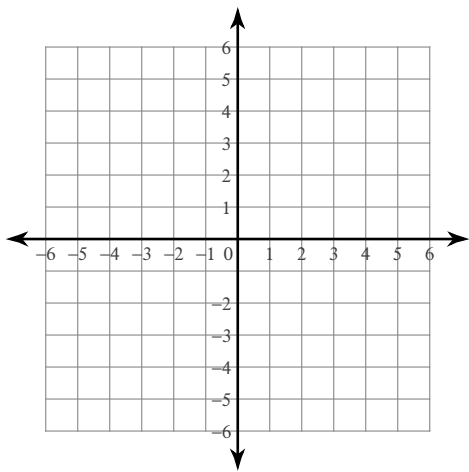


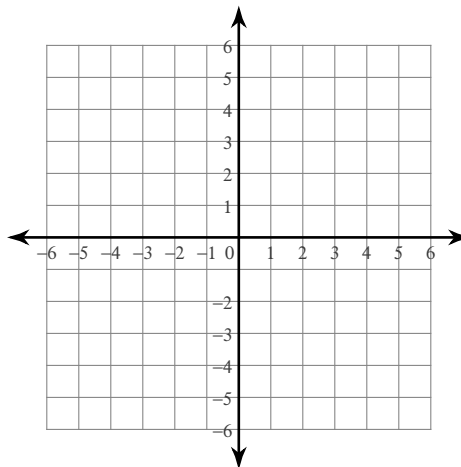
Graphing Linear Inequalities

Sketch the graph of each linear inequality.

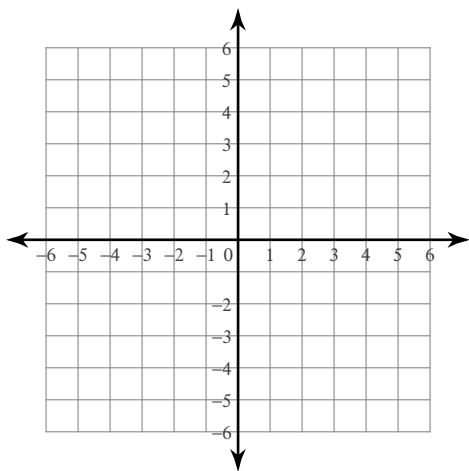
1) $y \geq -2x - 2$



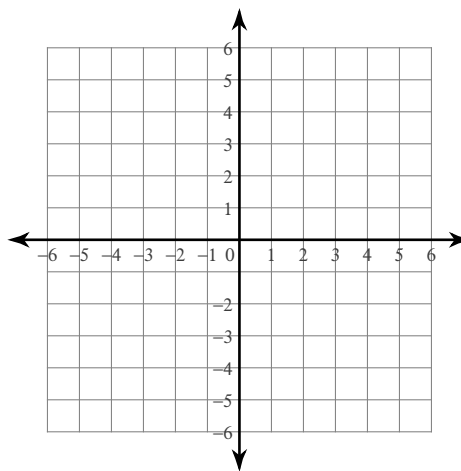
2) $y \leq -\frac{1}{3}x + 1$



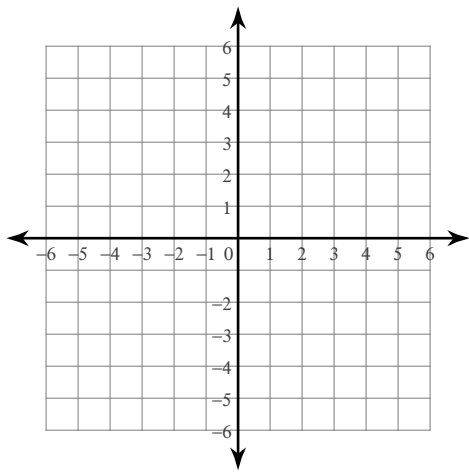
3) $x \geq -2$



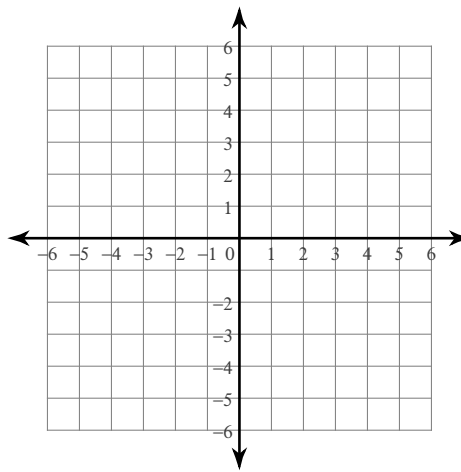
4) $y < x - 2$



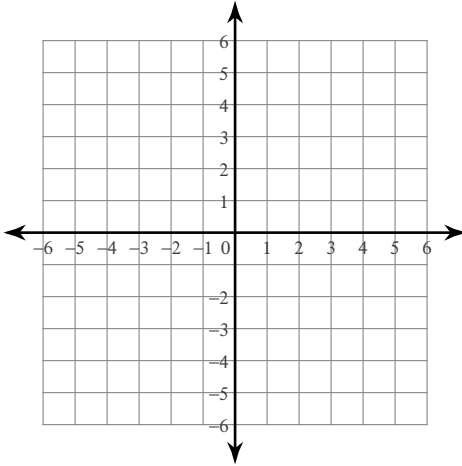
5) $y \geq x - 2$



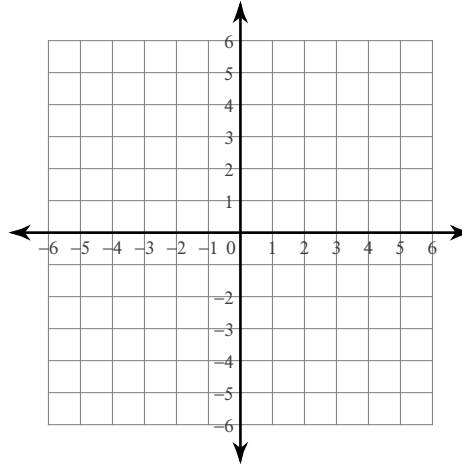
6) $y < 6x + 1$



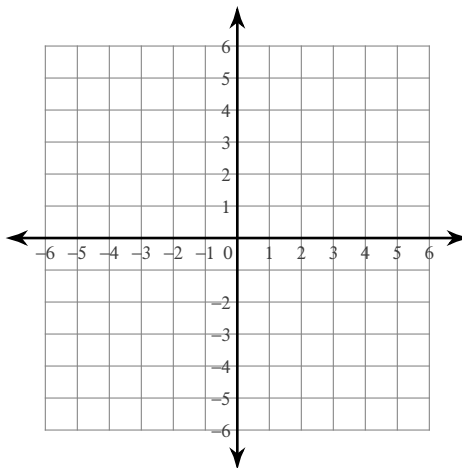
7) $5x - y \geq 5$



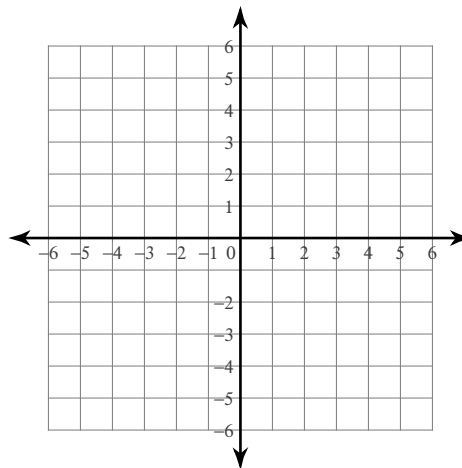
8) $x + 3y \geq 3$



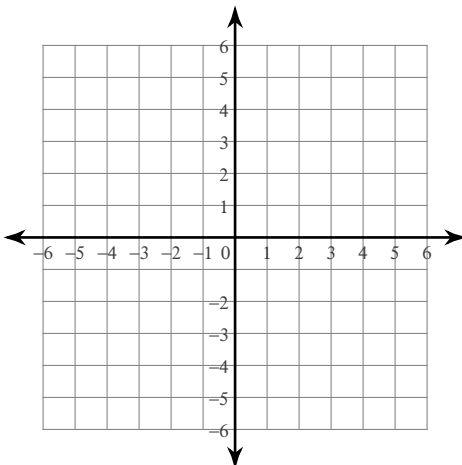
9) $y \geq 5$



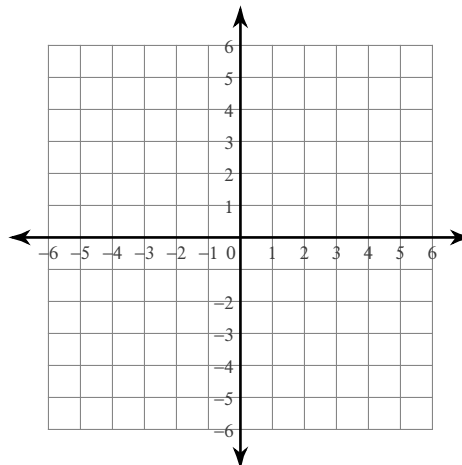
10) $2x - 5y \leq 10$



11) $8x - 3y \leq 12$



12) $x - y \geq 0$



Critical thinking questions:

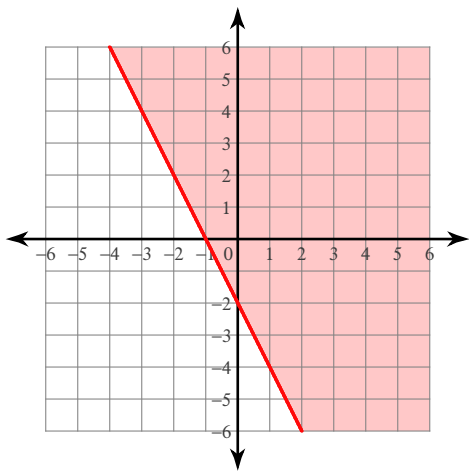
13) Name one particular solution to #11

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

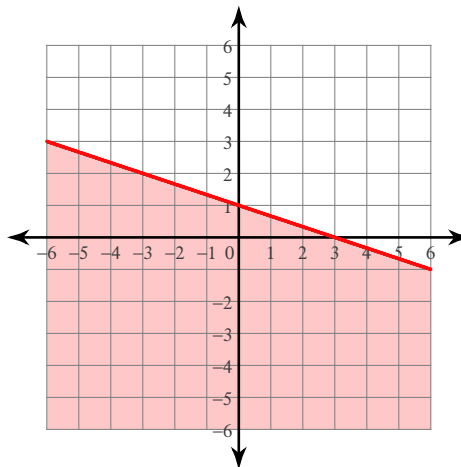
Graphing Linear Inequalities

Sketch the graph of each linear inequality.

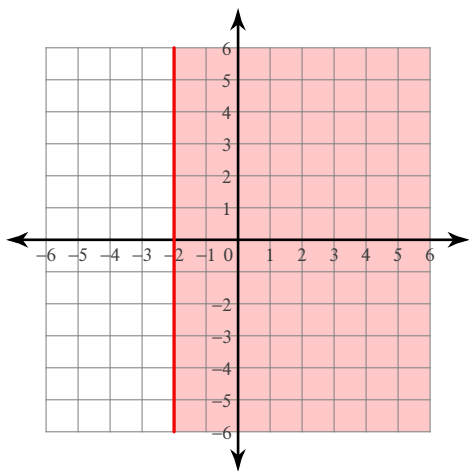
1) $y \geq -2x - 2$



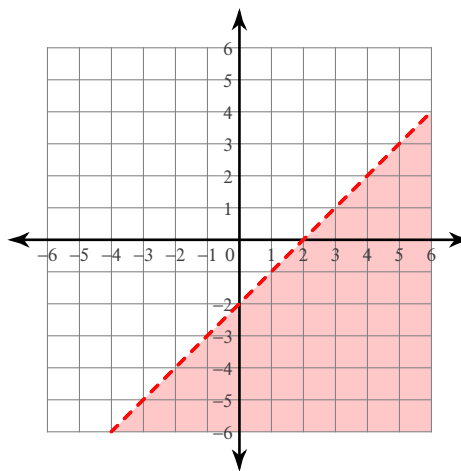
2) $y \leq -\frac{1}{3}x + 1$



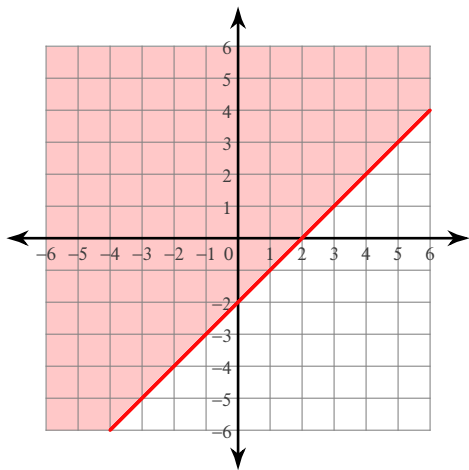
3) $x \geq -2$



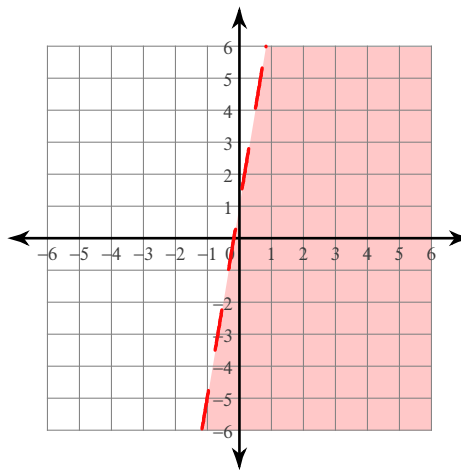
4) $y < x - 2$



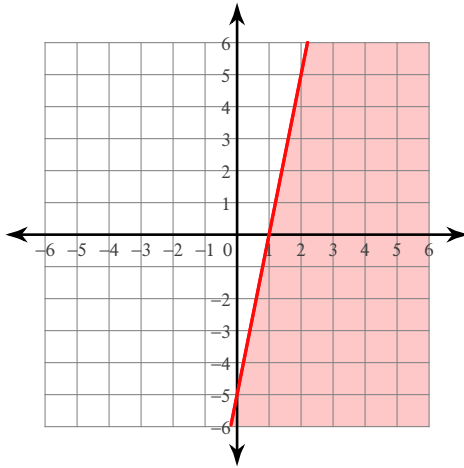
5) $y \geq x - 2$



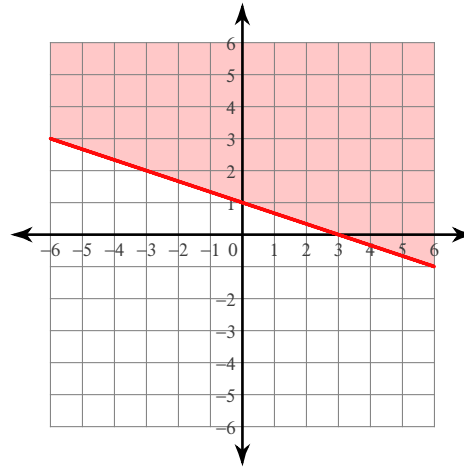
6) $y < 6x + 1$



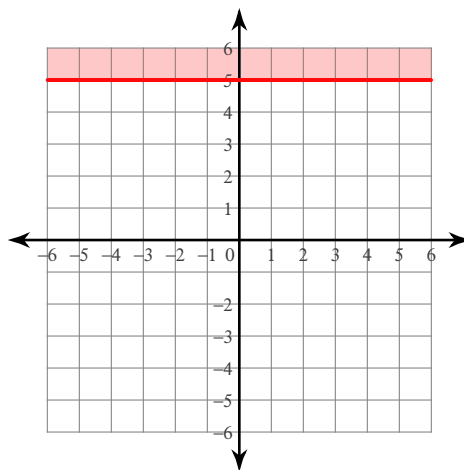
7) $5x - y \geq 5$



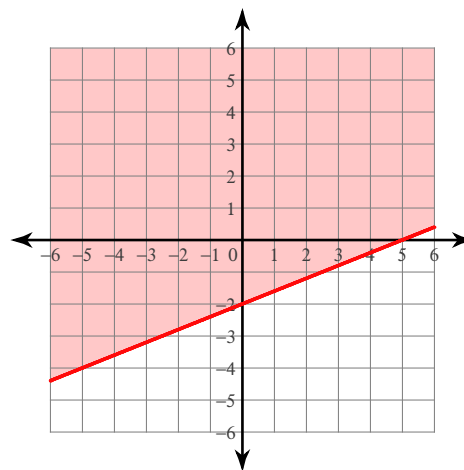
8) $x + 3y \geq 3$



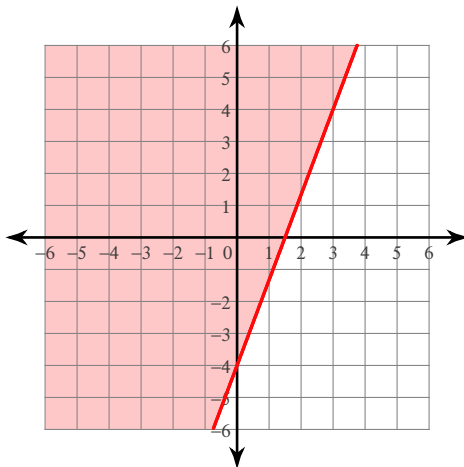
9) $y \geq 5$



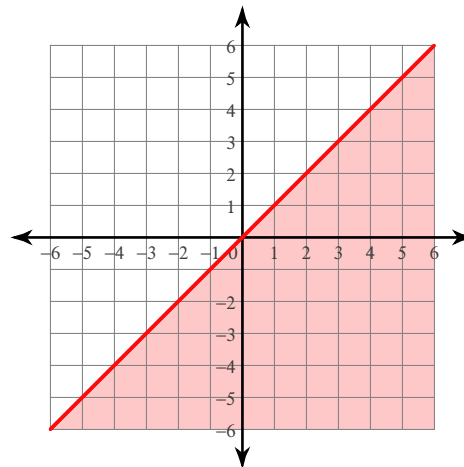
10) $2x - 5y \leq 10$



11) $8x - 3y \leq 12$



12) $x - y \geq 0$



Critical thinking questions:

13) Name one particular solution to #11

Any point in the shaded region or boundary. Ex: $(0, 0)$

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

No. No line can be in only the 1st quadrant.