



## Systems of linear equations

Find the x-coordinate of the solution to each system using substitution.

1)  $y = 1$   
 $-x - 5y = -4$

2)  $y = 1$   
 $-7x + 4y = -17$

3)  $-4x + 6y = -2$   
 $y = 1$

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

5)  $y = 2$   
 $3x + 2y = 22$

6)  $y = 0$   
 $2x - 2y = 10$

$$\begin{aligned} 7) \quad & 6x + 6y = -18 \\ & y = -2 \end{aligned}$$

$$\begin{aligned} 8) \quad & y = 6x \\ & -2x - 5y = 0 \end{aligned}$$

$$\begin{aligned} 9) \quad & y = 6x \\ & -8x + 5y = 22 \end{aligned}$$

$$\begin{aligned} 10) \quad & y = -5 \\ & 2x - 3y = 9 \end{aligned}$$

$$\begin{aligned} 11) \quad & y = 3 \\ & -4x - 2y = -18 \end{aligned}$$

$$\begin{aligned} 12) \quad & 2x - 4y = 8 \\ & y = -5 \end{aligned}$$

$$13) \begin{aligned} y &= -3 \\ 7x + 6y &= -11 \end{aligned}$$

$$14) \begin{aligned} -x - y &= 0 \\ y &= -5 \end{aligned}$$

$$15) \begin{aligned} y &= 0 \\ -3x + 8y &= -3 \end{aligned}$$

$$16) \begin{aligned} -5x - y &= -13 \\ y &= 3 \end{aligned}$$

$$17) \begin{aligned} y &= -6 \\ -3x - 4y &= 24 \end{aligned}$$

$$18) \begin{aligned} 5x + 8y &= 8 \\ y &= -4 \end{aligned}$$

$$19) \begin{aligned} y &= -1 \\ 3x + 8y &= 13 \end{aligned}$$

$$20) \begin{aligned} y &= 2 \\ -3x + 6y &= -3 \end{aligned}$$

$$21) \begin{aligned} -4x - 2y &= -12 \\ y &= -3x \end{aligned}$$

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

$$23) \begin{aligned} -6x - 8y &= 22 \\ y &= 1 \end{aligned}$$

$$24) \begin{aligned} 2x + 6y &= 12 \\ y &= 1 \end{aligned}$$

$$\begin{aligned} 25) \quad & 6x + 6y = 18 \\ & y = -4x \end{aligned}$$

$$\begin{aligned} 26) \quad & y = 8 \\ & -5x + 3y = 9 \end{aligned}$$

$$\begin{aligned} 27) \quad & y = -6x \\ & -7x - 4y = 0 \end{aligned}$$

$$\begin{aligned} 28) \quad & y = 4 \\ & 2x - 3y = -16 \end{aligned}$$

$$\begin{aligned} 29) \quad & 2x + 8y = 8 \\ & y = 1 \end{aligned}$$

$$\begin{aligned} 30) \quad & y = 3x \\ & -3x + 8y = -21 \end{aligned}$$

## Answers to Systems of linear equations

1) -1

5) 6

9) 1

13) 1

17) 0

21) -6

25) -1

29) 0

2) 3

6) 5

10) -3

14) 5

18) 8

22) -2

26) 3

30) -1

3) 2

7) -1

11) 3

15) 1

19) 7

23) -5

27) 0

4) 2

8) 0

12) -6

16) 2

20) 5

24) 3

28) -2