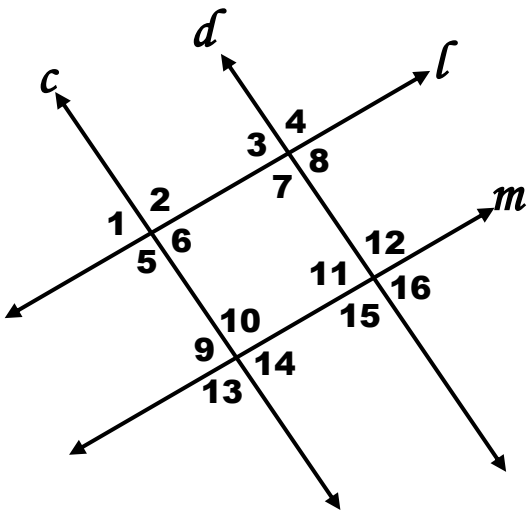
Review: **PARALLEL LINES & ANGLES**

NAME: _____ DATE: _____ PERIOD: _____

PART 1: IDENTIFYING ANGLE PAIRS

For #1 – 4, use the figure to state the transversal that forms each pair of angles, then identify the special angle pair named.



1. ∠1 and ∠13 _____; _____

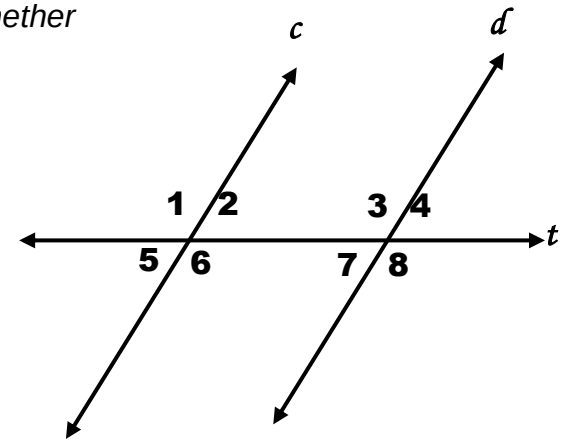
2. ∠5 and ∠4 _____; _____

3. ∠7 and ∠15 _____; _____

4. ∠14 and ∠11 _____; _____

PART 2: PARALLEL LINES AND ALGEBRA

*For #5 – 10, use the figure on the right in which line **c** ∥ line **d** to classify each of the following angle pairs, and tell whether they are congruent or supplementary.*



5. ∠1 and ∠4 _____

_____

6. ∠6 and ∠1 _____

_____

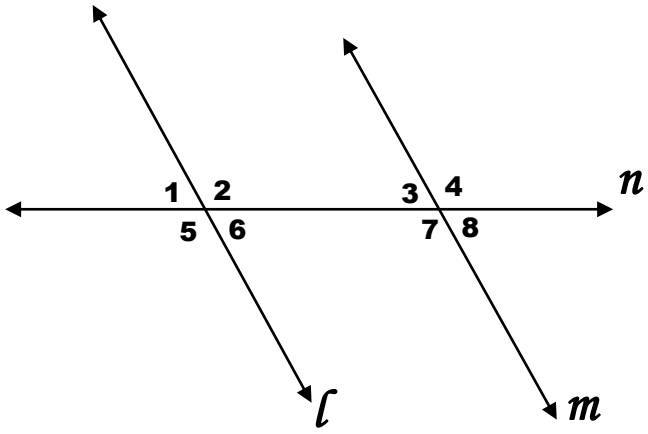
7. ∠6 and ∠8 _____ ; _____

8. ∠5 and ∠4 _____ ; _____

9. ∠2 and ∠7 _____ ; _____

10. ∠4 and ∠3 _____ ; _____

For #11 – 17, use the figure below in which line l ∥ line m, line and $m\angle 1 = 35°$ to find the measure of each angle.



11. m∠2 = _____

12. m∠3 = _____

13. m∠4 = _____

14. m∠5 = _____

15. m∠6 = _____

16. m∠7 = _____

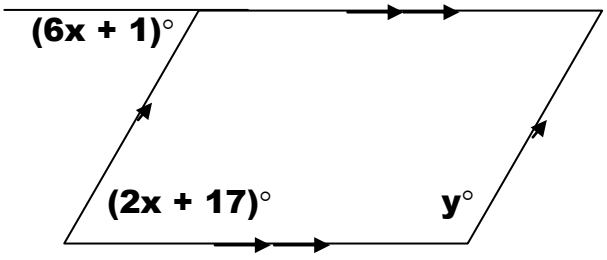
17. m∠8 = _____

PART 3: PARALLEL LINES & ALGEBRA

*Determine the value of **x** and **y** using the parallelogram shown below.*

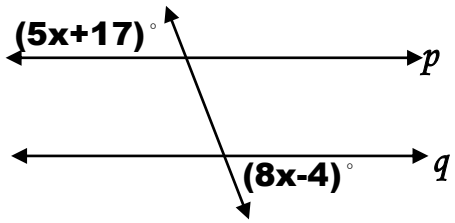
18. x = _____

y = _____

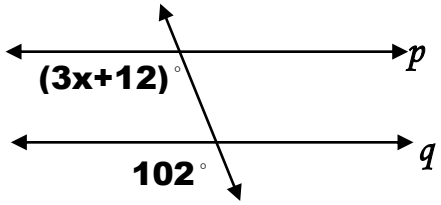


*For #19 -21, use the figures in which line **p** ∥ line **q** to find the value of **x**.*

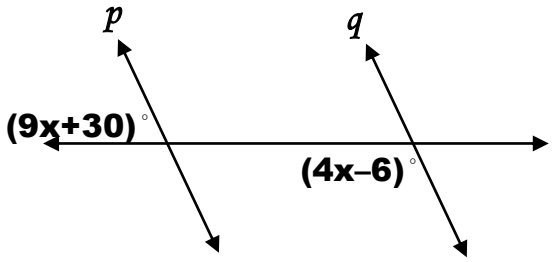
19. x = _____



20. x = _____

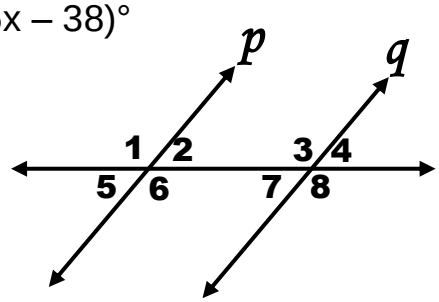


21. x = _____

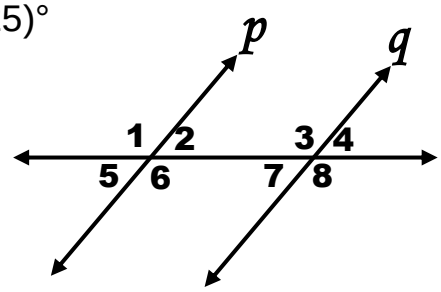


For #22 – 24, use the figures to find the value of x and ***m∠1*** *so that* ***p*** ∥ ***q***.

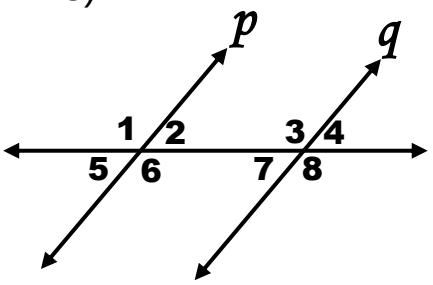
22. m∠1 = _____ m∠1 = (3x – 8)° and m∠8 = (5x – 38)°



23. m∠1 = _____ m∠1 = (2x)° and m∠3 = (3x – 25)°

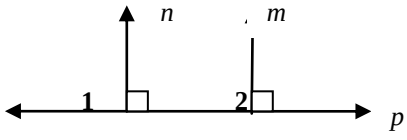


24. m∠1 = _____ m∠3 = (3x + 20)° and m∠2 = (5x + 8)°



25. Given: $m \perp p$; $n \perp p$

Prove: *m ll n*



Statements	Reasons
1. $m \perp p$	1.
2. $n \perp p$	2.
3.	3. Definition of Perpendicular Lines
4.	4. All Right Angles are Congruent
5. *m ll n*	5. Converse of _____ Angles are _____