AA PREP: LINEAR RELATIONSHIPS—GRAPHING LINEAR INEQUALITIES LECTURE

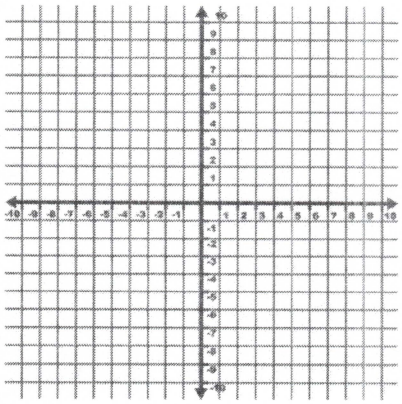
Graphing Linear Inequalities: Graphing an inequality starts by graphing the corresponding line. After graphing the line, there are two additional steps to remember.

1) Choose a point NOT on the line and see if it makes the inequality true. If the inequality is true, you will shade that side of the line. If it is false, you will shade the other side of the line.

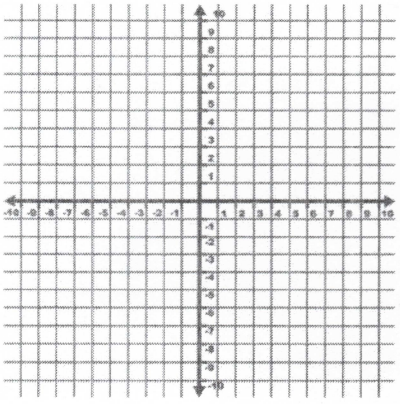
2) If the inequality is less than or equal to $(\leq)$ or greater than or equal to $(\geq)$, the line is drawn as a solid line. If the inequality is less than $(<)$ or greater than $(>)$, the line is drawn as a dashed line.

EX 1: Graph each linear inequality.

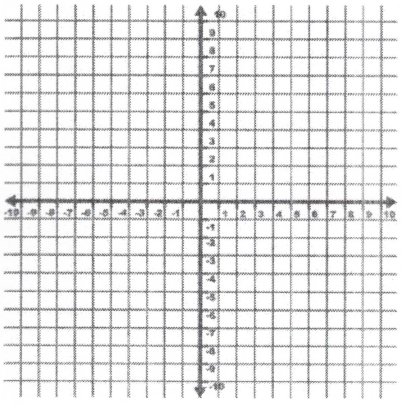
a) $x \geq 6$



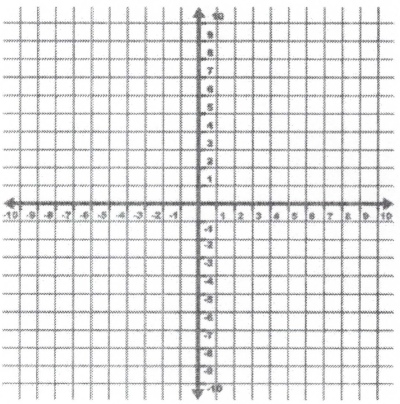
b) $y < \frac{1}{3}x$



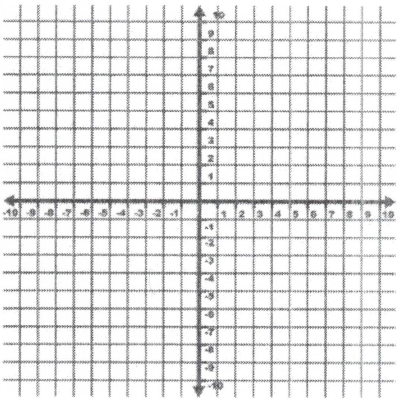
c) $y \leq -2x + 7$



d) $x + 2y > 4$



e) $y + 2 < \frac{1}{4}(x - 3)$



f) $-4 \leq y < 7$

