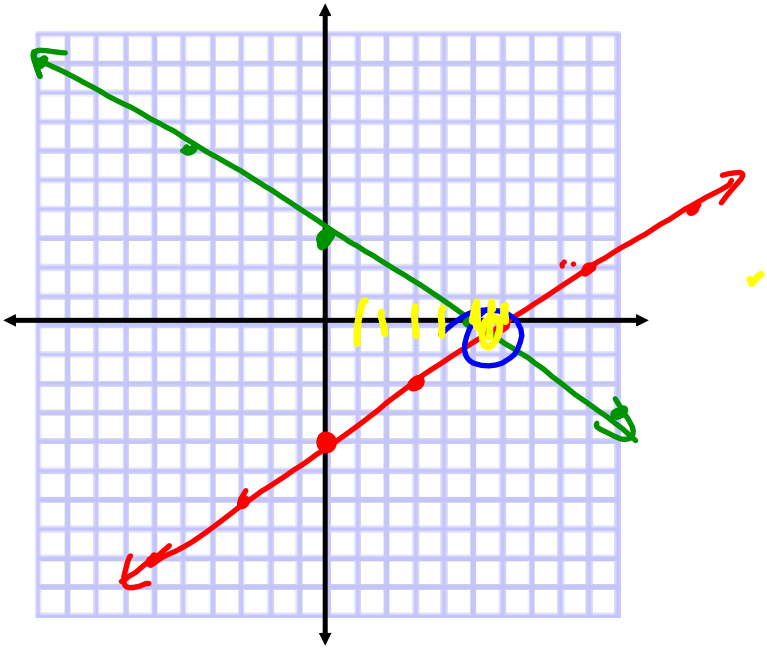
Review

Determine the point of intersection for the following lines

$y = \frac{2}{3}x - 4$

$y = -\frac{3}{5}x + 3$



Point of Intersection

= (5.6, -0.4)

x y

$$3y + 2x - 9 = 0$$

$$\frac{3y}{3} = \frac{-2x}{3} + \frac{9}{3}$$

$$y = \frac{-2}{3}x + 3$$

Solve y = 3x + 10 for:

1. y when x = 5

$y = 3(5) + 10$
$= 15 + 10$
$= 25$

2. y when x = 20

$y = 3(20) + 10$
$= 60 + 10$
$= 70$

$y = 3x + 10$

3. x when y = 1

$1 = 3x + 10$
-10
$\frac{-9}{3} = \frac{3x}{3}$
$-3 = x$

$y = 3x + 10$

4. x when y = 2x

$2x = 3x + 10$
$-3x$
$-x = 10$
$x = -10$

5. x when y = 4x - 3

$4x - 3 = 3x + 10$
$-3x$ $+3$
$x = 13$ ✓

~~Solve for x if given~~

given

$y = -2x + 7$

$y = x + 3$

Solve for x if

$x + 3 = -2x + 7$

-3 $+2x$

$3x = 4$

$\frac{3x}{3} = \frac{4}{3}$

$x = \frac{4}{3}$

Solve the Linear system

$y = 2x + 5$

$x - 3y + 2 = 0$

$x - 3(2x+5) + 2 = 0$

$x - 6x - 15 + 2 = 0$

$-5x - 13 = 0$

$\frac{-13}{5} = \frac{5x}{5}$

$\frac{-13}{5} = x$

$y = 2x + 5$

$y = 2\left(\frac{-13}{5}\right) + 5$

$y = \frac{-26}{5} + \frac{25}{5}$

$y = \frac{-1}{5}$

STEPS

1. Solve one equation for x or y.
2. Substitute step 1 into the other equation
3. Solve.
4. Sub. your answer into ANY equation
5. Solve

$3x+4y-3=0$

Create 2 Linear Equations

$y=3x+7$

Switch systems with a partner (group)

SOLVE

A B C

$3 \times 2 \times 1$

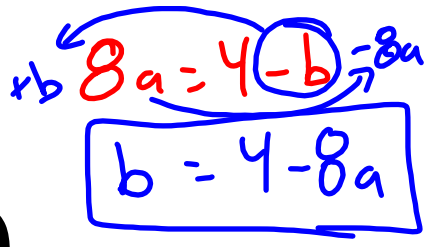
$= 6$

$52 \times 51 \times 50 \times \cdots\cdots \times 2 \times 1$

$= 52!$

$= 8.7 \times 10^{67}$

8 70000000000000000



pg. 39
4, 5, 9

1. 5. . . . . .

$3x+4y=7$

$y=2x+4$

$(1.354, -0.785)$

(4)

1