

7-1 - 7-2 Solving Systems of Equations

Graphing -

$$y = 3x - 4$$
$$y = -2x + 5$$

Substitution -

$$2x + 4y = 7$$
$$x = 2y - 3$$

Addition (Elimination) -

$$2x + 3y = 8$$
$$5x - 2y = 10$$

Special CasesNo Solution - *parallel lines*

$$5 = 3$$

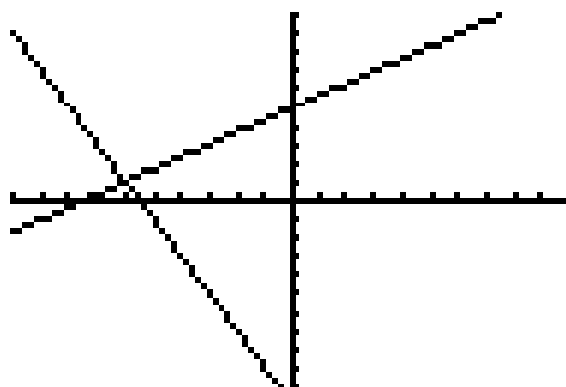
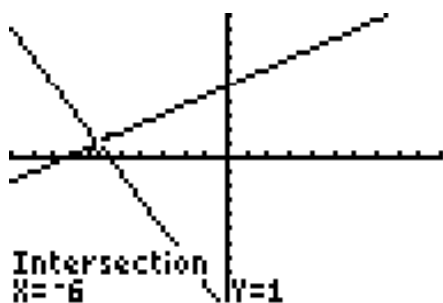
Infinite Solutions - *same line*

$$5 = 5$$

Ex. 1 Solve

$$y = \frac{2}{3}x + 5$$

$$y = -2x - 11$$



$$(-6, 1)$$

Ex 2 Solve

$$\begin{array}{r} -3(4x + 3y = 11) \\ + 4(3x - 5y = 30) \end{array}$$

$$4x + 3(-3) = 11$$

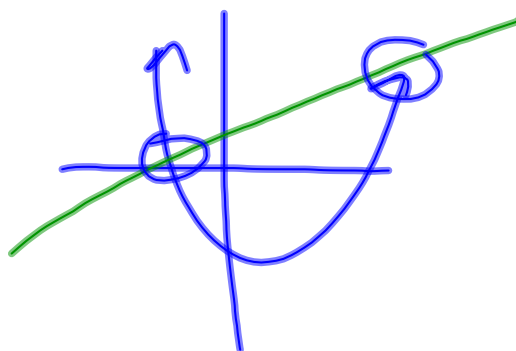
$$\boxed{x = 5}$$

$$\begin{array}{r} -12x - 9y = -33 \\ + 12x - 20y = 120 \\ \hline -29y = 87 \\ \hline \boxed{y = -3} \end{array}$$

Ex 3 Solve

$$y = x^2 - 4$$

$$y = x + 2$$



Homework

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