



Pair of Linear Equations in Two variables Ex 3.2 Q6

Answer :

The given equations are:

$$x - 2y = 6 \quad \dots\dots(i)$$

$$3x - 6y = 0 \quad \dots\dots(ii)$$

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

$$\Rightarrow 0 - 2y = 6$$

$$\Rightarrow y = -3$$

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

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

$$\Rightarrow x - 2 \times 0 = 6$$

$$\Rightarrow y = 6$$

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

Use the following table to draw the graph.

x	0	6
y	-3	0

Plotting the two points $A(0, -3)$ and $B(6, 0)$ equation (i) can be drawn.

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

$$3x - 6y = 0 \quad \dots\dots(ii)$$

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

$$\Rightarrow 3 \times 0 - 6y = 0$$

$$\Rightarrow y = 0$$

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

Putting $x=2$ in equation (ii), we get:

$$\Rightarrow 3 \times 2 - 6y = 0$$

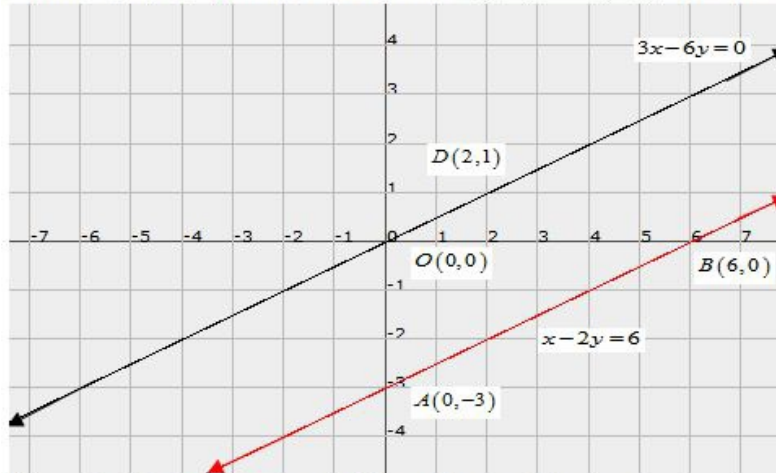
$$\Rightarrow y = 1$$

$$x = 2, \quad y = 1$$

Use the following table to draw the graph.

x	0	2
y	0	1

Draw the graph by plotting the two points $O(0,0)$ and $D(2,1)$ from table.



We see that the two lines are parallel, so they won't intersect

Hence there is no solution

Pair of Linear Equations in Two variables Ex 3.2 Q7

Answer :

The given equations are

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

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

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

$$\Rightarrow 0 + y = 4$$

$$\Rightarrow y = 4$$

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

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

$$\Rightarrow x + 0 = 4$$

$$\Rightarrow x = 4$$

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

Use the following table to draw the graph.

x	0	4
y	4	0

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

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

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

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

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

$$\Rightarrow y = -1$$

$$\therefore x = 0, \quad y = -1$$

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

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

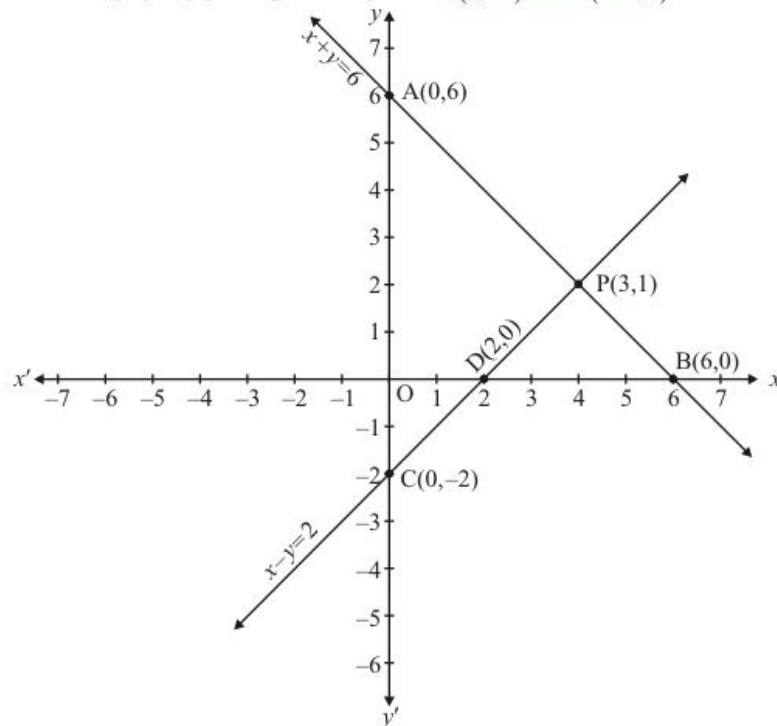
$$\Rightarrow x = 3/2$$

$$\therefore x = 3/2, \quad y = 0$$

Use the following table to draw the graph.

x	0	$3/2$
y	-1	0

Draw the graph by plotting the two points $C(0, -1)$ and $D(3/2, 0)$ from table.



The two lines intersect at points $P(3,1)$.

Hence $x = 3, y = 1$ is the solution

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