

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

$$\begin{aligned} 11) \quad x + 3y &= 1 \\ -3x - 3y &= -15 \end{aligned}$$

$$\begin{aligned} 12) \quad -3x - 8y &= 20 \\ -5x + y &= 19 \end{aligned}$$

$$\begin{aligned} 13) \quad -3x + 3y &= 4 \\ -x + y &= 3 \end{aligned}$$

$$\begin{aligned} 14) \quad -3x + 3y &= 3 \\ -5x + y &= 13 \end{aligned}$$

$$\begin{aligned} 15) \quad 6x + 6y &= -6 \\ 5x + y &= -13 \end{aligned}$$

$$\begin{aligned} 16) \quad 2x + y &= 20 \\ 6x - 5y &= 12 \end{aligned}$$

$$\begin{aligned} 17) \quad -3x - 4y &= 2 \\ 3x + 3y &= -3 \end{aligned}$$

$$\begin{aligned} 18) \quad -2x + 6y &= 6 \\ -7x + 8y &= -5 \end{aligned}$$

$$\begin{aligned} 19) \quad -5x - 8y &= 17 \\ 2x - 7y &= -17 \end{aligned}$$

$$\begin{aligned} 20) \quad -2x - y &= -9 \\ 5x - 2y &= 18 \end{aligned}$$

## Solving Systems of Equations by Substitution

Solve each system by substitution.

$$\begin{aligned} 1) \quad & y = 6x - 11 \\ & -2x - 3y = -7 \end{aligned}$$

(2, 1)

$$\begin{aligned} 2) \quad & 2x - 3y = -1 \\ & y = x - 1 \end{aligned}$$

(4, 3)

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

(1, 2)

$$\begin{aligned} 4) \quad & -3x - 3y = 3 \\ & y = -5x - 17 \end{aligned}$$

(-4, 3)

$$\begin{aligned} 5) \quad & y = -2 \\ & 4x - 3y = 18 \end{aligned}$$

(3, -2)

$$\begin{aligned} 6) \quad & y = 5x - 7 \\ & -3x - 2y = -12 \end{aligned}$$

(2, 3)

$$\begin{aligned} 7) \quad & -4x + y = 6 \\ & -5x - y = 21 \end{aligned}$$

(-3, -6)

$$\begin{aligned} 8) \quad & -7x - 2y = -13 \\ & x - 2y = 11 \end{aligned}$$

(3, -4)

$$\begin{aligned} 9) \quad & -5x + y = -2 \\ & -3x + 6y = -12 \end{aligned}$$

(0, -2)

$$\begin{aligned} 10) \quad & -5x + y = -3 \\ & 3x - 8y = 24 \end{aligned}$$

(0, -3)

$$\begin{aligned} 11) \quad x + 3y &= 1 \\ -3x - 3y &= -15 \end{aligned}$$

$(7, -2)$

$$\begin{aligned} 12) \quad -3x - 8y &= 20 \\ -5x + y &= 19 \end{aligned}$$

$(-4, -1)$

$$\begin{aligned} 13) \quad -3x + 3y &= 4 \\ -x + y &= 3 \end{aligned}$$

No solution

$$\begin{aligned} 14) \quad -3x + 3y &= 3 \\ -5x + y &= 13 \end{aligned}$$

$(-3, -2)$

$$\begin{aligned} 15) \quad 6x + 6y &= -6 \\ 5x + y &= -13 \end{aligned}$$

$(-3, 2)$

$$\begin{aligned} 16) \quad 2x + y &= 20 \\ 6x - 5y &= 12 \end{aligned}$$

$(7, 6)$

$$\begin{aligned} 17) \quad -3x - 4y &= 2 \\ 3x + 3y &= -3 \end{aligned}$$

$(-2, 1)$

$$\begin{aligned} 18) \quad -2x + 6y &= 6 \\ -7x + 8y &= -5 \end{aligned}$$

$(3, 2)$

$$\begin{aligned} 19) \quad -5x - 8y &= 17 \\ 2x - 7y &= -17 \end{aligned}$$

$(-5, 1)$

$$\begin{aligned} 20) \quad -2x - y &= -9 \\ 5x - 2y &= 18 \end{aligned}$$

$(4, 1)$