



Systems of linear equations

Use substitution to find the x-coordinate of the solution to each system.

1) $y = 6x$
 $y = 5x + 5$

2) $y = -2x - 24$
 $y = -6x$

3) $y = 4x + 12$
 $y = 6x$

4) $y = 2x$
 $y = 4x - 12$

5) $y = 6x - 20$
 $y = 2x$

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

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

$$8) \begin{aligned} y &= -4x + 16 \\ y &= -2x \end{aligned}$$

$$9) \begin{aligned} y &= x \\ y &= -3x - 8 \end{aligned}$$

$$10) \begin{aligned} y &= 8x + 1 \\ y &= 7x \end{aligned}$$

$$11) \begin{aligned} y &= 5x + 17 \\ y &= -3 \end{aligned}$$

$$12) \begin{aligned} y &= -5 \\ y &= 3x - 14 \end{aligned}$$

$$13) \begin{aligned} y &= 4 \\ y &= 4x + 24 \end{aligned}$$

$$14) \begin{aligned} y &= 7 \\ y &= 2x + 19 \end{aligned}$$

$$15) \begin{aligned} y &= -5 \\ y &= -5x \end{aligned}$$

$$16) \begin{aligned} y &= 3x - 10 \\ y &= -7 \end{aligned}$$

$$17) \begin{aligned} y &= 3x - 11 \\ y &= -8 \end{aligned}$$

$$18) \begin{aligned} y &= -6x + 16 \\ y &= -8 \end{aligned}$$

$$19) \begin{aligned} y &= x + 10 \\ y &= 3 \end{aligned}$$

$$20) \begin{aligned} y &= 6x \\ y &= 0 \end{aligned}$$

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

$$22) \begin{aligned} y &= 4 \\ y &= 5x - 11 \end{aligned}$$

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

$$24) \begin{aligned} y &= 8x - 14 \\ y &= 6x \end{aligned}$$

$$\begin{aligned} 25) \quad & y = x + 6 \\ & y = 2x \end{aligned}$$

$$\begin{aligned} 26) \quad & y = x - 6 \\ & y = 7x \end{aligned}$$

$$\begin{aligned} 27) \quad & y = -3x - 15 \\ & y = 2x \end{aligned}$$

$$\begin{aligned} 28) \quad & y = -2x \\ & y = x - 18 \end{aligned}$$

$$\begin{aligned} 29) \quad & y = -6x - 16 \\ & y = -2x \end{aligned}$$

$$\begin{aligned} 30) \quad & y = -2x \\ & y = -6x + 20 \end{aligned}$$

Answers to Systems of linear equations

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