Name _____ Date _____

8A; Algebra 1 Period _____

How do we graph a Linear Inequality in Two Variables?

Procedure:

1) Make sure the inequality is similar in form to $y = mx + b$
2) Plot the points representing the graph of the inequality as if it was an equation.
3) After plotting the points you must connect them.

- If the inequality is _____ or _____ connect the points with a **dotted line.**
- If the inequality is _____ or _____ connect the points with a **solid line.**

4) Finally, you must shade the area representing the solution set of the inequality.

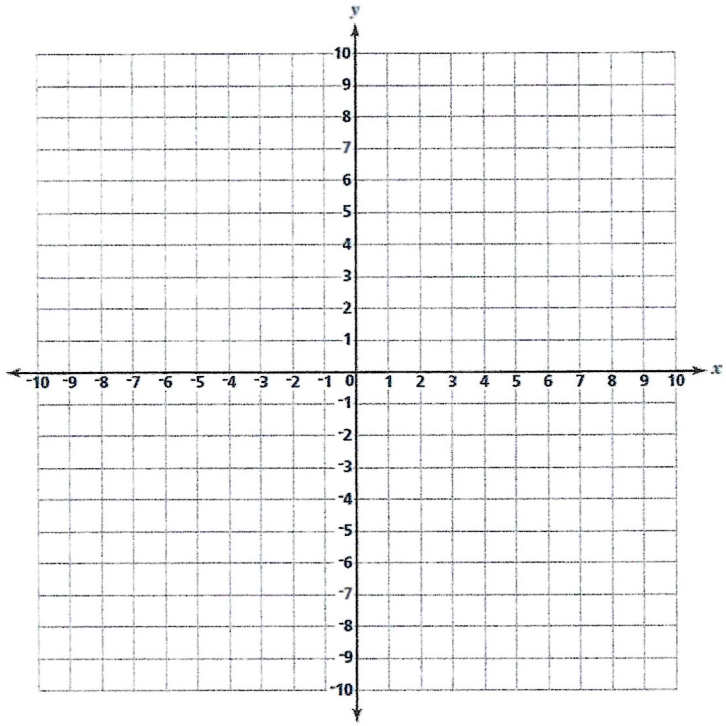
- If the inequality is _____ or _____ **shade above** the line.
- If the inequality is _____ or _____ **shade below** the line.

** You can also use a test point to check if you shaded in the correct direction!

Examples:

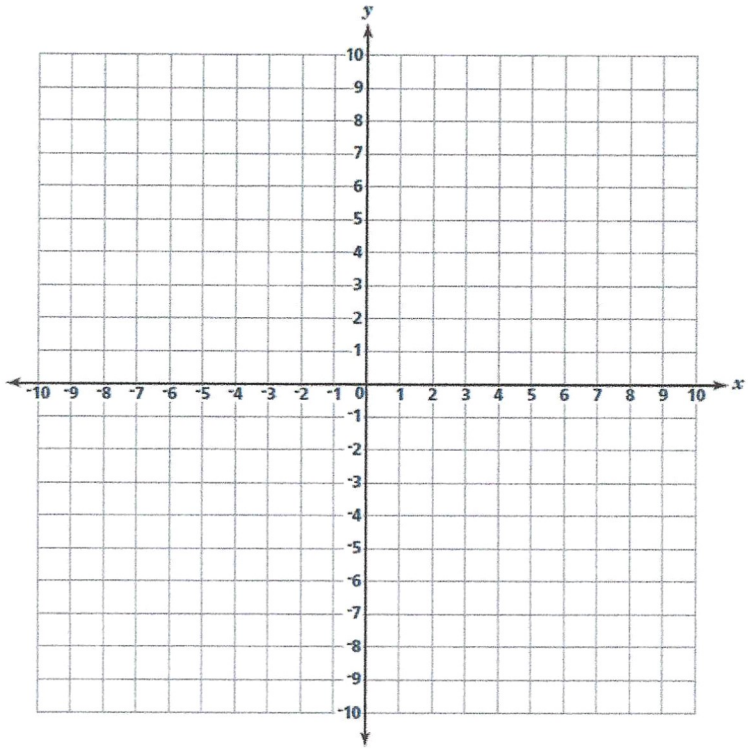
1) Graph the inequality:

$y - 2x \geq 2$



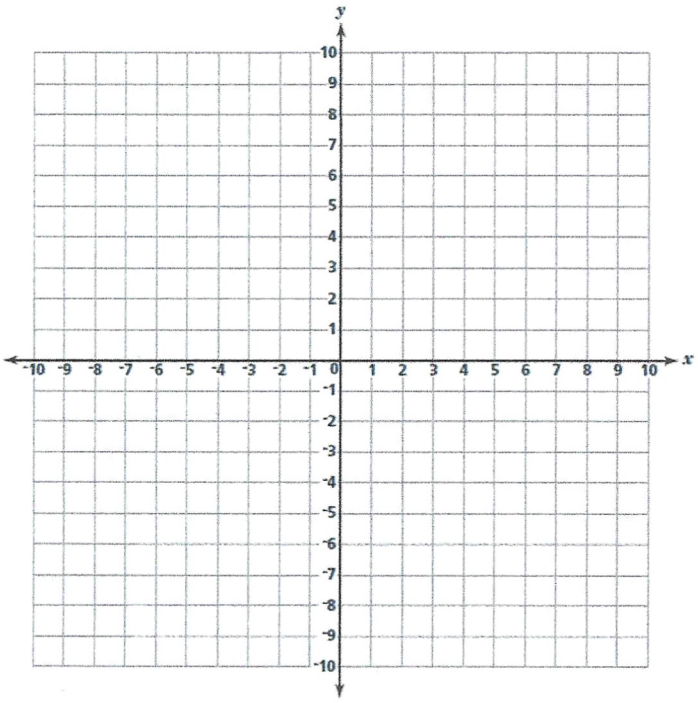
2) Graph the inequality :

$2x - 3y < 9$



3) Graph the inequality :

$y < 2$



4) Graph the inequality:

$x > 3$