

Name \_\_\_\_\_

**SYSTEM OF EQUATIONS-ELIMINATION #3**

**Directions:** Solve each system of equations below by *eliminating* a variable from each system. In order to eliminate a variable, you will have to use multiplication or division to modify both equations.

*modified equations*

1)  $6x + 8y = 52$      $6x + 8y = 52$

$x + 3y = 12$      $6x + 18y = 72$

$x = \underline{\hspace{2cm}}$      $y = \underline{\hspace{2cm}}$

*modified equations*

2)  $2x + 6y = 46$

$5x - 3y = 7$

$x = \underline{\hspace{2cm}}$      $y = \underline{\hspace{2cm}}$

*modified equations*

3)  $3x + 3y = 36$

$9x + 2y = 52$

$x = \underline{\hspace{2cm}}$      $y = \underline{\hspace{2cm}}$

4)  $10x + 5y = 90$

$5x + 2y = 36$

$x = \underline{\hspace{2cm}}$      $y = \underline{\hspace{2cm}}$

5)  $x + 7y = 72$

$7x - 3y = 36$

$x = \underline{\hspace{2cm}}$      $y = \underline{\hspace{2cm}}$

6)  $5x + 8y = 61$

$3x + 2y = 31$

$x = \underline{\hspace{2cm}}$      $y = \underline{\hspace{2cm}}$

7)  $15x + 24y = 117$

$30x + 10y = 140$

$x = \underline{\hspace{2cm}}$      $y = \underline{\hspace{2cm}}$

8)  $6x - 8y = 48$

$2x - 3y = 16$

$x = \underline{\hspace{2cm}}$      $y = \underline{\hspace{2cm}}$

9)  $18x + 30y = 336$

$12x + 15y = 189$

$x = \underline{\hspace{2cm}}$      $y = \underline{\hspace{2cm}}$