

Solving by Substitution

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Solve each system by substitution.

1) $y = 2x - 8$
 $y = -6x$

2) $y = 3x - 9$
 $y = x - 1$

3) $y = -4x + 16$
 $y = 8x - 20$

4) $y = 3x + 24$
 $y = -3x - 12$

5) $y = 3x - 1$
 $y = 6x + 2$

6) $y = 8x - 4$
 $y = -4x - 4$

$$7) \begin{aligned}y &= 5x - 17 \\y &= -5x + 23\end{aligned}$$

$$8) \begin{aligned}y &= 3x - 7 \\y &= -5x - 7\end{aligned}$$

$$9) \begin{aligned}y &= -7x - 8 \\-4x - y &= 8\end{aligned}$$

$$10) \begin{aligned}-4x + 2y &= 18 \\y &= x + 2\end{aligned}$$

$$11) \begin{aligned}y &= 6x - 19 \\-5x - y &= -14\end{aligned}$$

$$12) \begin{aligned}y &= 1 \\8x - 2y &= -10\end{aligned}$$

$$13) \begin{aligned} -8x + 3y &= 16 \\ y &= -3x + 11 \end{aligned}$$

$$14) \begin{aligned} -3x - 2y &= -1 \\ y &= -6x + 23 \end{aligned}$$

$$15) \begin{aligned} -2x - 8y &= 2 \\ y &= -2x - 2 \end{aligned}$$

$$16) \begin{aligned} y &= -2x - 6 \\ 5x + 6y &= -22 \end{aligned}$$

$$17) \begin{aligned} 4x - y &= -1 \\ x - 2y &= 5 \end{aligned}$$

$$18) \begin{aligned} -8x + y &= -17 \\ -x - 6y &= 4 \end{aligned}$$

$$19) \begin{aligned} -5x - 4y &= -21 \\ x + 3y &= 2 \end{aligned}$$

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

$$21) \begin{aligned} 5x - 3y &= -3 \\ -5x + y &= 1 \end{aligned}$$

$$22) \begin{aligned} x + 2y &= -3 \\ 5x + 7y &= -12 \end{aligned}$$

$$23) \begin{aligned} 6x + y &= -10 \\ -4x - y &= 4 \end{aligned}$$

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

Answers to Solving by Substitution (ID: 1)

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|----------------|----------------|---------------|----------------|
| 1) $(1, -6)$ | 2) $(4, 3)$ | 3) $(3, 4)$ | 4) $(-6, 6)$ |
| 5) $(-1, -4)$ | 6) $(0, -4)$ | 7) $(4, 3)$ | 8) $(0, -7)$ |
| 9) $(0, -8)$ | 10) $(-7, -5)$ | 11) $(3, -1)$ | 12) $(-1, 1)$ |
| 13) $(1, 8)$ | 14) $(5, -7)$ | 15) $(-1, 0)$ | 16) $(-2, -2)$ |
| 17) $(-1, -3)$ | 18) $(2, -1)$ | 19) $(5, -1)$ | 20) $(-5, 3)$ |
| 21) $(0, 1)$ | 22) $(-1, -1)$ | 23) $(-3, 8)$ | 24) $(0, 3)$ |