Pre-AP weekly project 1.5

- 1. Create and color a picture, using graph paper, of your first initial. Use block letters. (Examples of block letters are below.)
- 2. Label each line of your drawing with a number (Example: 1, 2, 3, ...)
- 3. Label each line as positive slope, negative slope, horizontal line, or vertical line.
- 4. Determine the equation for each line in the drawing. Put your information on the chart on the next page.



## 5. Answer the following questions:

- a. The slope for every vertical line is \_\_\_\_\_.
- b. The slope for every horizontal line is \_\_\_\_\_\_.
- c. Suppose you have the points (5,8) and (2,3). How do you create an equation in slope-intercept form that passes through these two points? (Make sure to show ALL your work so a friend could look at your work and see what you did.)

d. What is the equation of a line that has a slope of zero and a y-intercept of 4?

e. What is the equation of a line that has an undefined slope and an xintercept at -2?

f. What is the equation of a line that has a slope of 3 and a y-intercept of -3?

| Line<br># | Point<br>#1 | Point<br>#2 | Slope of<br>line (Pos,<br>Neg, Zero,<br>or<br>Undefined) | Slope (m)<br>SHOW WORK! | y-intercept (b)<br>SHOW WORK! | Equation of<br>line<br>y=mx +b |
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| Line<br># | Point<br>#1 | Point<br>#2 | Slope of<br>line (Pos,<br>Neg, Zero,<br>or<br>Undefined) | Slope (m)<br>SHOW WORK! | y-intercept (b)<br>SHOW WORK! | Equation of<br>line<br>y=mx +b |
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