NAME: $\qquad$ BLOCK: $\qquad$ DATE: $\qquad$

## UNIT 2 LESSON 1 - GRAPHING LINEAR FUNCTIONS

## PART 1 - X - AND Y - INTERCEPTS

Using graph paper provided, graph the two points listed for each question below. USE A RULER to connect the points and draw the line through both the $x$ and $y$ axes. After graphing, count slope and find both the $x$ and $y$ intercepts. As a reminder, the process for graphing a line by hand is to simply plot the points and draw a straight line through them using a ruler. Finally, fill in the chart below with the slope, $x$-intercept, and $y$-intercept.

|  | Two points | Slope | X-Intercept | Y-Intercept |
| :--- | :--- | :--- | :--- | :--- |
| 1. | $(4,6),(-4,2)$ |  |  |  |
| 2. | $(-4,-10),(8,5)$ |  |  |  |
| 3. | $(-2,10),(5,-4)$ |  |  |  |
| 4. | $(1,-2),(-2,-8)$ |  |  |  |
| 5. | $(-4,3),(4,-1)$ |  |  |  |

## PART 2 - SLOPE AND Y-INTERCEPT

Find the slope and $y$-intercept of each equation.
6) $y+3=x$
7) $2 y-10=-4 x$
8) $-5-y=-3 x$
9) $y=5 x$
10) $6-2 y=-x$
11) $5 y+10=-2 x$

## PART 3 - GRAPHING LINEAR EQUATIONS

Sketch the graph of each line.
12) $y=-2 x+2$

14) $y=\frac{1}{4} x+1$

16) $y=2 x$

13) $y=\frac{3}{5} x-4$

15) $y=-4$

17) $y=-3 x+1$


