

M7L4 - Elimination Using Multiplication

Name :

- 1) Solve the system of equations using elimination with multiplication.

$$11x - 6y = 25$$

$$3x + 9y = 60$$

Step 1 : Multiply the first equation with the number (coefficient of x) in the second equation.

$$(11x - 6y) = \quad (25)$$

$$x - \quad y =$$

Step 2 : Multiply the second equation with the opposite of number (coefficient of x) in the first equation.

$$(3x + 9y) = \quad (60)$$

$$x - \quad y =$$

Step 3 : Add the new equations to eliminate x

$$y =$$

$$y =$$

Step 4 : Find x by replacing y in the first equation

$$11x - 6y = 25$$

$$11x - 6(\quad) = 25$$

$$x =$$

- 2) Solve the system of equations using elimination with multiplication.

$$2x + 5y = 11$$

$$4x + 3y = 1$$

Step 1 : Multiply the first equation with the number (coefficient of x) in the second equation.

$$(2x + 5y) = \quad (11)$$

$$x + \quad y =$$

Step 2 : Multiply the second equation with the opposite of number (coefficient of x) in the first equation.

$$(4x + 3y) = \quad (1)$$

$$x - \quad y =$$

Step 3 : Add the new equations to eliminate x

$$y =$$

$$y =$$

Step 4 : Find x by replacing y in the first equation

$$2x + 5y = 11$$

$$2x + 5() = 11$$

$$x =$$