

Pair of Linear Equations in Two varibles Ex 3.2 Q29

## Answer:

(i)

The given equations are

$$2x + y = 6$$
 ......(i)

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

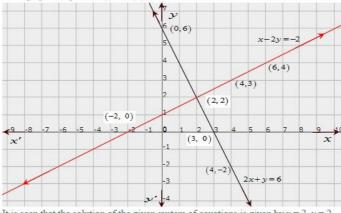
The two points satisfying (i) can be listed in a table as,

x	4	0
У	-2	6

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

x	4	6
у	3	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 = 2, y = 2.

Also, it is observed that the coordinates of the points where the lines (i) and (ii) meet the x-axis are (3, 0) and (-2, 0) respectively.

(ii) The given equations are

$$2x - y = 2$$
 ......(i)

$$4x - y = 8$$
 .....(ii)

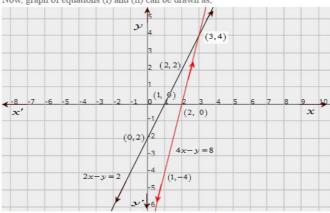
The two points satisfying (i) can be listed in a table as,

x	0	2
у	2	2

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

X	1	3
y	-4	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 = 4.

Also, it is observed that the coordinates of the points where the lines (i) and (ii) meet the x-axis are

## (1, 0) and (2, 0) respectively.

(iii) The given equations are

$$x + 2y = 5$$
 .....(i)

$$2x-3y=-4$$
 .....(ii)

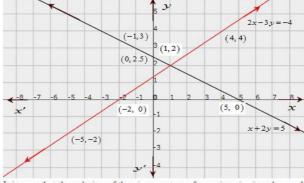
The two points satisfying (i) can be listed in a table as,

$\boldsymbol{x}$	0	-1
у	2.5	3

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

	7	
x	4	-5
y	4	-2

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 = 1, y = 2.

Also, it is observed that the coordinates of the points where the lines (i) and (ii) meet the x-axis are (5, 0) and (-2, 0) respectively.

## Solution is missing

(iv) The given equations are

$$2x + 3y = 8$$
 .....(i)

$$x-2y=-3$$
 .....(ii)

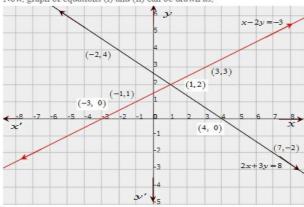
The two points satisfying (i) can be listed in a table as,

х	-2	7
v	4	-2

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

x	-1	3
y	1	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 = 1, y = 2.

Also, it is observed that the coordinates of the points where the lines (i) and (ii) meet the x-axis are (4, 0) and (-3, 0) respectively.

