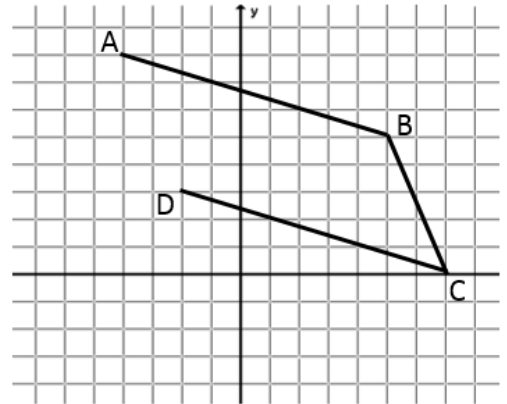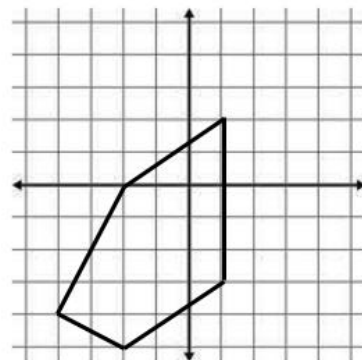**Unit 9 Coordinate Geometry Digital Learning Recovery Opportunity**

Use the graph to the right to answer questions 1 - 3.

1. _____ What is the slope of the missing side that

   would complete parallelogram ABCD?

2. _____ What is the y intercept of the line that would

   complete parallelogram ABCD?

3. _____ What is the length of segment AD?

4. _____ The line that passes through points (2, -1) & (5, 3) is _____ to the line that passes

   through points (-3, 4) & (0, -1)

     A) Parallel   B) Perpendicular   C) Coincidental   D) Neither

5. _____ Find the missing endpoint if the midpoint is (-2, 4) and the other endpoint is (-6, 1).

6. _____ Partition segment $\overline{AB}$ by the given ratio: A (-4, -6) & B (-2, 10); Ratio: 3:5

Use the figure to the right to answer questions 7 & 8

7. _____ What is the perimeter?

8. _____ What is the area?

9. What is the equation of the line parallel to the line y = -5x + 2 and passes through the point (2, -13)

$$y = \text{_____}$$

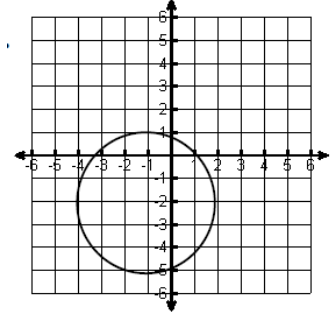10. A diameter of a circle has endpoints (-2, 6) and (10, 6). What is the equation of the circle?

_____

11. What is the equation of a circle with a center of (3 , - 5) that is tangent to the line x = -1?

_____

12. What are the coordinates of the center of the following circle $(x + 4)^2 + (y - 1)^2 = 5$?

_____

13. What equation is graphed to the right?

_____

14. What is the equation of the circle with the center (-5 , 2) and a radius of 4?

_____

15. What is the center of the following circle. $x^2 + y^2 + 2x - 4y - 12 = 0$

_____

16. If a polygon is a rhombus then it is _____ a rectangle. (Sometimes / Always / Never

Use the following coordinates to answer questions 17 – 20

Quadrilateral A (-3, 0), B (5, -4), C (-1, -6), D (-9, -2)

17. Find the exact length of all four sides of quadrilateral ABCD?

18. Find the slope of all four sides of quadrilateral ABCD?

19. What is the best way to classify quadrilateral ABCD?

_____

20. Explain your answer.

	Exact Length	Slope
AB		
BC		
CD		
DA		