**5.4B Notes on Solving Systems of Equations by Elimination using Multiplication**

When you can’t eliminate a variable by adding or subtracting the equations, you multiply each equation by the coefficient in front of the variable in the other equation.

**To solve the system of equations my elimination using multiplication:**

**Solve the following system of equations using elimination:**

**1)** Pick a variable you want to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**2)** Multiply both of the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ by the opposite \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ so that they have the same coefficient on the one \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**3)** Make sure the variable you want to eliminate has \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ signs.

**4)** Add the two \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, then solve for the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ variable.

**5)** Use the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to solve for the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ variable.

**6)** Write \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ as an \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (x,y)

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| **Ex 1)** | **ex 2)** |