

Solving Systems of Linear Equations: Substitution Method  
Jefferson Davis Learning Center, Sandra Peterson

Solve each system of linear equations by using the substitution method.      Answers

1. 
$$\begin{cases} x - 3y = 4 \\ 6x + 5y = 1 \end{cases}$$

1.  $(1, -1)$

2. 
$$\begin{cases} 2x + y = 0 \\ 5x - 2y = -18 \end{cases}$$

2.  $(-2, 4)$

3. 
$$\begin{cases} 4x - 3y = -21 \\ x + 5y = 12 \end{cases}$$

3.  $(-3, 3)$

4. 
$$\begin{cases} 2x + 4y = 6 \\ x - y = 16 \end{cases}$$

4.  $(7, -2)$

5. 
$$\begin{cases} -2x - y = -4 \\ 4x + 3y = 6 \end{cases}$$

5.  $(3, -2)$

6. 
$$\begin{cases} 2x + 3y = 16 \\ 3x + 2y = 24 \end{cases}$$

6.  $(8, 0)$

7. 
$$\begin{cases} 4x + 2y = 14 \\ 3x + 6y = -3 \end{cases}$$

7.  $(5, -3)$

8. 
$$\begin{cases} 8x - 5y = -6 \\ 6x + 2y = -16 \end{cases}$$

8.  $(-2, -2)$

Please visit the Learning Lab for further assistance.