Inspiring Greatness

ISD

INDEPENDENCE SCHOOL DISTRICT

Math Virtual Learning

Algebra 1 Semester 1

April 15, 2020

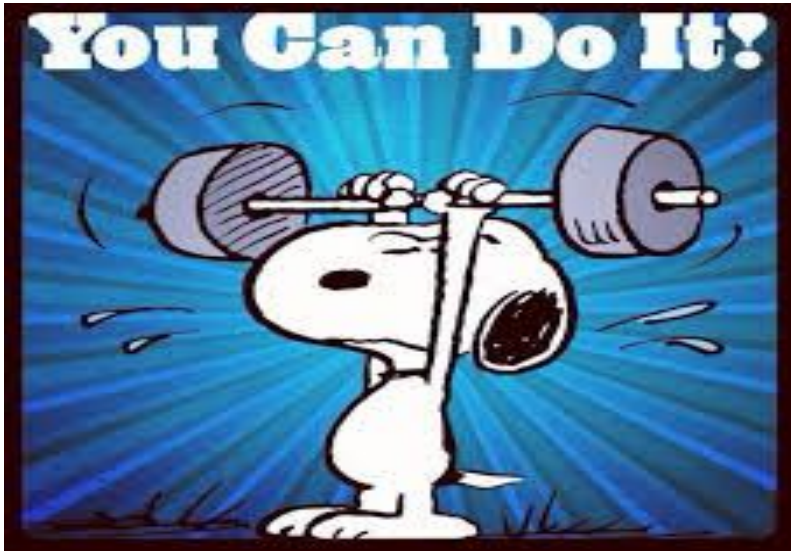
Grade/Course

Lesson: April 15, 2020

Objective/Learning Target:

Students will graph inequalities.

Practice from Yesterday



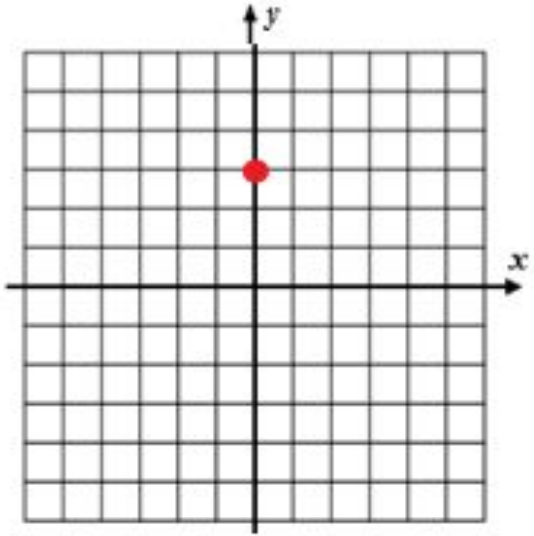
Let's Get Started:

Watch Video:

Remember "Take Notes"

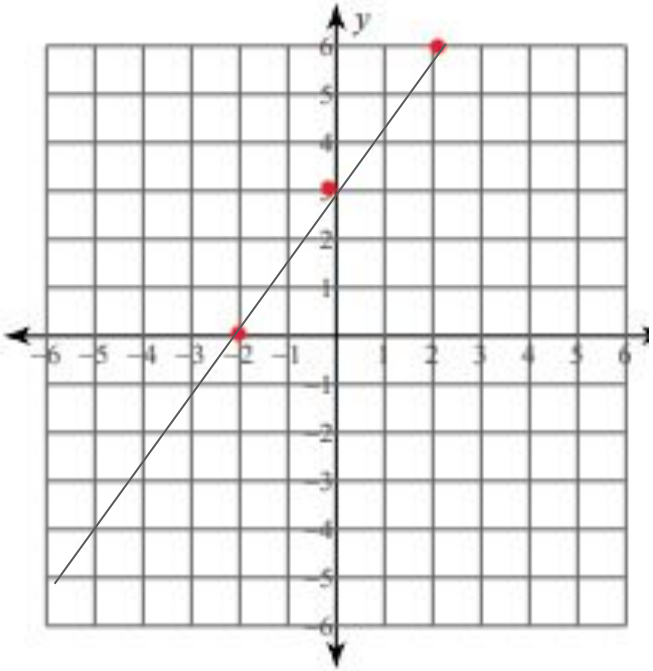
GRAPHING INEQUALITIES

To graph an inequality simply means to plot (or shade) **all** (x, y) pairs that make the inequality true



$$y \leq \frac{3}{2}x + 3$$

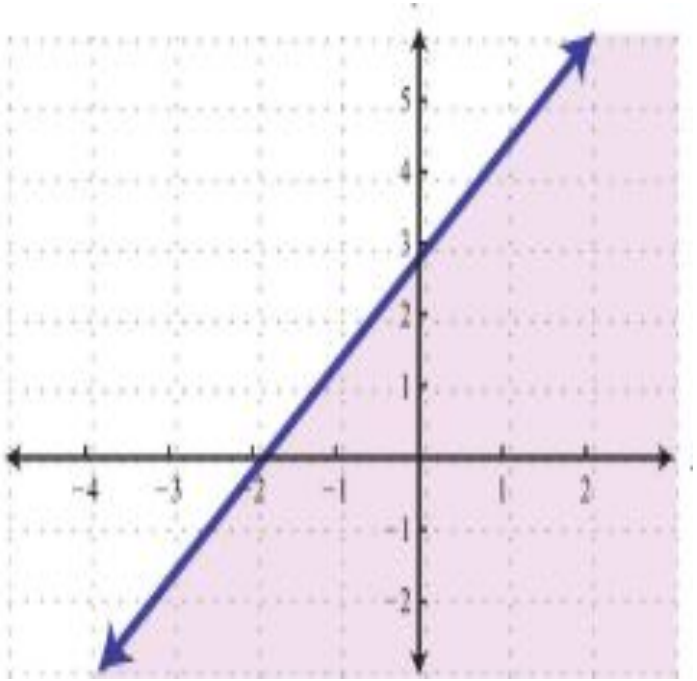
Graph y intercept



Plot two points using the inequality

$$y \leq \frac{3}{2}x + 3$$

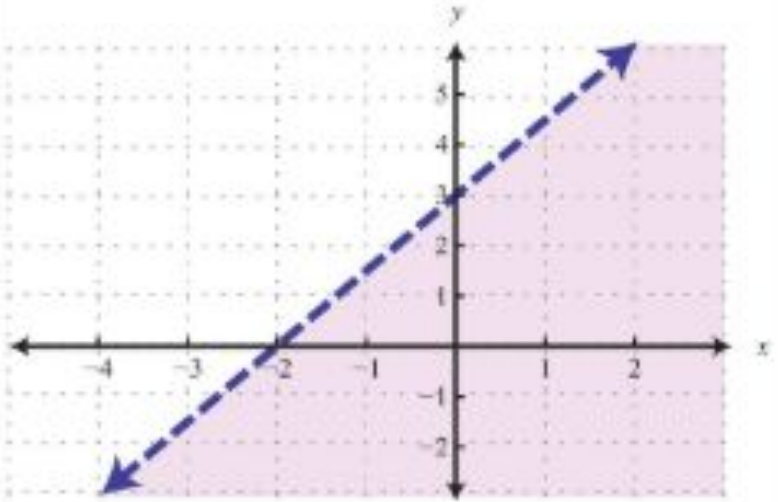
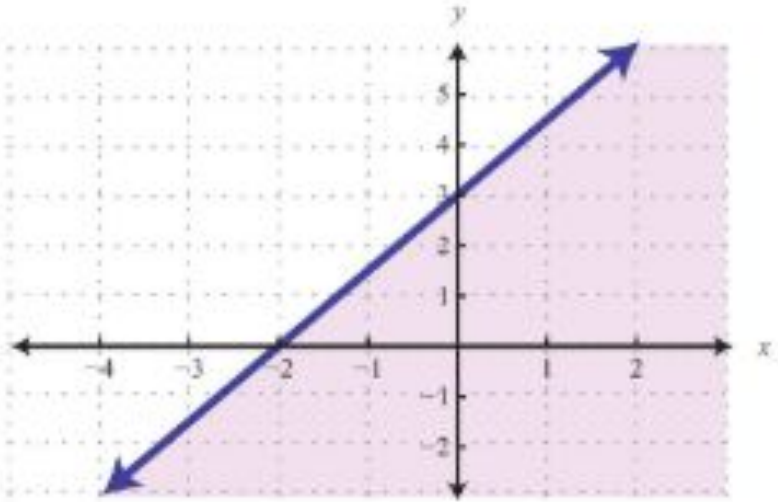
Plot the "y=" line (make it a solid line for y≤ or y≥, and a dashed line for y< or y>)

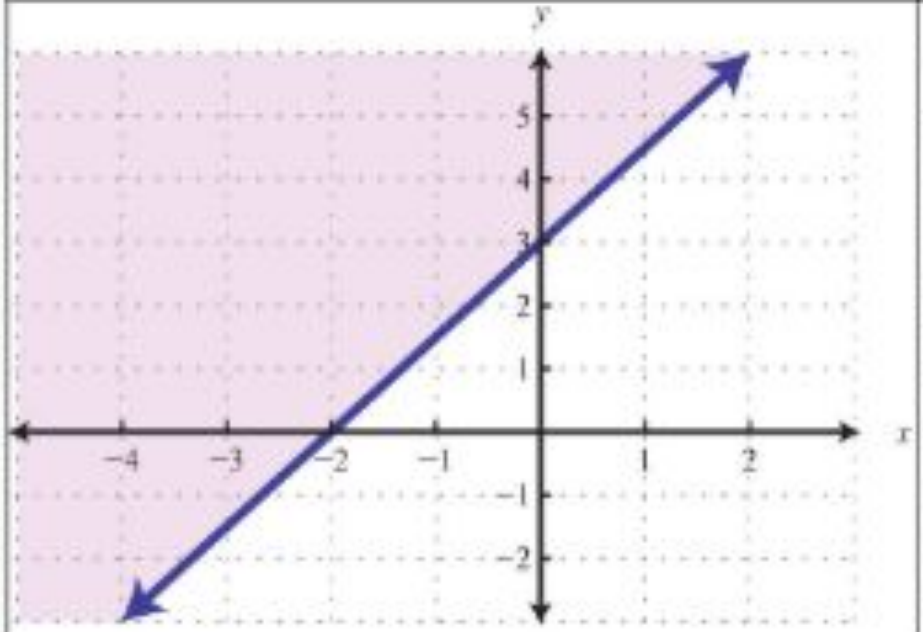
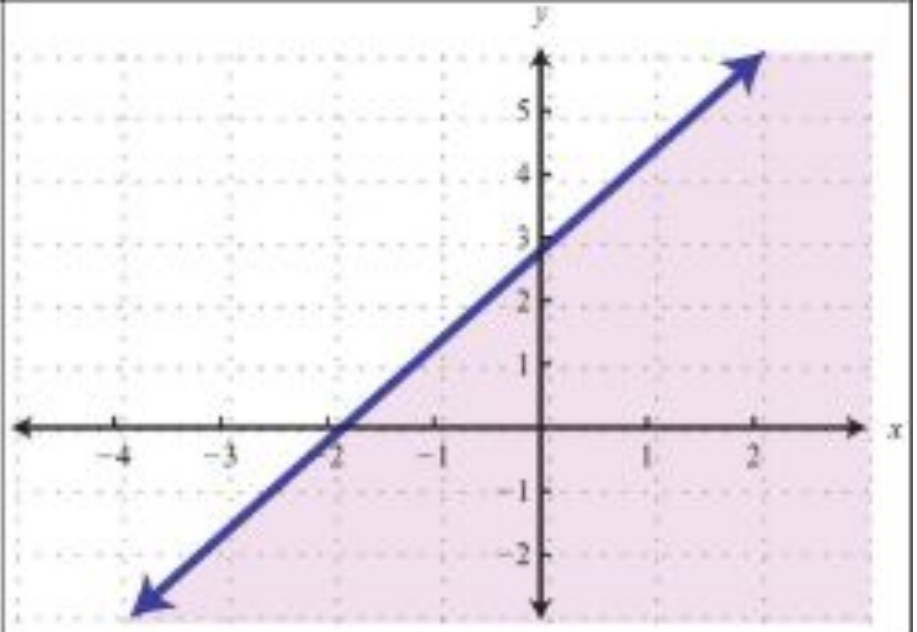


Shade below the line because y is less than.

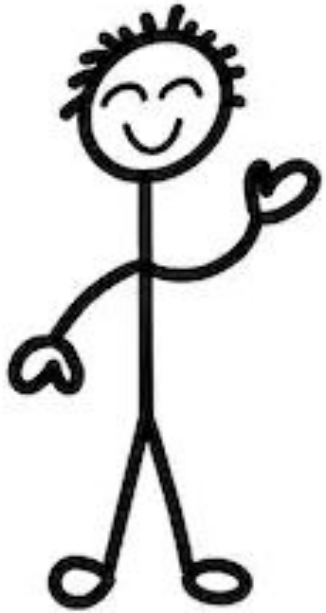
Using the point (0,0) check to see if your inequality is true.

$0 \leq 0 + 3$

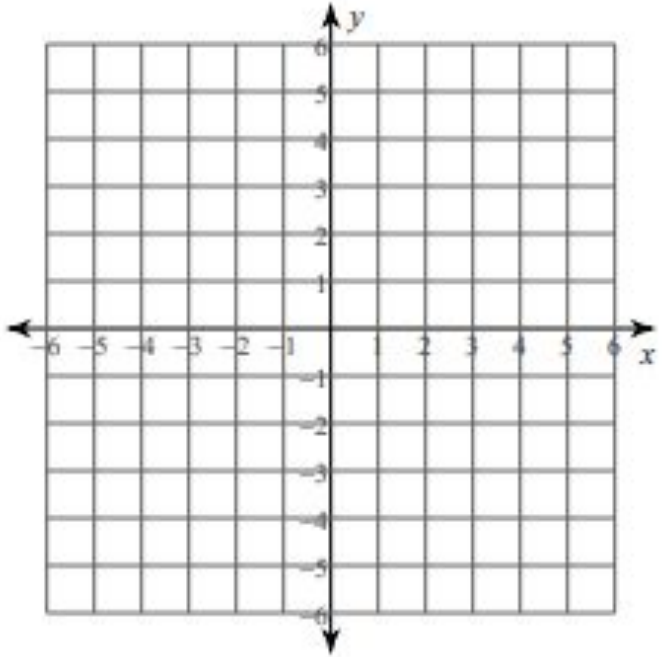
Dashed Line < , >	Solid Line $\leq$, $\geq$
$y < \frac{3}{2}x + 3$	$y \leq \frac{3}{2}x + 3$
	

Greater Than (Above)	Less Than (Below)
$y \geq \frac{3}{2}x+3$	$y \leq \frac{3}{2}x+3$
	

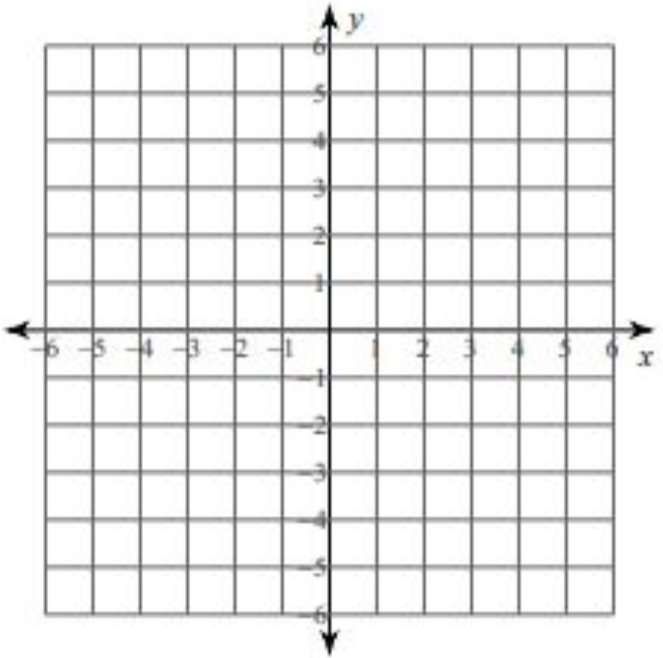
Now it’s your turn



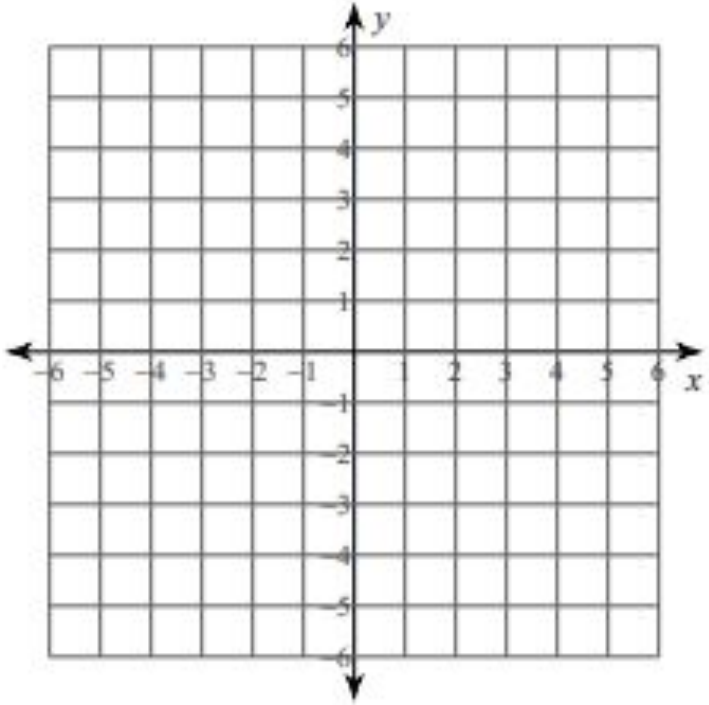
1) $y \geq -3x + 4$



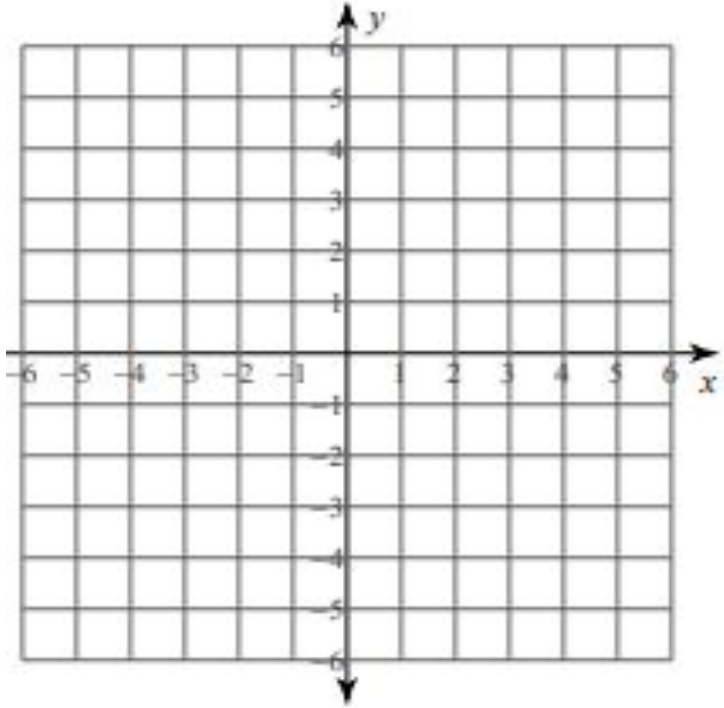
2) $y \leq \frac{3}{5}x - 5$



3) $y > -x - 5$


y
x
−6 −5 −4 −3 −2 −1 1 2 3 4 5 6
6 5 4 3 2 1 −1 −2 −3 −4 −5 −6

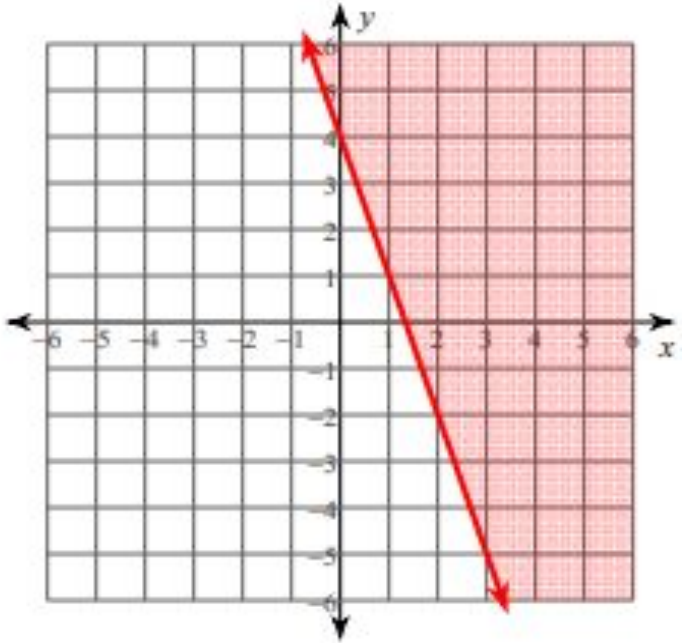
4) $y > 2x - 5$


y
x
−6 −5 −4 −3 −2 −1 1 2 3 4 5 6
6 5 4 3 2 1 −1 −2 −3 −4 −5 −6

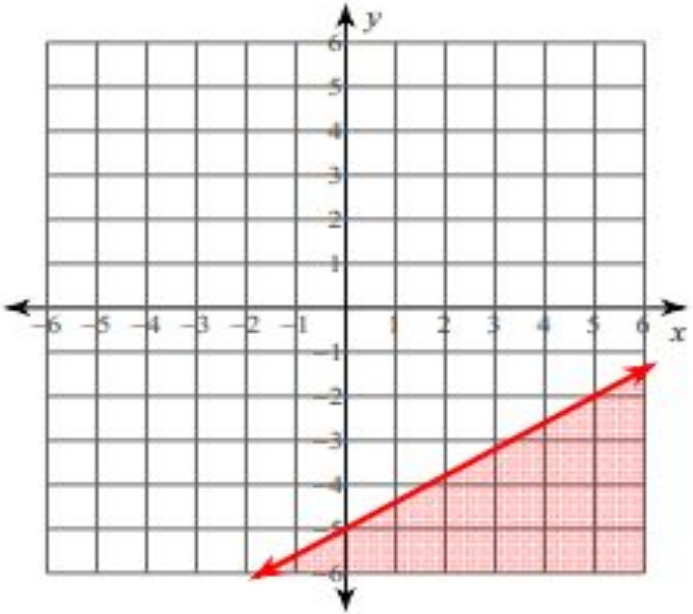
Answer Key:

Once you have completed the problems, check your answers here.

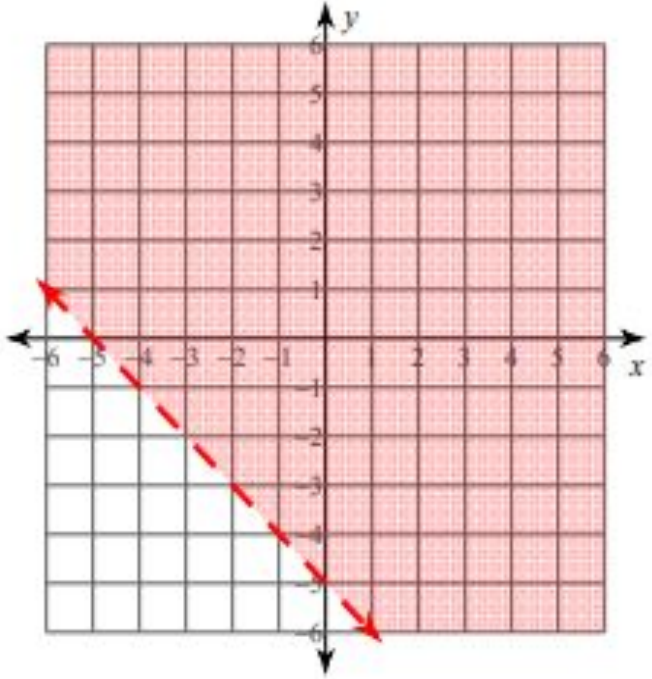
1) $y \geq -3x + 4$



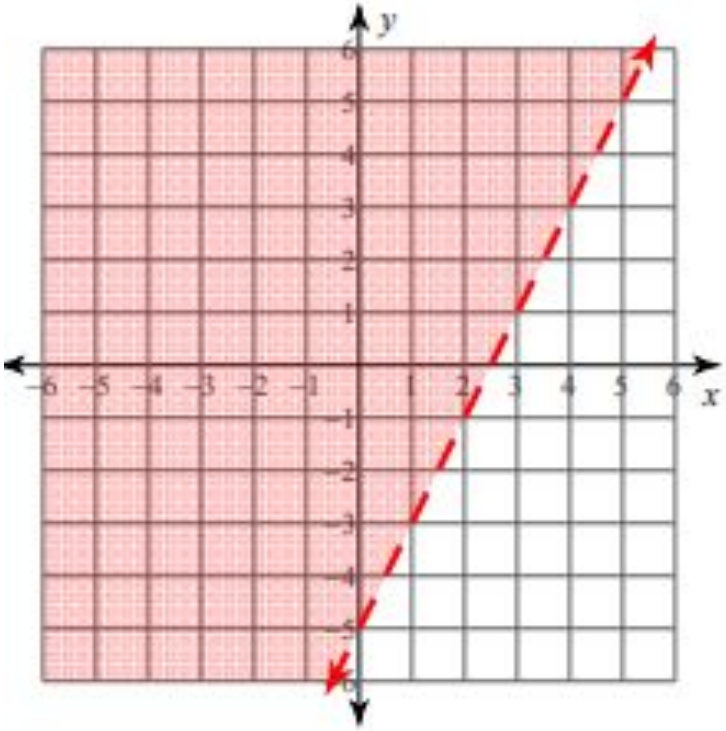
2) $y \leq \frac{3}{5}x - 5$



3) $y > -x - 5$



4) $y > 2x - 5$



Additional Practice:

Click on the links below to get additional practice and to check your understanding!

Graphing Inequalities

Click continue without signing in if prompted.