



Linear Equations in Two Variables Ex 13.2 Q2

Answer :

(i) We are given,

$$5x - 2y = 10$$

Substituting $x = 0$ in the given equation, we get

$$5 \times 0 - 2y = 10$$

$$-2y = 10$$

$$y = -\frac{10}{2}$$

$$y = -5$$

Thus $\boxed{x = 0}$ and $\boxed{y = -5}$ is the solution of $5x - 2y = 10$

Substituting $y = 0$ in the given equation, we get

$$5x - 2 \times 0 = 10$$

$$5x = 10$$

$$x = \frac{10}{5}$$

$$x = 2$$

Thus $\boxed{x = 2}$ and $\boxed{y = 0}$ is the solution of $5x - 2y = 10$

(ii) We are given,

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

Substituting $x = 0$ in the given equation, we get

$$-4 \times 0 + 3y = 12$$

$$3y = 12$$

$$y = 4$$

Thus $x = 0$ and $y = 4$ is the solution of the $-4x + 3y = 12$

Substituting $y = 0$ in the given equation, we get

$$-4x + 3 \times 0 = 12$$

$$-4x = 12$$

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

$$x = -3$$

Thus $x = -3$ and $y = 0$ is the solution of $-4x + 3y = 12$

(iii) We are given,

$$2x + 3y = 24$$

Substituting $x = 0$ in the given equation, we get

$$2 \times 0 + 3y = 24$$

$$3y = 24$$

$$y = \frac{24}{3}$$

$$y = 8$$

Thus $x = 0$ and $y = 8$ is the solution of $2x + 3y = 24$

Substituting $y = 0$ in the given equation, we get

$$2x + 3 \times 0 = 24$$

$$2x = 24$$

$$x = \frac{24}{2}$$

$$x = 12$$

Thus $x = 12$ and $y = 0$ is the solution of $2x + 3y = 24$

***** END *****