Inspiring Greatness

INDEPENDENCE SCHOOL DISTRICT

Math Virtual Learning

Algebra 1 S-1

May 4, 2020

Grade/Course

Lesson: [May 4]

Objective/Learning Target:

Students will graph systems of inequalities (given in slope-intercept form). (May 4 lesson)

Brainstarter

"Remember
Take Notes"

Let's Get Started

Watch Video 1:

Things to remember about system of linear inequalities.

< & > symbols result in a dashed line.

- - - - - - - - - -

≤ & ≥ symbols result in a solid line

_____

When you multiply or divide by a negative number, flip the sign !

A System of Linear inequalities can be solved by graphing. The portion of overlap is the solution.

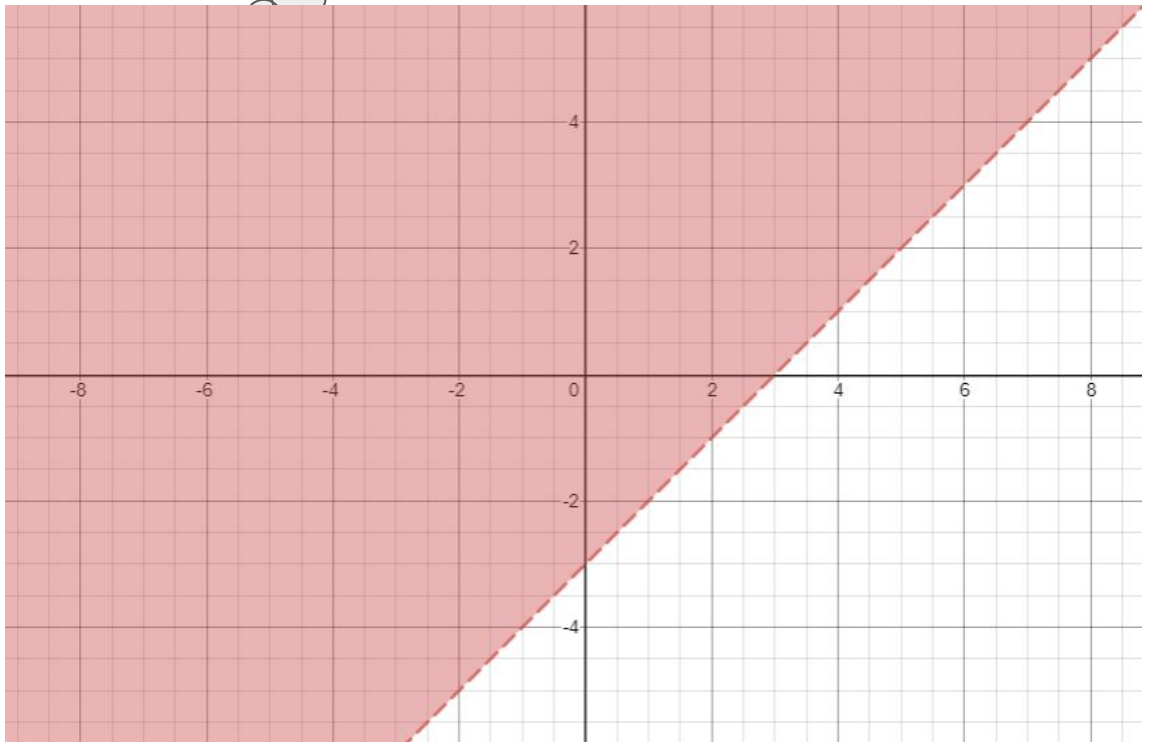
Solve by graphing

$y > x - 3$

$y > -x + 1$

Graph the first inequality

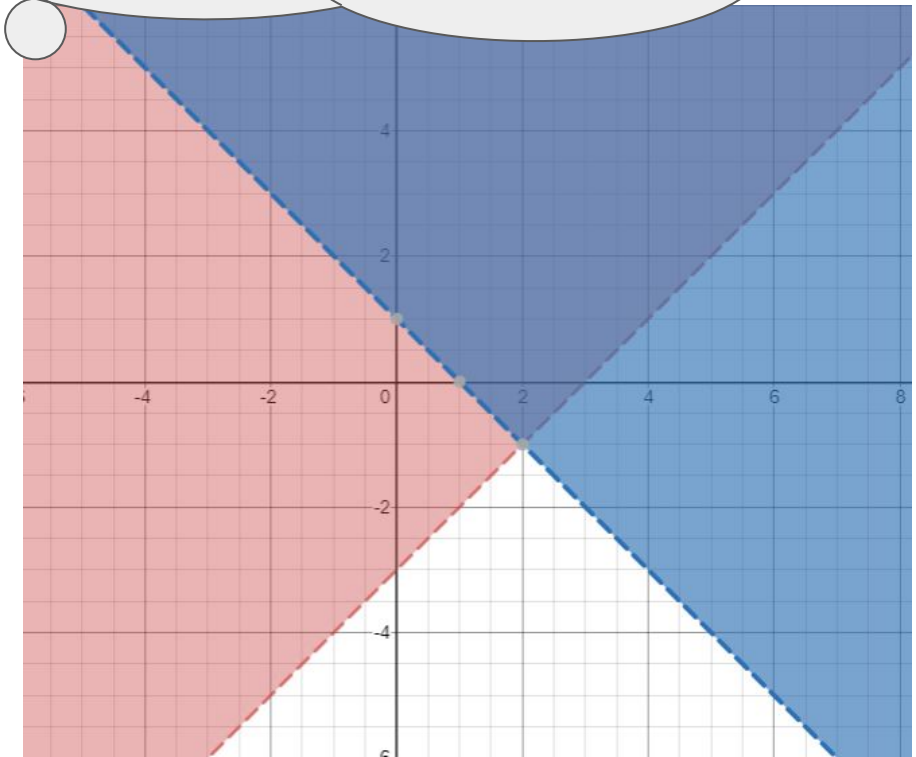
$y > x - 3$



Now graph the second inequality.

$y > -x + 1$

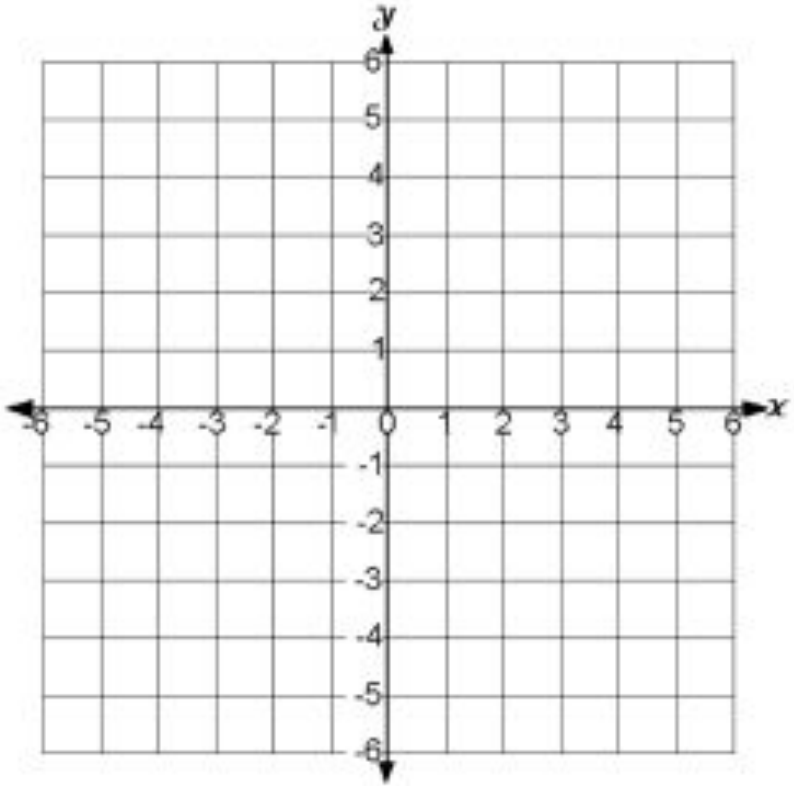
The overlapping shading is your solution



Now it's your turn!

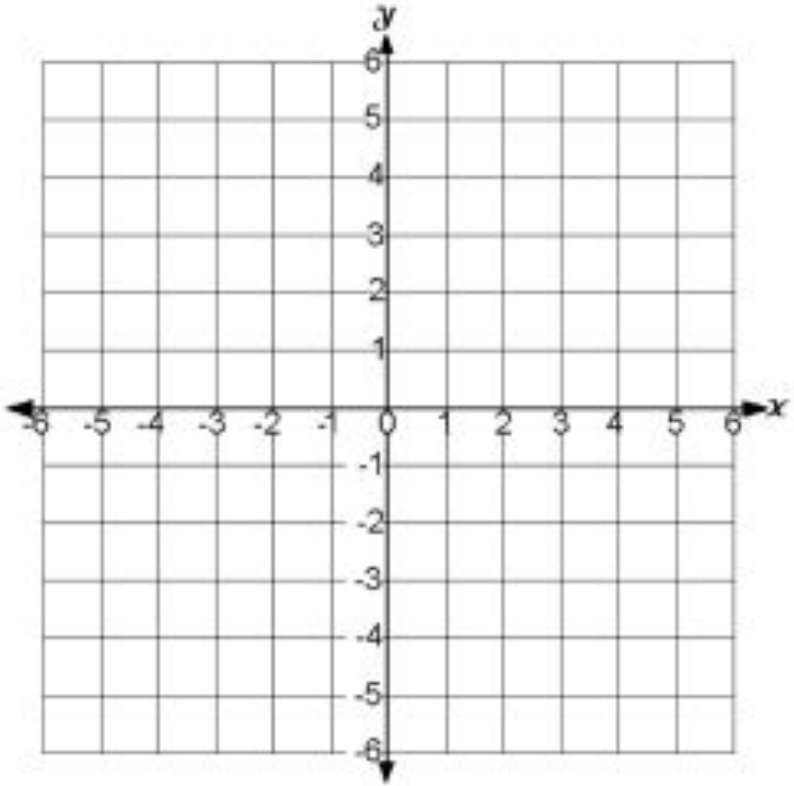
1). $y > -5x + 3$

$y > -2$



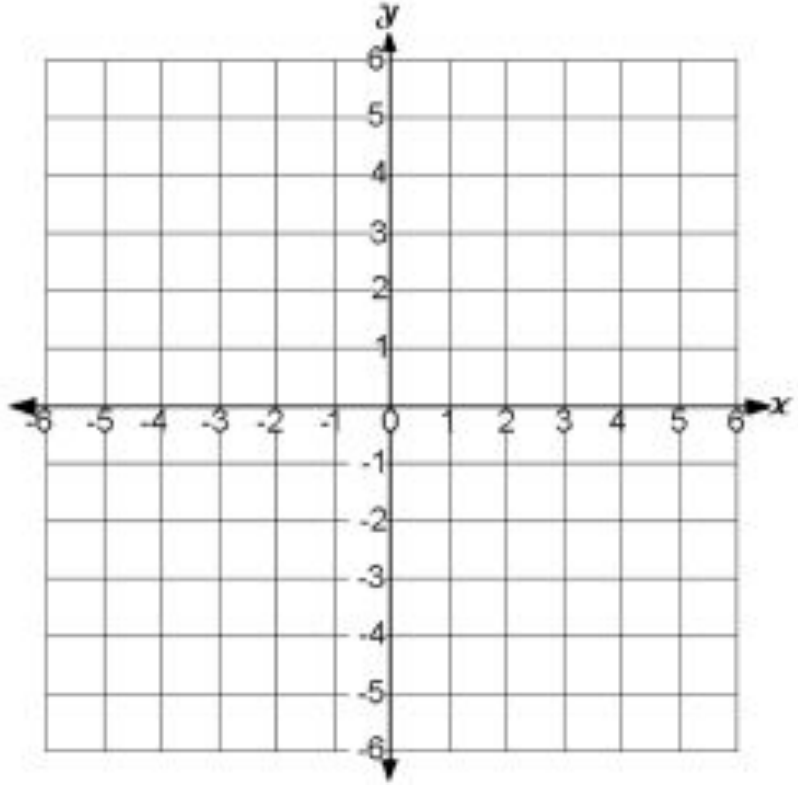
2). $y > 4x - 3$

$y \geq -2x + 3$



3).

$$\begin{cases} y < \frac{1}{2}x - 3 \\ y \geq -x + 2 \end{cases}$$

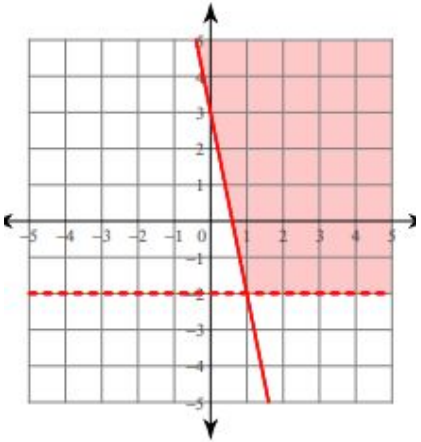


Answer Key:

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

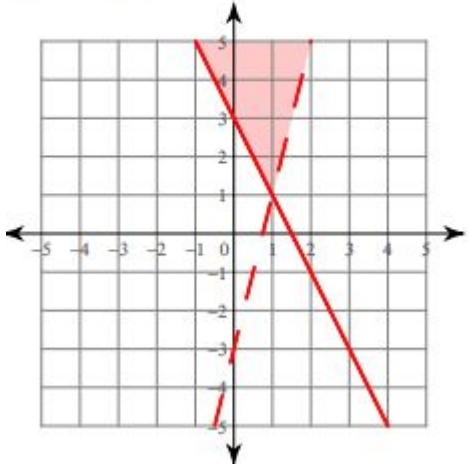
$y \geq -5x + 3$

$y > -2$

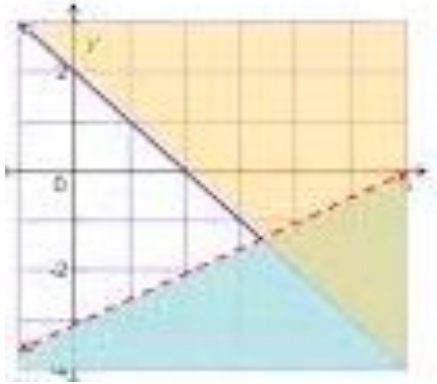


$y > 4x - 3$

$y \geq -2x + 3$



$$\begin{cases} y < \frac{1}{2}x - 3 \\ y \geq -x + 2 \end{cases}$$



Additional Practice:

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

Graph systems of inequalities (given in slope-intercept form).