

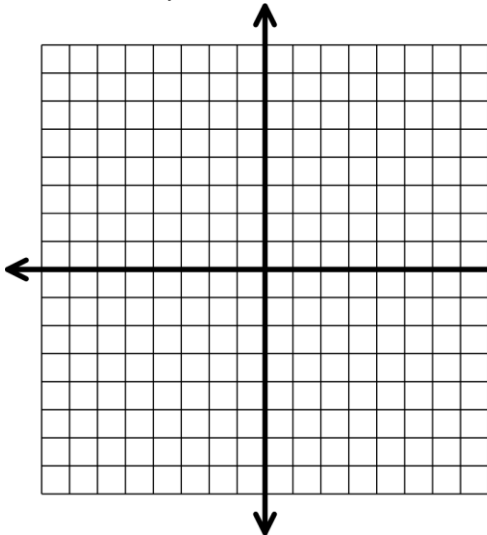
Linear Inequalities

Graph the solution set of the linear inequalities:

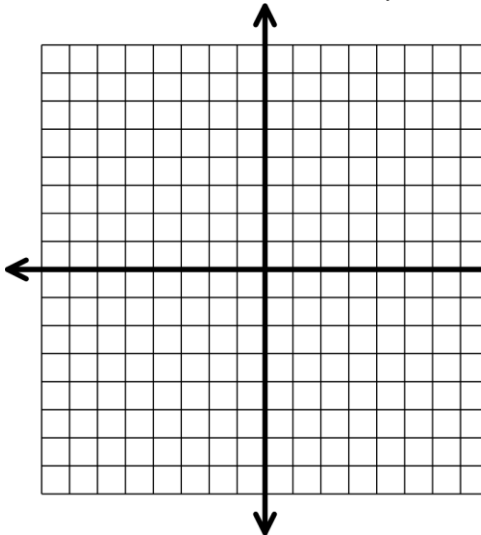
Steps:

1. Solve for y . Identify the slope and y -intercept.
2. Graph the line by plotting the y -intercept first (on the y -axis) and then use the slope to get other points, $\left(\frac{\text{rise}}{\text{run}}\right)$.
2. Use a solid line if you have \leq or \geq .
Use a dashed or dotted line if you have $<$ or $>$.
3. Look at the y -intercept. Shade **below** the y -intercept if **less than**.
Shade **above** the y -intercept if **greater than**.

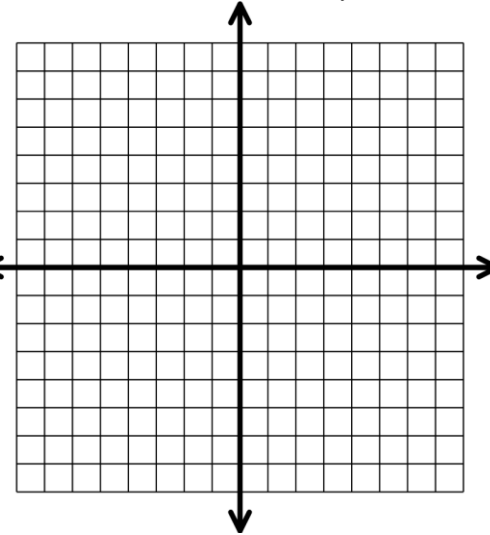
Ex. #1: $y - 3x > 2$



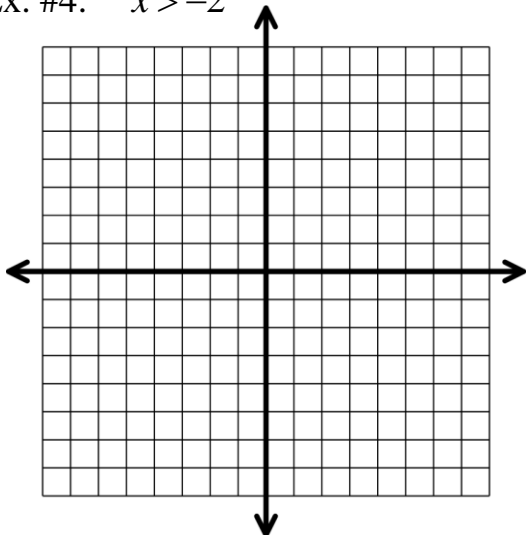
Ex. #2: $9 > 4x + 3y$



Ex. #3: $4x \leq 12 - 3y$



Ex. #4: $x > -2$



Ex. #5: $y \leq 4$

