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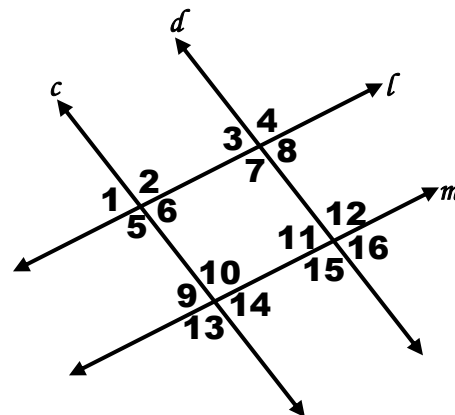
TEST #3 REVIEW: Parallel & Perpendicular Lines**PART 1: Parallel Lines & Angles**

Draw a picture for each of the following terms. You may want to refer to your notes to do this and you will want to use colors to distinguish the angle pairs.

1. Parallel Lines	
2. Linear Pair	
3. Vertical Angles	
4. Transversal:	
5. Alternate Interior/Exterior Angles:	
6. Same-Side Interior/Exterior Angles:	
7. Corresponding Angles:	

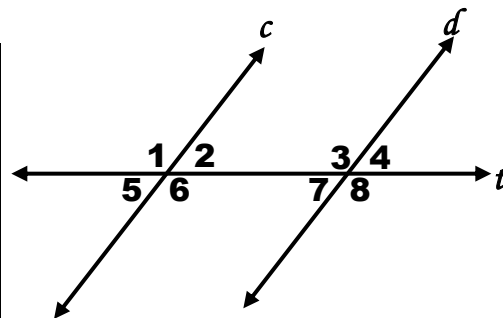
Using the figure below, 1st name by letter the line that forms the transversal for each pair of angles, then identify the special angle pair.

8. _____; _____	$\angle 1$ and $\angle 8$
9. _____; _____	$\angle 6$ and $\angle 8$
10. _____; _____	$\angle 7$ and $\angle 12$
11. _____; _____	$\angle 10$ and $\angle 11$



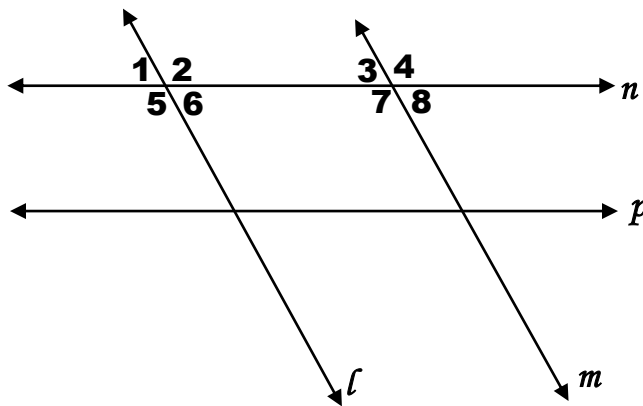
In the figure below, $c \parallel d$. Classify each of the following angle pairs, and tell whether they are congruent or supplementary.

12. _____; _____	$\angle 1$ and $\angle 3$
13. _____; _____	$\angle 6$ and $\angle 3$
14. _____; _____	$\angle 1$ and $\angle 8$
15. _____; _____	$\angle 7$ and $\angle 4$
16. _____; _____	$\angle 5$ and $\angle 8$
17. _____; _____	$\angle 2$ and $\angle 1$
18. _____; _____	$\angle 2$ and $\angle 3$



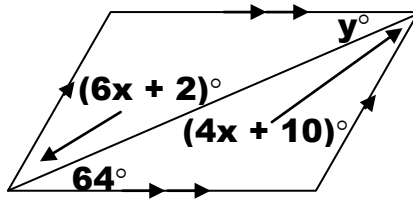
In the figure below, $l \parallel m$, $n \parallel p$ and $m\angle 1 = 55^\circ$. Find the measure of each angle.

19. _____	$m\angle 2 = ?$
20. _____	$m\angle 3 = ?$
21. _____	$m\angle 4 = ?$
22. _____	$m\angle 5 = ?$
23. _____	$m\angle 6 = ?$
24. _____	$m\angle 7 = ?$
25. _____	$m\angle 8 = ?$

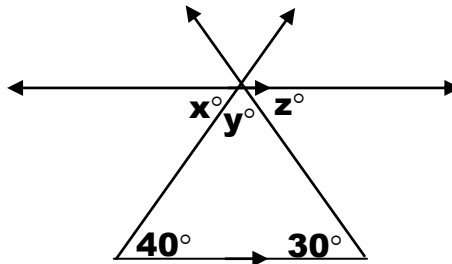


PART 2: MORE PARALLEL LINES

26. $x =$ _____
 $y =$ _____



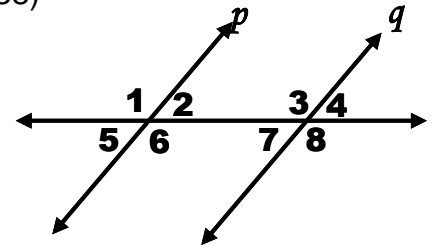
27. $x =$ _____
 $y =$ _____
 $z =$ _____



Find the $m\angle 1$ if $p \parallel q$.

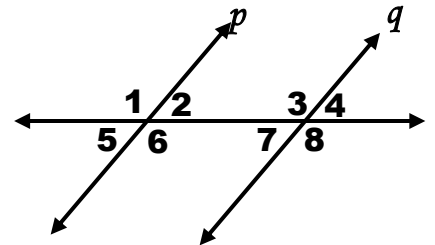
28. $m\angle 1 =$ _____

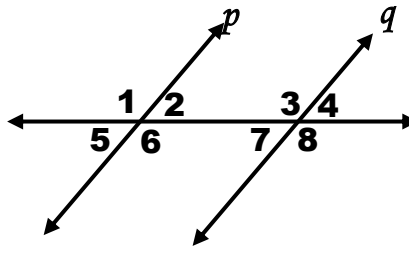
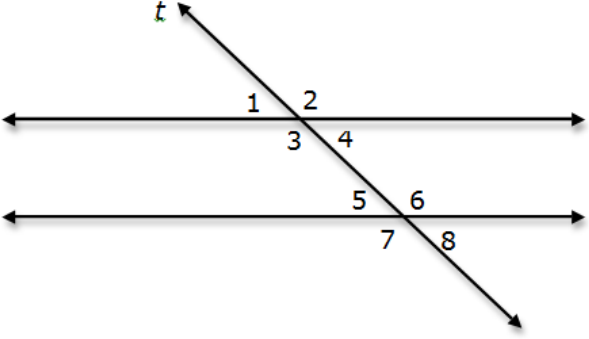
$m\angle 1 = (3x - 8)^\circ$ and $m\angle 8 = (5x - 38)^\circ$



29. $m\angle 1 =$ _____

$m\angle 1 = (2x)^\circ$ and $m\angle 3 = (3x - 25)^\circ$



30. $m\angle 1 =$ _____	$m\angle 3 = (3x+20)^\circ$ and $m\angle 2 = (5x+8)^\circ$ 
31. _____	<p>Lines r and s are cut by a transversal as shown below. If you know that the lines are parallel, then which of the following angle pairs must be congruent?</p> <div style="border: 1px solid black; padding: 5px; display: inline-block; margin-right: 20px;"> <p>I. $\angle 1$ and $\angle 4$ II. $\angle 3$ and $\angle 5$ III. $\angle 1$ and $\angle 2$ IV. $\angle 2$ and $\angle 7$</p> </div> 

PART 3: WRITING EQUATIONS OF PARALLEL & PERPENDICULAR LINES

Determine whether the lines are parallel, perpendicular or neither.

32. _____	$-3x + 2y = 5$, $6x - 4y = 8$
33. _____	$y = 4x - 3$, $5x + 2y = 1$
34. _____	\overline{AB} and \overline{CD} $A(3, 5)$ $B(4, 7)$ $C(7, 0)$ $D(2, 10)$

35. _____	Find the equation of a line perpendicular to $y = \frac{-3}{4}x - 8$ and passing through $(-3, 2)$.
36. _____	A line perpendicular to $3x + 2y = 10$ and goes through the point $(3, 8)$.
37. _____	A line parallel to $y = \frac{-1}{4}x + 4$ and goes through the point $(4, 1)$.
REVIEW	
38. _____	\overrightarrow{YX} bisects $\angle WYZ$. Given $m\angle WYX = 26^\circ$, find $m\angle WYZ$.