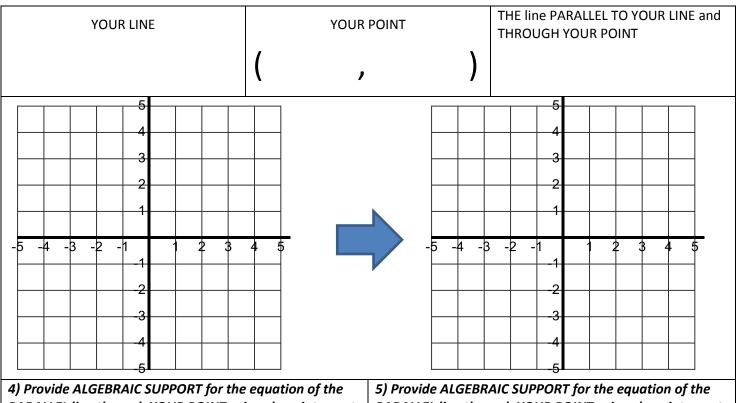
Goal: Write the equation of a parallel or perpendicular line through a given point (graph paper provided)

Directions: 1) Graph YOUR line on both grids (you must plot all of the "nice" points using slope)

- 2) Plot YOUR point on both grids (use color to emphasize this point)
- 3) Plot THE PARALLEL LINE that passes through YOUR point ONLY ON THE GRID ON THE RIGHT



4) Provide ALGEBRAIC SUPPORT for the equation of the PARALLEL line through YOUR POINT using slope intercept form of the line

Note:y =mx+b is slope intercept form of the line

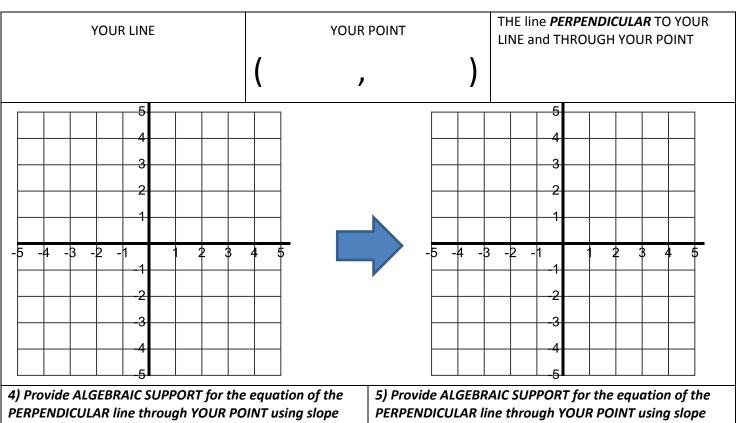
5) Provide ALGEBRAIC SUPPORT for the equation of the PARALLEL line through YOUR POINT using slope intercept form of the line using "modified" point slope form Note:  $y = m(x - x_1) + y_1$  is modified point slope form of

Note:  $y = m(x - x_1) + y_1$  is modified point slope form of the line

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Directions: 1) Graph YOUR line on both grids (you must plot all of the "nice" points using slope)

- 2) Plot YOUR point on both grids (use color to emphasize this point)
- 3) Plot THE PERPENDICULAR LINE that passes through YOUR point ONLY ON THE GRID ON THE RIGHT



intercept form of the line

Note:y =mx+b is slope intercept form of the line

intercept form of the line using "modified" point slope form

Note:  $y = m(x - x_1) + y_1$  is modified point slope form of the line