Pair of Linear Equations in Two varibles Ex 3.2 Q22

Answer :

(i) The given equations are

$2x-5y+4=0 \quad .....(i)$

$2x+y-8=0 \quad .....(ii)$

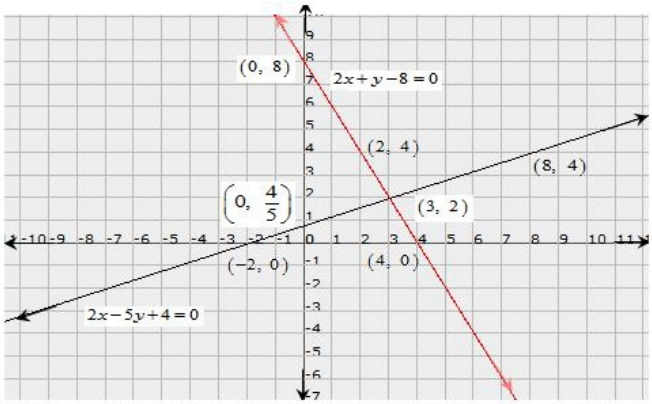
The two points satisfying (i) can be listed in a table as,

x	-2	8
y	0	4

The two points satisfying (ii) can be listed in a table as,

x	4	2
y	0	4

Now, graph of equations (i) and (ii) can be drawn as,



It is seen that the solution of the given system of equations is given by $x=3, y=2$.

Also, it is observed that the lines (i) and (ii) meet the y-axis at the points $\left(0, \frac{4}{5}\right)$ and $(0, 8)$ respectively.

(ii) The given equations are

$3x+2y=12 \quad .....(i)$

$5x-2y=4 \quad .....(ii)$

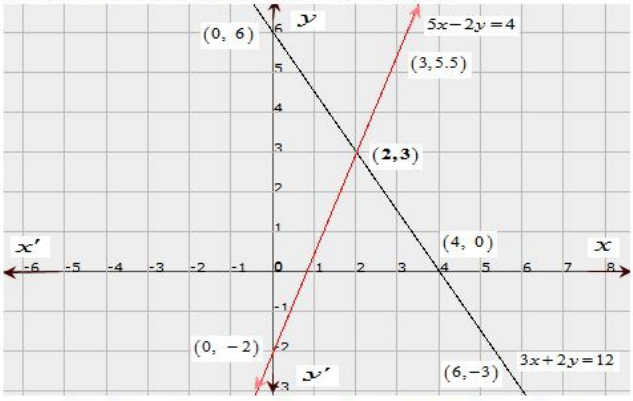
The two points satisfying (i) can be listed in a table as,

x	4	6
y	0	-3

The two points satisfying (ii) can be listed in a table as,

x	3	2
y	5.5	3

Now, graph of equations (i) and (ii) can be drawn as,



It is seen that the solution of the given system of equations is given by $x = 2, y = 3$.

Also, it is observed that the lines (i) and (ii) meet the y-axis at the points $(0, 6)$ and $(0, -2)$ respectively.

(iii) The given equations are

$2x + y - 11 = 0$ .....(i)

$x - y - 1 = 0$ .....(ii)

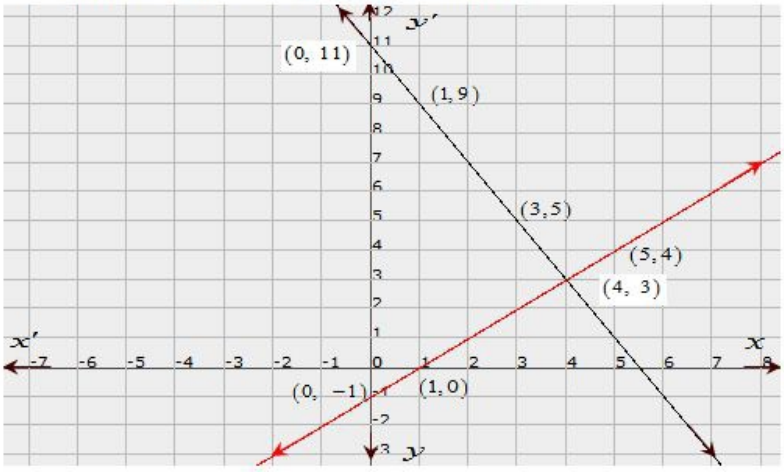
The two points satisfying (i) can be listed in a table as,

x	3	1
y	5	9

The two points satisfying (ii) can be listed in a table as,

x	1	5
y	0	4

Now, graph of equations (i) and (ii) can be drawn as,



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