Pair of Linear Equations in Two varibles Ex 3.2 Q4

Answer :

The given equations are

$\Rightarrow 2x+y=3 \quad .....(i)$

$\Rightarrow 2x-3y=7 \quad .....(ii)$

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

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

$\Rightarrow y=3$

$x=0, \quad y=3$

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

$\Rightarrow 2x+0=3$

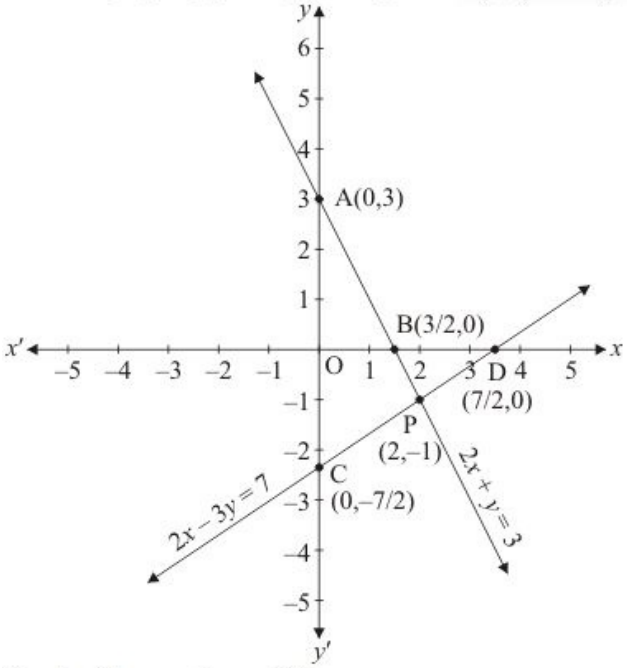
$\Rightarrow x=3/2$

$x=3/2, \qquad y=0$

Use the following table to draw the graph.

x	0	3/2
y	3	0

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



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

$2x-3y=7$

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

$\Rightarrow 2\times 0-3y=7$

$\Rightarrow y=-7/3$

$x=0, \quad y=-7/3$

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

$\Rightarrow 2x-3\times 0=7$

$\Rightarrow x=7/2$

$x=7/2, \quad y=0$

Use the following table to draw the graph.

x	0	7/2
y	–7/3	0

Draw the graph by plotting the two points $C(0,-7/2)$ and $D(7/2,0)$ from table.

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

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

Pair of Linear Equations in Two varibles Ex 3.2 Q5

Answer :

The given equations are

$x+y=6 \quad .....(i)$

$x-y=2 \quad .....(ii)$

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

$\Rightarrow 0+y=6$

$\Rightarrow y=6$

$x=0, \quad y=6$

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

$\Rightarrow x+0=6$

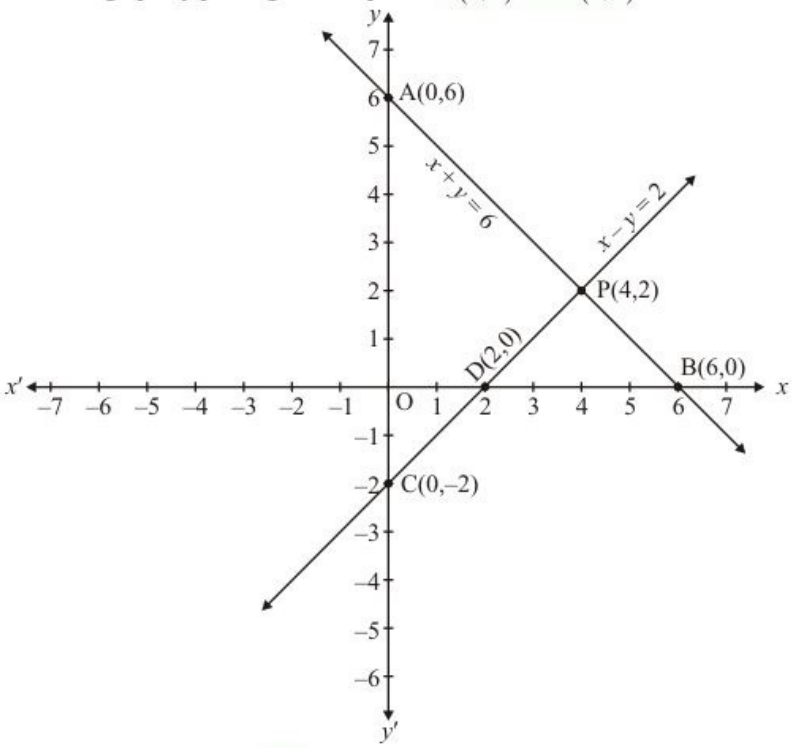
$\Rightarrow x=6$

$x=6, \quad y=0$

Use the following table to draw the graph.

x	0	6
y	6	0

Draw the graph by plotting the two points $A(0,6)$ *and* $B(6,0)$ from table.



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

$x-y=2 \qquad .....(ii)$

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

$\Rightarrow 0-y=2$

$\Rightarrow y=-2$

$x=0, \qquad y=-2$

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

$\Rightarrow x-0=2$

$\Rightarrow x=2$

$x=2, \qquad y=0$

Use the following table to draw the graph.

x	0	2
y	-2	0

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

The two lines intersect at points $\mathrm{P}(4,2)$.

Hence $\boxed{x=4, \quad y=2}$ is the solution.

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