

Solving by Comparison & Substitution

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Solve each system by substitution.

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

2) $y = 8x - 3$
 $y = -7x - 3$

3) $y = -4x + 12$
 $y = 3x - 16$

4) $y = -4x - 21$
 $y = -3x - 14$

5) $2x - 5y = -3$
 $y = 7x - 6$

6) $y = x + 3$
 $-2x - 3y = -19$

$$7) \begin{aligned} y &= -3x + 10 \\ 4x + 3y &= 15 \end{aligned}$$

$$8) \begin{aligned} y &= 5x - 13 \\ 3x - 8y &= -7 \end{aligned}$$

$$9) \begin{aligned} y &= -4x + 1 \\ y &= -7x + 7 \end{aligned}$$

$$10) \begin{aligned} y &= 2x + 2 \\ y &= 8x + 14 \end{aligned}$$

$$11) \begin{aligned} y &= 5x + 18 \\ y &= -3x - 22 \end{aligned}$$

$$12) \begin{aligned} y &= x - 11 \\ y &= -8 \end{aligned}$$

$$13) \begin{aligned} y &= 2x - 3 \\ -3x - 3y &= -9 \end{aligned}$$

$$14) \begin{aligned} y &= -3x - 6 \\ 4x - 4y &= -8 \end{aligned}$$

$$15) \begin{aligned} 2x - 4y &= 16 \\ y &= 5x + 5 \end{aligned}$$

$$16) \begin{aligned} y &= -2x - 1 \\ 2x + 2y &= 0 \end{aligned}$$

$$17) \begin{aligned} y &= -4x + 4 \\ y &= 7x - 18 \end{aligned}$$

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

$$19) \begin{aligned} y &= -5x - 12 \\ y &= 5x - 2 \end{aligned}$$

$$20) \begin{aligned} y &= 4x + 12 \\ y &= -4x - 4 \end{aligned}$$

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

$$22) \begin{aligned} 6x + 2y &= -26 \\ y &= -3x - 13 \end{aligned}$$

$$23) \begin{aligned} -4x - 6y &= -24 \\ y &= -5x - 22 \end{aligned}$$

$$24) \begin{aligned} y &= 4x - 4 \\ 4x - y &= 5 \end{aligned}$$

$$25) \begin{aligned} y &= 7x + 24 \\ 8x - 2y &= -24 \end{aligned}$$

$$26) \begin{aligned} 2x - 4y &= -2 \\ y &= -3x + 4 \end{aligned}$$

$$27) \begin{aligned} -7x - y &= -14 \\ y &= -2x + 9 \end{aligned}$$

$$28) \begin{aligned} -4x - 3y &= -6 \\ y &= 2x - 8 \end{aligned}$$

Answers to Solving by Comparison & Substitution (ID: 1)

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|-----------------|----------------------------------|----------------|---------------|
| 1) $(4, 4)$ | 2) $(0, -3)$ | 3) $(4, -4)$ | 4) $(-7, 7)$ |
| 5) $(1, 1)$ | 6) $(2, 5)$ | 7) $(3, 1)$ | 8) $(3, 2)$ |
| 9) $(2, -7)$ | 10) $(-2, -2)$ | 11) $(-5, -7)$ | 12) $(3, -8)$ |
| 13) $(2, 1)$ | 14) $(-2, 0)$ | 15) $(-2, -5)$ | 16) $(-1, 1)$ |
| 17) $(2, -4)$ | 18) $(0, -2)$ | 19) $(-1, -7)$ | 20) $(-2, 4)$ |
| 21) No solution | 22) Infinite number of solutions | 23) $(-6, 8)$ | |
| 24) No solution | 25) $(-4, -4)$ | 26) $(1, 1)$ | 27) $(1, 7)$ |
| 28) $(3, -2)$ | | | |