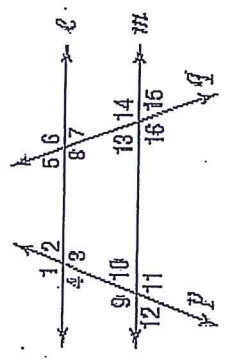


HW #8

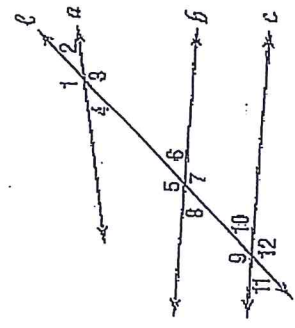
For #5-8, name the transversal that forms each pair of angles then identify the relationship of the angle pair.

- 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: _____

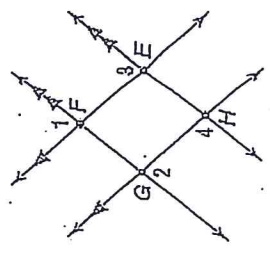


For #9-20, refer to the image at the right. Identify each pair of angles as alternate interior, alternate exterior, corresponding, consecutive interior, vertical, linear pair or no relationship.

- 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 $\angle 11$ _____



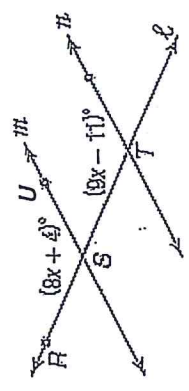
30. If $m\angle 2 = 4x + 7$ and $m\angle 3 = 5x - 13$, find $m\angle 3$. Show all work.



$\angle 3 =$ _____

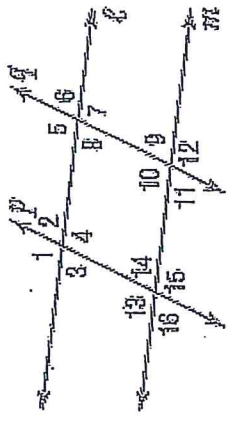
32. Find x and $m\angle RSU$ so that $m \parallel n$. Show all work.

$x =$ _____
 $m\angle RSU =$ _____



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

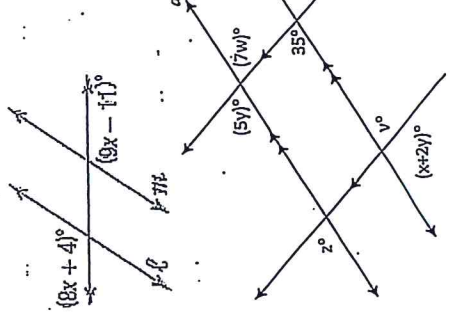
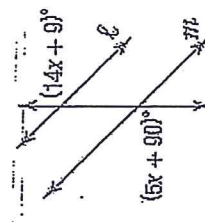
- 33. $\angle 16 \cong \angle 3$ Parallel Lines: _____ & _____ Theorem: _____
- 34. $\angle 4 \cong \angle 13$ Parallel Lines: _____ & _____ Theorem: _____
- 35. $m\angle 14 + m\angle 10 = 180$ Parallel Lines: _____ & _____ Theorem: _____
- 36. $\angle 1 \cong \angle 7$ Parallel Lines: _____ & _____ Theorem: _____



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

- 37. $x =$ _____
- 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 .