

## Solving Systems Using Substitution

Solve each system by substitution.

$$\begin{aligned} 1) \quad y &= -2x - 6 \\ y &= 4x + 6 \end{aligned}$$

$$\begin{aligned} 2) \quad y &= 3 \\ y &= -2x + 11 \end{aligned}$$

$$\begin{aligned} 3) \quad y &= -2x - 12 \\ y &= x \end{aligned}$$

$$\begin{aligned} 4) \quad y &= 4x + 10 \\ y &= 2x + 6 \end{aligned}$$

$$\begin{aligned} 5) \quad y &= -3x + 4 \\ y &= 4x - 10 \end{aligned}$$

$$\begin{aligned} 6) \quad y &= -2x + 4 \\ y &= -4x + 12 \end{aligned}$$

$$\begin{aligned} 7) \quad y &= x \\ y &= 3x - 8 \end{aligned}$$

$$\begin{aligned} 8) \quad y &= -3x - 2 \\ y &= -4x - 3 \end{aligned}$$

$$\begin{aligned} 9) \quad y &= x \\ y &= 3x + 6 \end{aligned}$$

$$\begin{aligned} 10) \quad y &= -3x + 11 \\ y &= 2x - 4 \end{aligned}$$

$$\begin{aligned} 11) \quad x - 6y &= -15 \\ -2x + 2y &= 10 \end{aligned}$$

$$\begin{aligned} 12) \quad x + 6y &= 6 \\ 4x + 2y &= 2 \end{aligned}$$

$$\begin{aligned} 13) \quad 3x + y &= 14 \\ 6x + 2y &= 28 \end{aligned}$$

$$\begin{aligned} 14) \quad x - 2y &= 0 \\ -5x + 7y &= 0 \end{aligned}$$

$$\begin{aligned} 15) \quad x + 6y &= 10 \\ -5x - 5y &= 0 \end{aligned}$$

$$\begin{aligned} 16) \quad 4x + y &= 18 \\ -3x - 6y &= -24 \end{aligned}$$

$$\begin{aligned} 17) \quad -8x + 3y &= 12 \\ -7x + 6y &= 24 \end{aligned}$$

$$\begin{aligned} 18) \quad -3x + 21y &= -42 \\ -x + 7y &= -14 \end{aligned}$$

## Solving Systems Using Substitution

Solve each system by substitution.

$$\begin{aligned} 1) \quad y &= -2x - 6 \\ y &= 4x + 6 \end{aligned}$$

$$(-2, -2)$$

$$\begin{aligned} 2) \quad y &= 3 \\ y &= -2x + 11 \end{aligned}$$

$$(4, 3)$$

$$\begin{aligned} 3) \quad y &= -2x - 12 \\ y &= x \end{aligned}$$

$$(-4, -4)$$

$$\begin{aligned} 4) \quad y &= 4x + 10 \\ y &= 2x + 6 \end{aligned}$$

$$(-2, 2)$$

$$\begin{aligned} 5) \quad y &= -3x + 4 \\ y &= 4x - 10 \end{aligned}$$

$$(2, -2)$$

$$\begin{aligned} 6) \quad y &= -2x + 4 \\ y &= -4x + 12 \end{aligned}$$

$$(4, -4)$$

$$\begin{aligned} 7) \quad y &= x \\ y &= 3x - 8 \end{aligned}$$

$$(4, 4)$$

$$\begin{aligned} 8) \quad y &= -3x - 2 \\ y &= -4x - 3 \end{aligned}$$

$$(-1, 1)$$

9)  $y = x$   
 $y = 3x + 6$   
 $(-3, -3)$

10)  $y = -3x + 11$   
 $y = 2x - 4$   
 $(3, 2)$

11)  $x - 6y = -15$   
 $-2x + 2y = 10$   
 $(-3, 2)$

12)  $x + 6y = 6$   
 $4x + 2y = 2$   
 $(0, 1)$

13)  $3x + y = 14$   
 $6x + 2y = 28$   
Infinite number of solutions

14)  $x - 2y = 0$   
 $-5x + 7y = 0$   
 $(0, 0)$

15)  $x + 6y = 10$   
 $-5x - 5y = 0$   
 $(-2, 2)$

16)  $4x + y = 18$   
 $-3x - 6y = -24$   
 $(4, 2)$

17)  $-8x + 3y = 12$   
 $-7x + 6y = 24$   
 $(0, 4)$

18)  $-3x + 21y = -42$   
 $-x + 7y = -14$   
Infinite number of solutions