



Linear Inequations Ex 15.2 Q9

Consider the first inequation,

$$3x - 1 \geq 5$$

$$3x \geq 5 + 1$$

$$3x \geq 6$$

$$x \geq 2 \quad \dots (i)$$

Consider the second inequation,

$$x + 2 > -1$$

$$x > -1 - 2$$

$$x > -3 \quad \dots (ii)$$

From (i) and (ii), $[2, \infty)$ is the solution set of the simultaneous equations.

Linear Inequations Ex 15.2 Q10

Consider the first inequation,

$$11 - 5x > -4$$

$$-5x > -4 - 11$$

$$-5x > -15$$

$$5x < 15$$

$$x < 3 \quad \dots (i)$$

Consider the second inequation,

$$4x + 13 \leq -11$$

$$4x \leq -11 - 13$$

$$4x \leq -24$$

$$x \leq -6 \quad \dots (ii)$$

From (i) and (ii), $[-\infty, -6]$ is the solution set of the simultaneous equations.

Linear Inequations Ex 15.2 Q11

Consider the first inequation,

$$4x - 1 \leq 0$$

$$4x \leq 1$$

$$-5x \leq -15$$

$$x \leq \frac{1}{4} \quad \dots (i)$$

Consider the second inequation,

$$3 - 4x < 0$$

$$-4x < -3$$

$$-x < \frac{-3}{4}$$

$$x > \frac{3}{4} \quad \dots (ii)$$

From (i) and (ii), there is no solution set of the simultaneous equations.

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