



Pair of Linear Equations in Two variables Ex 3.2 Q8

Answer :

The given equations are:

$$2x + 3y = 4 \quad \dots\dots(i)$$

$$x - y + 3 = 0 \quad \dots\dots(ii)$$

Putting $x = 0$ in equation (i), we get:

$$\Rightarrow 2 \times 0 + 3y = 4$$

$$\Rightarrow y = 4/3$$

$$x = 0, \quad y = 4/3$$

Putting $y = 0$ in equation (i,) we get:

$$\Rightarrow 2x + 3 \times 0 = 4$$

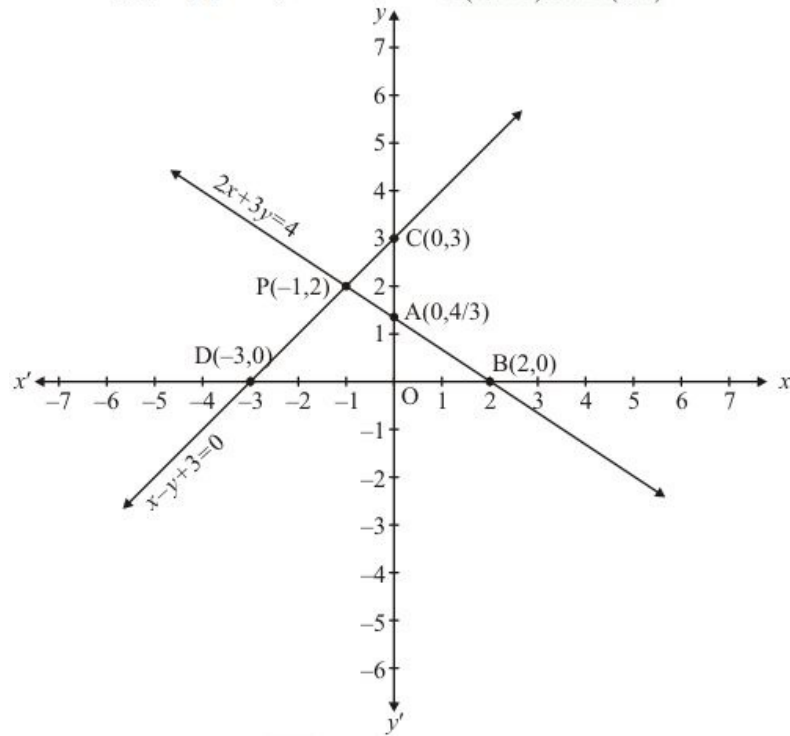
$$\Rightarrow x = 2$$

$$x = 2, \quad y = 0$$

Use the following table to draw the graph.

| | | |
|-----|-----|---|
| x | 0 | 2 |
| y | 4/3 | 0 |

Draw the graph by plotting the two points $A(0, 4/3)$ and $B(2, 0)$ from table



Graph of the equation.... (ii):

$$x - y = -3 \quad \dots\dots(ii)$$

Putting $x = 0$ in equation (ii) we get:

$$\Rightarrow 0 - y = -3$$

$$\Rightarrow y = 3$$

$$x = 0, \quad y = 3$$

Putting $y = 0$ in equation (ii), we get:

$$\Rightarrow x - 0 = -3$$

$$\Rightarrow x = -3$$

$$x = -3, \quad y = 0$$

Use the following table to draw the graph.

| | | |
|-----|---|----|
| x | 0 | -3 |
|-----|---|----|

| | | |
|-----|---|---|
| y | 3 | 0 |
|-----|---|---|

Draw the graph by plotting the two points $C(0, 3)$ and $D(-3, 0)$ from table

The two lines intersect at points $P(-1, 2)$.

Hence, $\boxed{x = -1}$ and $\boxed{y = 2}$ is the solution.

Pair of Linear Equations in Two variables Ex 3.2 Q9

Answer :

The given equations are:

$$2x - 3y + 13 = 0 \quad \dots\dots(i)$$

$$3x - 2y + 12 = 0 \quad \dots\dots(ii)$$

Putting $x = 0$ in equation (i), we get:

$$\Rightarrow 2 \times 0 - 3y = -13$$

$$\Rightarrow y = 13/3$$

$$x = 0, \quad y = 13/3$$

Putting $y = 0$ in equation (i) we get

$$\Rightarrow 2x - 3 \times 0 = -13$$

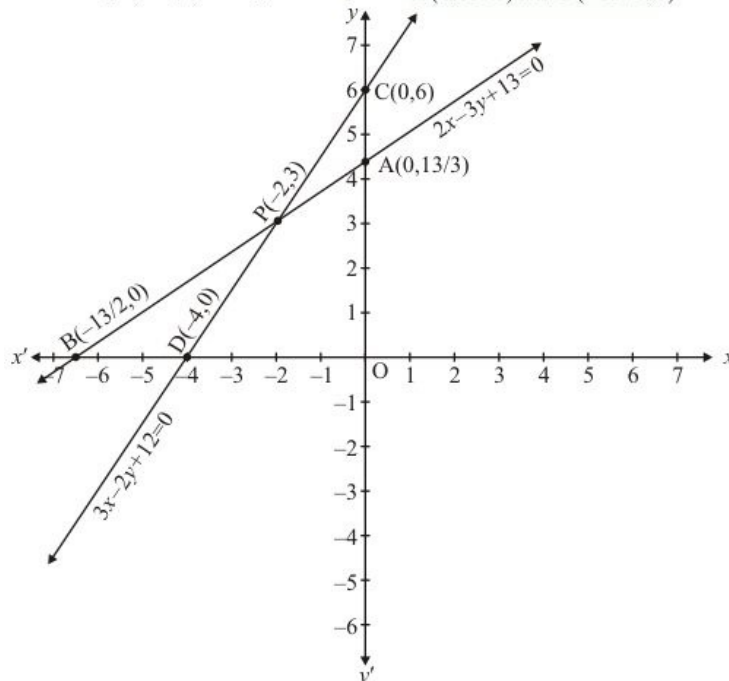
$$\Rightarrow x = -13/2$$

$$x = -13/2, \quad y = 0$$

Use the following table to draw the graph.

| | | |
|-----|--------|---------|
| x | 0 | $-13/2$ |
| y | $13/3$ | 0 |

Draw the graph by plotting the two points $A(0, 13/2)$ and $B(-13/2, 0)$ from table.



Graph of the equation....(ii):

$$3x - 2y = -12 \quad \dots\dots(ii)$$

Putting $x = 0$ in equation(ii) we get:

$$\Rightarrow 3 \times 0 - 2y = -12$$

$$\Rightarrow y = 6$$

$$x = 0, \quad y = 6$$

Putting $y = 0$ in equation(ii), we get:

$$\Rightarrow 3x - 2 \times 0 = -12$$

$$\Rightarrow x = -4$$

$$x = -4, \quad y = 0$$

Use the following table to draw the graph.

$$x \quad 0 \quad -4$$

$$y \quad 6 \quad 0$$

Draw the graph by plotting the two points $C(0,6)$ and $D(-4,0)$ from table.

The two lines intersect at points $P(-2,3)$.

Hence, $\boxed{x = -2}$ and $\boxed{y = 3}$ is the solution.

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