Linear Equations in Two Variables Ex 13.3 Q19

Answer :

We are given the path of train A,

$3x+4y-12=0$

We get,

$y=\frac{12-3x}{4}$

Now, substituting $x=0$ in $y=\frac{12-3x}{4}$,we get

$y=3$

Substituting $x=4$ in $y=\frac{12-3x}{4}$,we get

$y=0$

Thus, we have the following table exhibiting the abscissa and ordinates of points on the line represented by the given equation

x	0	4
y	3	0

Plotting A(4,0) and E(0,3) on the graph and by joining the points , we obtain the graph of equation $3x+4y-12=0$.

We are given the path of train B,

$6x+8y-48=0$

We get,

$y=\frac{48-6x}{8}$

Now, substituting $x=0$ in $y=\frac{48-6x}{8}$,we get

$y=6$

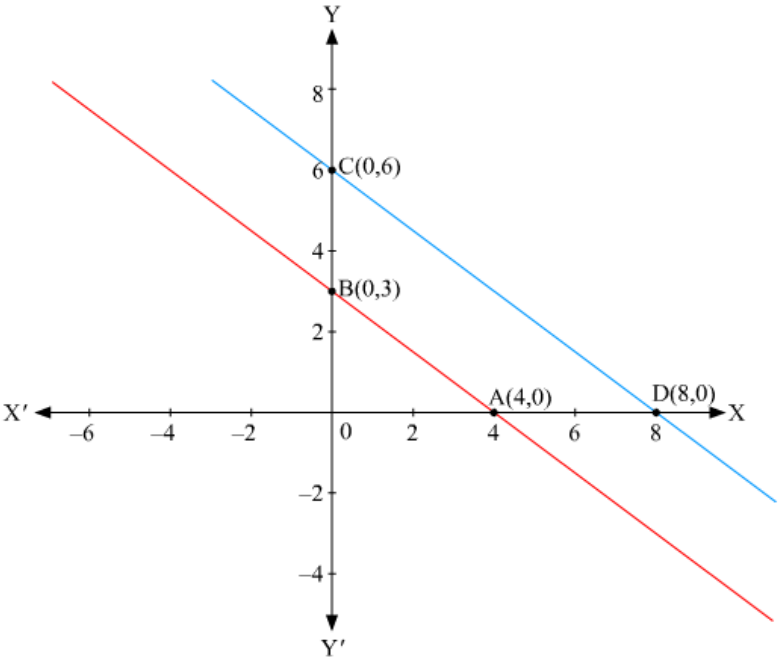
Substituting $x=8$ in $y=\frac{48-6x}{8}$,we get

$y=0$

Thus, we have the following table exhibiting the abscissa and ordinates of points on the line represented by the given equation

x	0	8
y	6	0

Plotting C(0,6) and D(8,0) on the graph and by joining the points , we obtain the graph of equation $6x+8y-48=0$



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