Kuta Software - Infinite Algebra 2

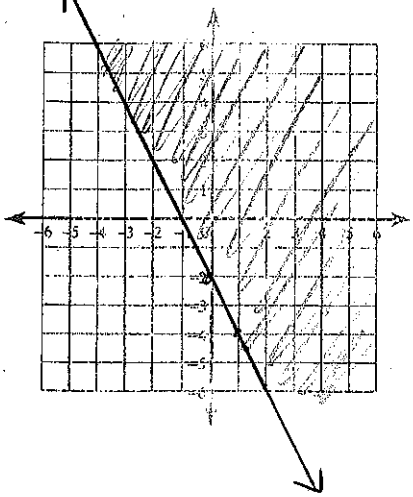
Name_____

Graphing Linear Inequalities

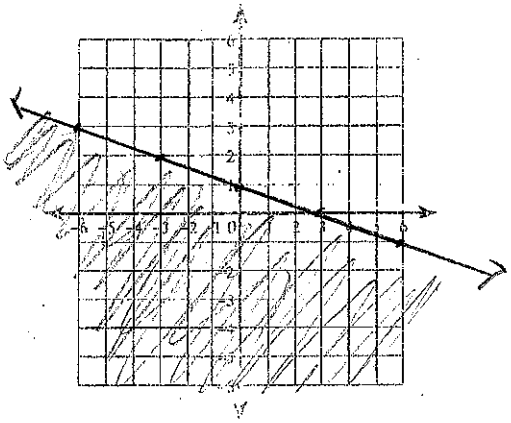
Date_____ Period____

Sketch the graph of each linear inequality.

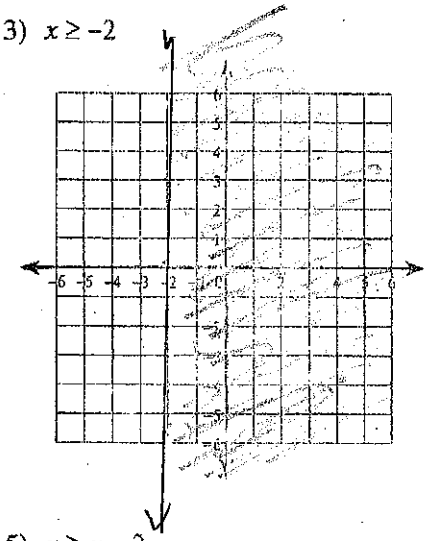
1) $y \geq -2x - 2$



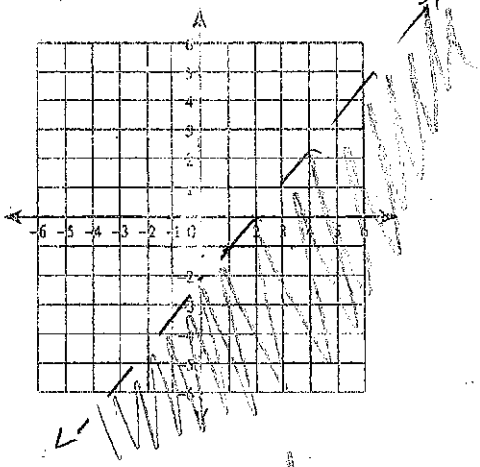
2) $y \leq -\frac{1}{3}x + 1$



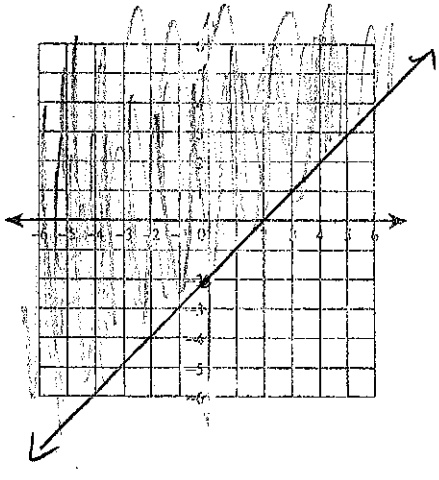
3) $x \geq -2$



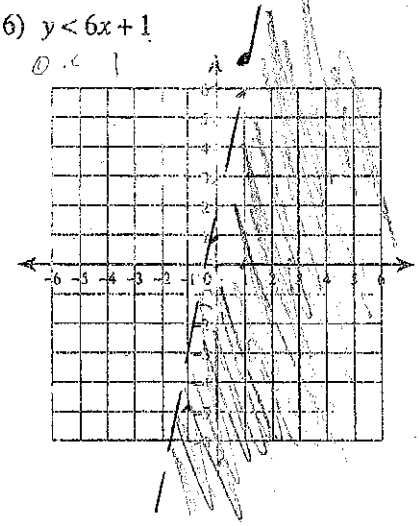
4) $y < x - 2$



5) $y \geq x - 2$

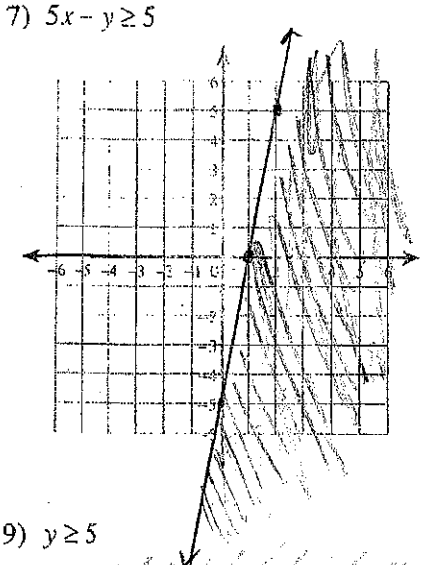


6) $y < 6x + 1$

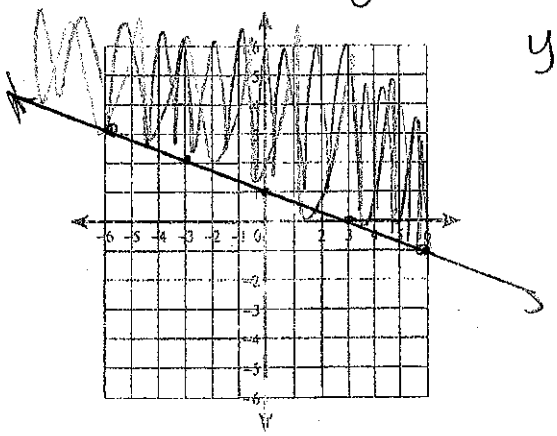


$5x - 5 \geq y$

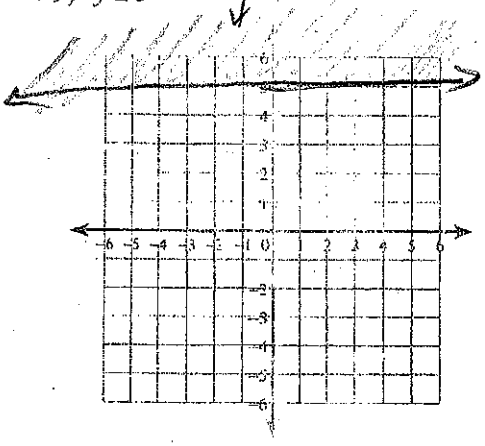
7) $5x - y \geq 5$



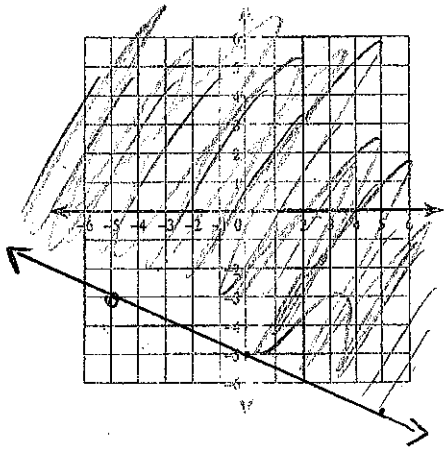
8) $x + 3y \geq 3$ $\quad 3y \geq 3 - x$ $\quad y \geq 1 - \frac{1}{3}x$



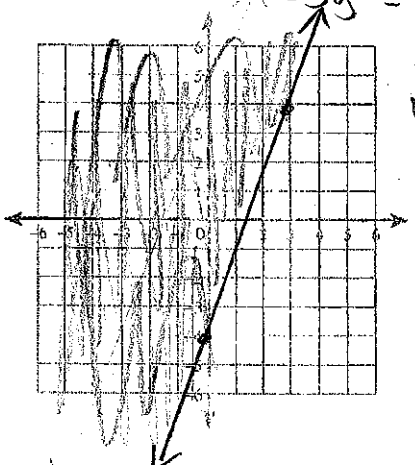
9) $y \geq 5$



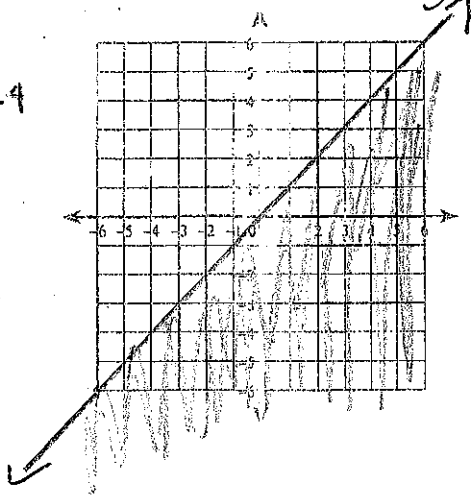
10) $2x - 5y \leq 10$ $\quad -5y \leq -2x + 10$ $\quad y \geq \frac{2}{5}x - 5$



11) $8x - 3y \leq 12$ $\quad -3y \leq -8x + 12$ $\quad y \geq \frac{8}{3}x - 4$



12) $x - y \geq 0$ $\quad x \geq y$



Critical thinking questions:

13) Name one particular solution to #11

14) Can you write a linear inequality whose solution contains only points with positive x-values and positive y-values? Why or why not?