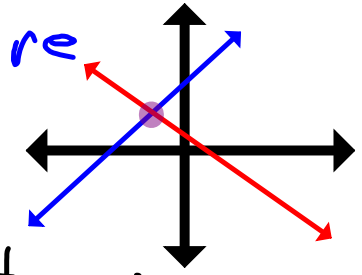
7.1 Solving and Graphing Linear Systems

Jan. 17, 200

Graph Paper & Straight edge

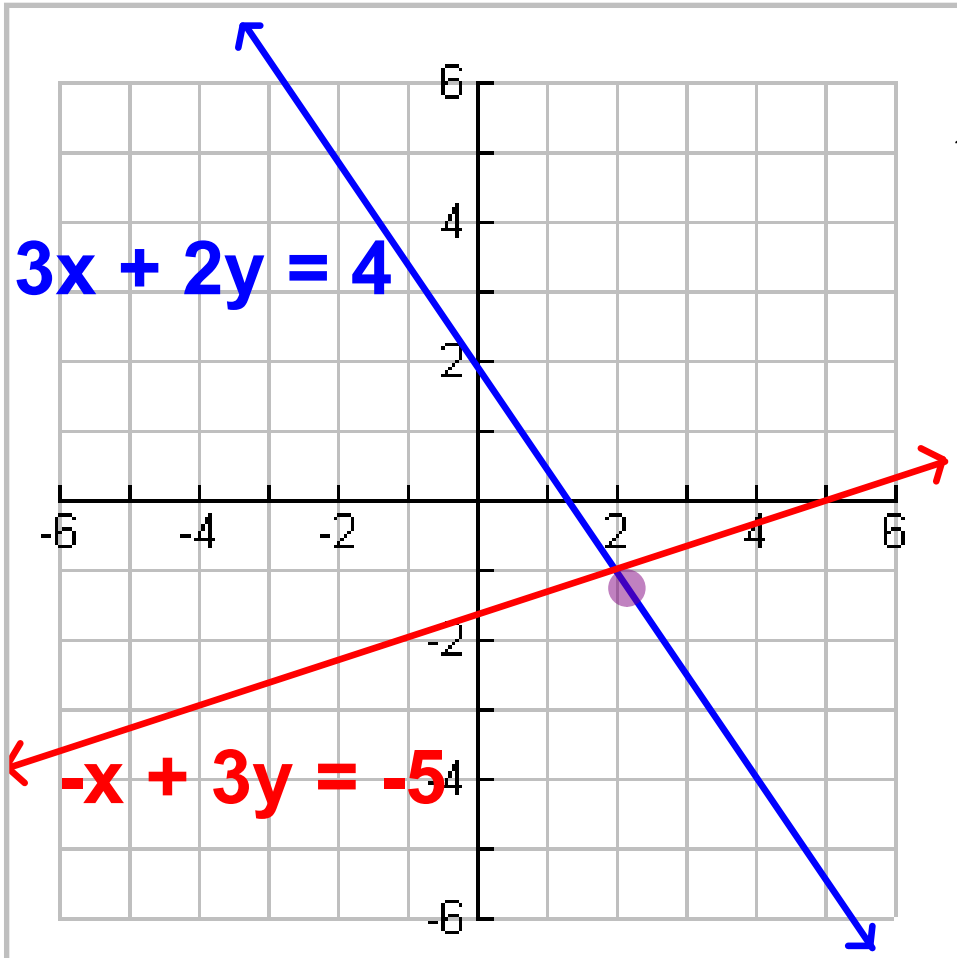
Linear System: 2 or More Linear Equations.



Solution to Linear System:

The Coordinate Where the 2 Linear Equations Meet.

* The Solution Makes the Linear Equations True!



Guess the solution of the Linear System.

(2, -1)

Check our Solution

$3(2)+2(-1) \stackrel{?}{=} 4$

$6+-2 \stackrel{?}{=} 4$

$4 = 4$ ✓

$-(2)+3(-1) \stackrel{?}{=} -5$

$-2+-3 \stackrel{?}{=} -5$

$-5 = -5$ ✓

Find the Solution to the following Linear System: Step 1: Graph.

$x + y = -2$

$-x \quad -x$

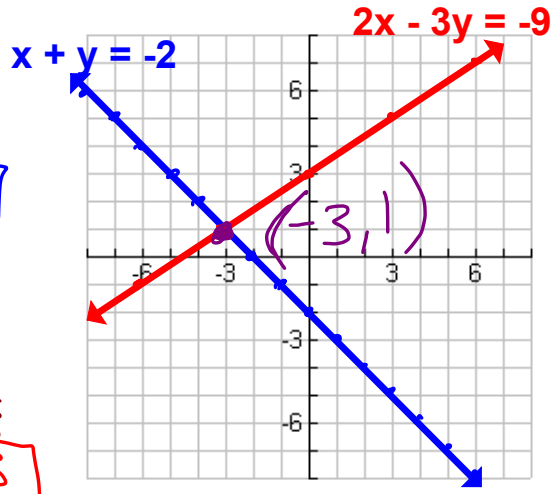
$y = -x - 2$

$2x - 3y = -9$

$-2x \quad -2x$

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

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



Step 2: Guess the Solution (Intersection)

$(-3, 1)$

Step 3: Check Solution

$x + y = -2$

$(-3) + (1) \stackrel{?}{=} -2$

$-3 + 1 \stackrel{?}{=} -2$

$-2 = -2$ ✓

$2x - 3y = -9$

$2(-3) - 3(1) \stackrel{?}{=} -9$

$-6 - 3 \stackrel{?}{=} -9$

$-9 = -9$ ✓

O.T.L.

① Pg 392: 8, 10, 12-15(a)
16, 20, 23, 24, 25