**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:** 4*x* – 3*y* = 5 **Ex:** 6*x* – 4*y* = 14

 –2*x* + 3*y* = –7 3*x* – 4*y* = 1

 **Ex:** 3*x* + 4*y* = –6

 2*y* = 3*x* + 6

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

 **Ex:** *x* + *y* = 2 **Ex:** 4*x* – 3*y* = 8

2*x* + 7*y* = 9 5*x* – 2*y* = –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: 3*x* + 2*y* = 10

 

**Ex:** Solve by substitution: **Ex:** Solve by elimination:

 *x* – 2*y* = –4 2*x* – 3*y* = 6

  2*x* – 3*y* = –4

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

 **Ex:** 5*x* + 3*y* = 6 **Ex:** *y* = 2*x* – 4

 **–**5*x* – 3*y* = 3 –6*x* + 3*y* = –12