

Name : Practice # 2 E Score : \_\_\_\_\_

Teacher : \_\_\_\_\_ Date : \_\_\_\_\_

### Solving Systems of Equations by Substitution

1)  $y = -\frac{2}{5}x - 2$

$y = -4$

6)  $y = -\frac{5}{3}x + 12$

$y = \frac{3}{2}x - 7$

2)  $y = -\frac{2}{3}x - 2$

$y = -\frac{8}{3}x + 4$

7)  $x + y = 7$

$x - y = 3$

3)  $-3x - 5y = 6$

$y = -3$

8)  $9x - 2y = 19$

$7x = 21$

4)  $y = -3x - 3$

$y = -3$

9)  $y = -6x - 3$

$y = -x + 2$

5)  $-8x + 7y = 10$

$9y = -18$

10)  $-5x + 9y = -12$

$3x + 2y = 22$



E

## Using Substitution to Solve Systems of Equations Activity

**Directions** Match the system of equations with the modified equation that can be used to solve the system of equations by substitution. Draw a line between the system and the equation used to substitute.

$$\begin{aligned}2x + y &= 11 \\ x - y &= 2\end{aligned}$$

$$x = -2y + 6$$

$$\begin{aligned}4x - y &= 7 \\ 5x - 8y &= 2\end{aligned}$$

$$x = -6y + 5$$

$$\begin{aligned}2x + 2y &= 4 \\ 3x - 3y &= 18\end{aligned}$$

$$y = -2x + 1$$

$$\begin{aligned}2x + y &= 1 \\ 10x - 4y &= 2\end{aligned}$$

$$y = 4x - 7$$

$$\begin{aligned}-3x - y &= -13 \\ x + 2y &= 6\end{aligned}$$

$$x = y + 2$$

$$\begin{aligned}2x - 6y &= 4 \\ x + 6y &= 5\end{aligned}$$

$$x = -y + 2$$

## Solving Systems of Equations by Substitution

Solve each system by substitution.

1)  $y = 6x - 11$   
 $-2x - 3y = -7$

2)  $2x - 3y = -1$   
 $y = x - 1$

3)  $y = -3x + 5$   
 $5x - 4y = -3$

4)  $-3x - 3y = 3$   
 $y = -5x - 17$

5)  $y = -2$   
 $4x - 3y = 18$

6)  $y = 5x - 7$   
 $-3x - 2y = -12$

7)  $-4x + y = 6$   
 $-5x - y = 21$

8)  $-7x - 2y = -13$   
 $x - 2y = 11$

9)  $-5x + y = -2$   
 $-3x + 6y = -12$

10)  $-5x + y = -3$   
 $3x - 8y = 24$