

Elementary Algebra Skill

Solving a System of Two Linear Equations in Two Variables by Substitution

Solve each system by substitution.

$$\begin{aligned} 1) \quad & y = -4x + 16 \\ & -3x + 8y = 23 \end{aligned}$$

$$\begin{aligned} 2) \quad & -3x + 6y = -24 \\ & y = 7x + 22 \end{aligned}$$

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

$$\begin{aligned} 4) \quad & y = 4x + 22 \\ & y = -4x - 18 \end{aligned}$$

$$\begin{aligned} 5) \quad & x - 3y = -12 \\ & 4x + 6y = -12 \end{aligned}$$

$$\begin{aligned} 6) \quad & 2x - 5y = 22 \\ & x + 5y = -4 \end{aligned}$$

$$\begin{aligned} 7) \quad & y = -4 \\ & -3x - 6y = 15 \end{aligned}$$

$$\begin{aligned} 8) \quad & 2x + 4y = -10 \\ & 7x + 8y = -23 \end{aligned}$$

Answers to Solving a System of Two Linear Equations in Two Variables by Substitution

1) $(3, 4)$
5) $(-6, 2)$

2) $(-4, -6)$
6) $(6, -2)$

3) $(0, 5)$
7) $(3, -4)$

4) $(-5, 2)$
8) $(-1, -2)$