7.3 – 7.5 Quiz Study Guide

7.3-7.4 Solve Systems of Equations by Eliminating a Variable:

- Be able to add or subtract equations to eliminate a variable in order to solve a system

Ex: $4x - 3y = 5$
$-2x + 3y = -7$

Ex: $6x - 4y = 14$
$3x - 4y = 1$

Ex: $3x + 4y = -6$
$2y = 3x + 6$

- Be able to multiplying equations first, then eliminate a variable, in order to solve a system

Ex: $x + y = 2$
$2x + 7y = 9$

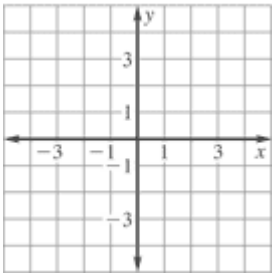
Ex: $4x - 3y = 8$
$5x - 2y = -11$

7.5: Special Types of Linear Systems:

- Be able to identify when a system of equations has one solution, no solution or infinite solutions by solving using any method.

Ex: Solve by graphing: $3x + 2y = 10$

$$y = -\frac{3}{2}x + 1$$



Ex: Solve by substitution:

$x - 2y = -4$

$y = \frac{1}{2}x + 2$

Ex: Solve by elimination:

$2x - 3y = 6$

$2x - 3y = -4$

- Be able to identify the number of solutions to system *without actually solving it*. Show <u>and</u> explain your reasoning.

Ex: $5x + 3y = 6$

$-5x - 3y = 3$

Ex: $y = 2x - 4$

$-6x + 3y = -12$