Name	Due Date	Period
Unit 14 Review: Lines and Quadrilaterals		
Give an example for each of the following and use appropriate notation:		
1) Ray	2) Line Segment	3) Angle
4) Circle	5) Line	6) Parallel Lines

For each of the following examples find a line parallel AND perpendicular to the given line through the same point. Ie. Given the line y = 2x + 4 find the line perpendicular through the point (4,2) and the line parallel through the point (4,2).

- 7) Find the equations of the lines || and \perp to y = 2x 8 through the point (2,8).
- 8) Find the equations of the lines that pass through (-1,2) and are || and \perp to $y = -\frac{1}{3}x + 4$

9) What is the equation of the lines that pass through (3,7) and are || and \perp to the line y = 3x - 2

10)The line l and m contains the point (3,4) line l is \perp and line m is \parallel to a line that passes through (5,3) and (-2, -4). Write the equations of line l and m. 11) Graph a line that is perpendicular to the line on the graph that passes through the point (-2,0). Place the digits and a symbol in the boxes to indicate the slope of this line.



- 12) Anne drew the function y = 2x + 5. Use the add arrow tool to draw a line to draw a line that is
 - a. parallel to Anne's function



b. perpendicular to Anne's function

Find the perimeter and area of the indicated figures:

- 13) A polygon with the vertices at *A* (-2,1), *B* (1,5), *C* (5,5) and *D* (2,1)?
- 14) A triangle is defined by the points A(-2,1), B(1,5), C(8,9).

Quadrilaterals:

- 15) Which property is sufficient to prove that a parallelogram is a rectangle:
 - a. Opposite sides must be congruent
 - b. The diagonals must bisect each other
 - c. The diagonals must be congruent
 - d. The diagonals must be perpendicular
- 16) Porter claims the figure below is a parallelogram. If he's correct, what are the coordinates of point E?



- 17) Three vertices of a rectangle are at (-90, -52), (-70, -2), and (30, -42) on the coordinate grid. Where is the fourth vertex located?
- 18) Quadrilateral *WXYZ* has vertices *W*(1,4), *X*(5,1), *Y*(8,4), and *Z*(5,7). What type of Quadrilateral is *WXYZ*?

19) Draw a quadrilateral that is **NOT** a rectangle. Calculate the perimeter of your quadrilateral to the nearest tenth of a unit. (You do not need to fill all the places if your quadrilateral has a perimeter that is less than 1,000.)

