle 9$

12. $\angle 1$ and $\angle 12$

13. $\angle 3$ and $\angle 12$

14. $\angle 4$ and $\angle 10$

15. $\angle 5$ and $\angle 7$

16. $\angle 9$ and $\angle 11$

30. If $m\angle 2 = 4x + 7$ and $m\angle 3 = 5x - 13$, find $m\angle 3$. Show all work.

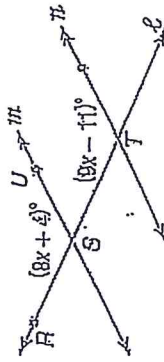
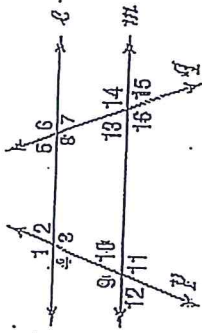
$\angle 3 =$ _____

Name _____
 Hvr # 10

32. Find x and $m\angle RSU$ so that $m \parallel n$. Show all work.

$x =$ _____

$m\angle RSU =$ _____



For #33-36, given the following information, determine which lines, if any, are parallel. State the Theorem that justifies your answer.

33. $\angle 6 \cong \angle 3$ Parallel Lines: _____ & _____

Theorem: _____

34. $\angle 4 \cong \angle 13$ Parallel Lines: _____ & _____

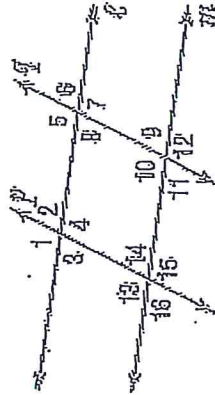
Theorem: _____

35. $m\angle 14 + m\angle 10 = 180$ Parallel Lines: _____ & _____

Theorem: _____

36. $\angle 1 \cong \angle 7$ Parallel Lines: _____ & _____

Theorem: _____



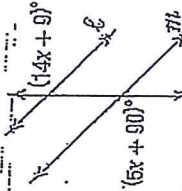
For #37-38, find x so that $l \parallel m$. Identify the relationship between the angles. Show all work.

37. $x =$ _____

Angle Relationship: _____

38. $x =$ _____

Angle Relationship: _____



40. In the drawing, $d \parallel e$ and $a \parallel c$. Find the values for v, w, x, y and z .

