LESSON C3: SOLVING SYSTEMS OF EQUATIONS BY SUBSTITUTION

Types of Solutions for Systems of Equations

<u>1 Solution</u>   <u>No Solutions</u>   <u>Infinite Solutions</u>

Substitution Method

1.   Choose an equation and solve for a variable. (HINT: choose a variable with a coefficient of 1)

2.   Substitute the new equation from step #1 into the equation not used from the original system.

Examples: Solve the system of equations using Substitution.

1. $-3x + 2y = 23$

        $y = -3x - 2$

2. $x = y - 2$

        $3x - y = 6$

Problems for Left

3        $-6x + y = 11$
             $3x + 6y = -12$

4. $-3x + 3y = -12$
             $y = x - 4$

5. $5x + 6y = 8$
             $x = y - 5$