

Systems of linear equations

Find both x- and y- coordinates of the solution to each system using substitution.

$$1) \begin{aligned} y &= -6x \\ y &= -5x - 8 \end{aligned}$$

$$2) \begin{aligned} y &= x \\ y &= 4x - 9 \end{aligned}$$

$$3) \begin{aligned} y &= -7 \\ y &= 6x + 11 \end{aligned}$$

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

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

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

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

$$8) \begin{aligned}y &= 5x \\y &= 8x - 21\end{aligned}$$

$$9) \begin{aligned}y &= 5 \\y &= 2x + 3\end{aligned}$$

$$10) \begin{aligned}y &= -6x \\y &= -5x + 8\end{aligned}$$

$$11) \begin{aligned}y &= 8x - 6 \\y &= -6\end{aligned}$$

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

$$13) \begin{aligned} y &= 2x - 16 \\ y &= -2x \end{aligned}$$

$$14) \begin{aligned} y &= 5x - 2 \\ y &= -2 \end{aligned}$$

$$15) \begin{aligned} y &= -2 \\ y &= x - 10 \end{aligned}$$

$$16) \begin{aligned} y &= -8 \\ y &= 2x - 22 \end{aligned}$$

$$17) \begin{aligned} y &= -3x \\ y &= -2x + 1 \end{aligned}$$

$$18) \begin{aligned} y &= 5x - 24 \\ y &= -4 \end{aligned}$$

$$19) \begin{aligned} y &= -3x \\ y &= -6x + 3 \end{aligned}$$

$$20) \begin{aligned} y &= -1 \\ y &= 2x + 3 \end{aligned}$$

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

$$22) \begin{aligned} y &= -5 \\ y &= 5x - 5 \end{aligned}$$

$$23) \begin{aligned} y &= -1 \\ y &= 2x + 5 \end{aligned}$$

$$24) \begin{aligned} y &= x \\ y &= -3x + 12 \end{aligned}$$

$$25) \quad y = -6x + 6$$
$$y = 6$$

$$26) \quad y = -6x - 24$$
$$y = -3x$$

$$27) \quad y = -8x - 11$$
$$y = 3x$$

$$28) \quad y = -2x$$
$$y = x + 15$$

$$29) \quad y = -5x$$
$$y = -3x - 8$$

$$30) \quad y = -8x - 12$$
$$y = -6x$$

Answers to Systems of linear equations

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|--------------|--------------|--------------|--------------|
| 1) (8, -48) | 2) (3, 3) | 3) (-3, -7) | 4) (-6, -12) |
| 5) (2, 6) | 6) (-7, 5) | 7) (2, -4) | 8) (7, 35) |
| 9) (1, 5) | 10) (-8, 48) | 11) (0, -6) | 12) (-1, -2) |
| 13) (4, -8) | 14) (0, -2) | 15) (8, -2) | 16) (7, -8) |
| 17) (-1, 3) | 18) (4, -4) | 19) (1, -3) | 20) (-2, -1) |
| 21) (-8, -3) | 22) (0, -5) | 23) (-3, -1) | 24) (3, 3) |
| 25) (0, 6) | 26) (-8, 24) | 27) (-1, -3) | 28) (-5, 10) |
| 29) (4, -20) | 30) (-6, 36) | | |