

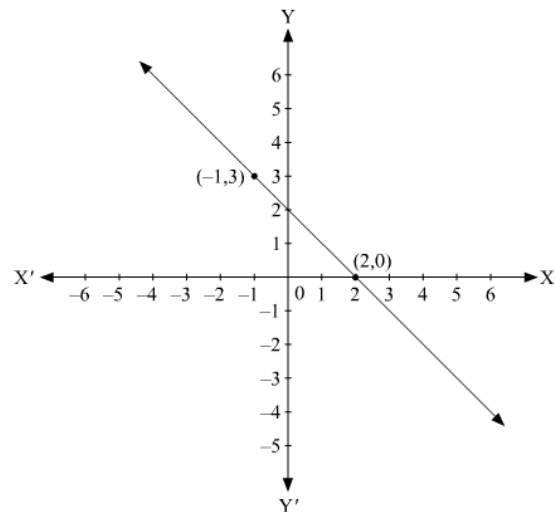


Linear Equations in Two Variables Ex 13.3 Q9

Answer :

We are given co-ordinates $(-1, 3)$ and $(2, 0)$ as the solution of one of the following equations.

We will substitute the value of both co-ordinates in each of the equation and find the equation which satisfies the given co-ordinates.



(i) We are given,

$$y = x + 2$$

Substituting $x = -1$ and $y = 3$, we get

$$3 = -1 + 2$$

$$\text{L.H.S} \neq \text{R.H.S}$$

Substituting $x = 2$ and $y = 0$, we get

$$0 \neq 4$$

$$\text{L.H.S} \neq \text{R.H.S}$$

Therefore, the given solutions does not satisfy this equation.

(ii) We are given,

$$y = x - 2$$

Substituting $x = -1$ and $y = 3$, we get

$$3 = -1 - 2$$

$$\text{L.H.S} \neq \text{R.H.S}$$

Substituting $x = 2$ and $y = 0$, we get

$$0 = 0$$

$$\text{L.H.S} = \text{R.H.S}$$

Therefore, the given solutions does not completely satisfy this equation.

(iii) We are given,

$$y = -x + 2$$

Substituting $x = -1$ and $y = 3$, we get

$$3 = -(-1) + 2$$

$$\text{L.H.S} = \text{R.H.S}$$

Substituting $x = 2$ and $y = 0$, we get

$$0 = -2 + 2$$

$$0 = 0$$

$$\text{L.H.S} = \text{R.H.S}$$

Therefore, the given solutions satisfy this equation. Thus, it is the equation whose graph is given.

Linear Equations in Two Variables Ex 13.3 Q10

Answer :

It is given that the point $(2, -2)$ lies on the given equation,

$$5x + ky = 4$$

Clearly, the given point is the solution of the given equation.

Now,

Substituting $x = 2$ and $y = -2$ in the given equation, we get

$$5x + ky = 4$$

$$5 \times 2 + (-2)k = 4$$

$$2k = 10 - 4$$

$$2k = 6$$

$$k = \frac{6}{2}$$

$$\boxed{k = 3}$$

***** END *****