

Systems of Equations - Substitution

© 2011 Kuta Software LLC. All rights reserved.

Solve each system by substitution.

1) $y = 2x + 7$
 $3x - 4y = -13$

2) $y = -8x - 24$
 $6x + 6y = 24$

3) $-4x + 8y = -12$
 $y = 5x + 21$

4) $y = -4x - 11$
 $3x + 7y = -2$

5) $-4x - 2y = 8$
 $-2x + y = 20$

6) $-3x + 5y = -4$
 $-x + y = 0$

$$\begin{aligned} 7) \quad x + 2y &= -6 \\ -5x + 4y &= 2 \end{aligned}$$

$$\begin{aligned} 8) \quad 3x + y &= 4 \\ 3x - 4y &= 14 \end{aligned}$$

$$\begin{aligned} 9) \quad -3x + y &= 5 \\ 5x - y &= -11 \end{aligned}$$

$$\begin{aligned} 10) \quad -2x - 5y &= -5 \\ x - 5y &= -20 \end{aligned}$$

$$\begin{aligned} 11) \quad -4x - 3y &= 23 \\ -4x + y &= 3 \end{aligned}$$

$$\begin{aligned} 12) \quad x - y &= -3 \\ 4x - 2y &= 2 \end{aligned}$$

$$\begin{aligned} 13) \quad 2x + y &= 12 \\ 2x - 4y &= 12 \end{aligned}$$

$$\begin{aligned} 14) \quad x - 2y &= -18 \\ 3x + 5y &= 1 \end{aligned}$$

Systems of Equations - Substitution

© 2011 Kuta Software LLC. All rights reserved.

Solve each system by substitution.

1) $y = 2x + 7$
 $3x - 4y = -13$

$(-3, 1)$

2) $y = -8x - 24$
 $6x + 6y = 24$

$(-4, 8)$

3) $-4x + 8y = -12$
 $y = 5x + 21$

$(-5, -4)$

4) $y = -4x - 11$
 $3x + 7y = -2$

$(-3, 1)$

5) $-4x - 2y = 8$
 $-2x + y = 20$

$(-6, 8)$

6) $-3x + 5y = -4$
 $-x + y = 0$

$(-2, -2)$

$$\begin{aligned} 7) \quad x + 2y &= -6 \\ -5x + 4y &= 2 \end{aligned}$$

$$(-2, -2)$$

$$\begin{aligned} 8) \quad 3x + y &= 4 \\ 3x - 4y &= 14 \end{aligned}$$

$$(2, -2)$$

$$\begin{aligned} 9) \quad -3x + y &= 5 \\ 5x - y &= -11 \end{aligned}$$

$$(-3, -4)$$

$$\begin{aligned} 10) \quad -2x - 5y &= -5 \\ x - 5y &= -20 \end{aligned}$$

$$(-5, 3)$$

$$\begin{aligned} 11) \quad -4x - 3y &= 23 \\ -4x + y &= 3 \end{aligned}$$

$$(-2, -5)$$

$$\begin{aligned} 12) \quad x - y &= -3 \\ 4x - 2y &= 2 \end{aligned}$$

$$(4, 7)$$

$$\begin{aligned} 13) \quad 2x + y &= 12 \\ 2x - 4y &= 12 \end{aligned}$$

$$(6, 0)$$

$$\begin{aligned} 14) \quad x - 2y &= -18 \\ 3x + 5y &= 1 \end{aligned}$$

$$(-8, 5)$$