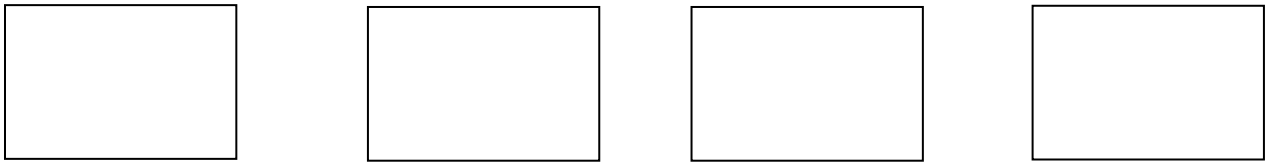
Name _____ Class _____

12-6: Graphing Inequalities in Two Variables Notes

Graphing One-Variable Linear Inequalities – OLD STUFF!

Inequality Symbols:



Check the following solutions for $x < 6$:

$x = 8$ $x = -4$ $x = 0$ $x = 6$ $x = 25$

One variable means one _____, but, while an equation means _____ one solution, an inequality means more than one _____. Visually, a one-dimensional solution would be graphed on a _____ _____.

The graphical solution for the example $x < 6$ is:

Check the following solutions for $y \geq 3$:

$y = 3$ $y = -4$ $y = -3$ $y = 0$ $y = -25$

The graphical solution for the example $y \geq 3$ is:

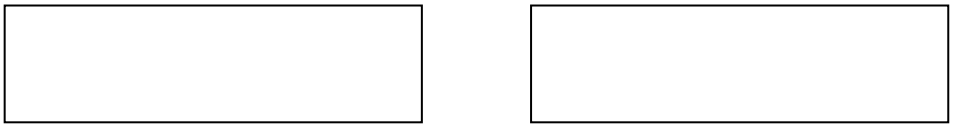
Graphing Two-Variable Linear Inequalities – NEW STUFF!

Check the following solutions for the 2-variable inequality $y > x + 4$ (note how the solutions look different):

(2, -9) (-3, 1) (0, 2) (-1, 3)

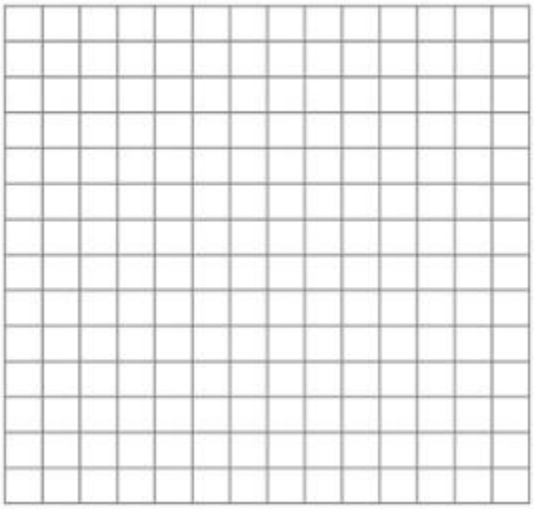
Visually, a two-dimensional solution would be graphed on a "_____ _____ _____," which we call a _____ _____ with an x-axis and a y-axis.

Inequality Symbols:



Name _____ Class _____

The graphical solution for the example $y > x + 4$ is:



Shading Check:

The graphical solution for the example $y \geq \frac{1}{2}x - 2$ is:

Shading Check:

The graphical solution for the example $y \leq 3x$ is:

Shading Check:

The graphical solution for the example $y < \frac{3}{4}x - 1$ is:

Shading Check: