



### Pair of Linear Equations in Two variables Ex 3.1 Q3

**Answer :**

The given equation are  $3x + 4y - 12 = 0$  and  $6x + 8y - 48 = 0$ .

In order to represent the above pair of linear equation graphically, we need

Two points on the line representing each equation. That is, we find two solutions of each equation as given below:

We have,

$$3x + 4y - 12 = 0$$

Putting  $y = 0$ , we get

$$3x + 0 - 12 = 0$$

$$\Rightarrow x = 4$$

Putting  $x = 0$  we get

$$0 + 4y - 12 = 0$$

$$\Rightarrow y = 3$$

Thus, two solution of equation  $3x + 4y - 12 = 0$  are

$x$	0	4
$y$	3	0

We have  $6x + 8y - 48 = 0$

Putting  $y = 0$ , we get

$$6x + 0 - 48 = 0$$

$$\Rightarrow x = 8$$

Putting  $x = 0$  we get

$$0 + 8y - 48 = 0$$

$$\Rightarrow y = 6$$

Thus, two solution of equation  $6x + 8y - 48 = 0$  are

$x$	0	8
$y$	6	0

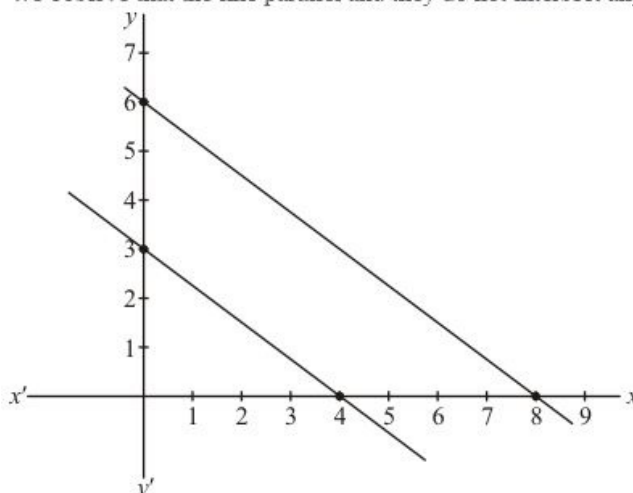
Now we plot the point  $A(4,0)$  and  $B(0,3)$  and draw a line passing through

These two points to get the graph of the line represented by equation (1)

We also plot the points  $C(8,0)$  and  $D(0,6)$  and draw a line passing through

These two points to get the graph of the line represented by equation (2)

We observe that the lines are parallel and they do not intersect anywhere.



### Pair of Linear Equations in Two variables Ex 3.1 Q4

**Answer :**

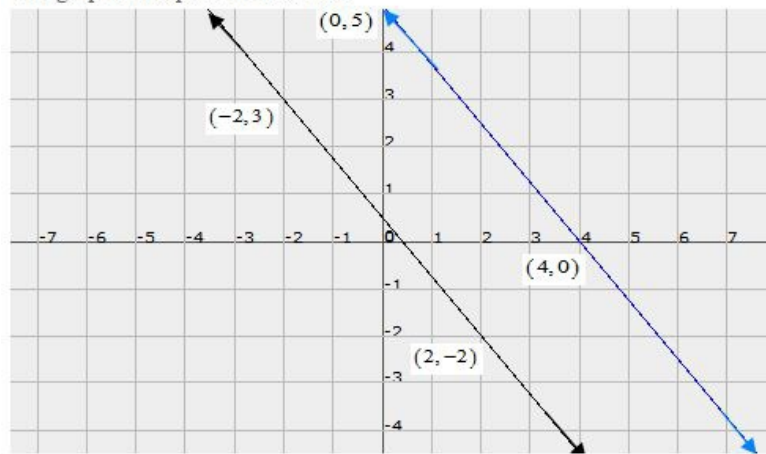
Gloria is walking the path joining  $(-2, 3)$  and  $(2, -2)$

Suresh is walking the path joining  $(0, 5)$  and  $(4, 0)$

$x$	$-2$	$2$
$y$	$3$	$-2$

$x$	$0$	$4$
$y$	$5$	$0$

The graphical representations are



\*\*\*\*\* END \*\*\*\*\*