

Board – ICSE

Class –VIII

Topic – Linear In Equations

1. If $x \in \{-3, -2, -1, 0, 1, 2, 3\}$, find the solution set of each of the following $x + 2 < 1$
2. If $x \in \mathbb{N}$, find the solution set of each of the following $3x - 8 < 0$
3. If $x \in \mathbb{Z}$, find the solution set of the following in equations $9x - 7 \leq 25 + 3x$
4. Solve the inequality: $-2(y + 3) < 10$
5. Solve: $\frac{1+3x}{2} < \frac{9}{2} + \frac{1-2x}{4}$ $x \in \mathbb{N}$
6. Find the Solution Set of the following in equations and represent the solution on a real line.

$$-3 < \frac{x}{2} - 1 < 1, x \in \mathbb{Z}$$

7. Represent the solution set on number line $2x < x - 4 \leq 3x + 8$
8. Solve the in equations and represent them graphically $x + 4 \leq 8, x \in \mathbb{N}$
9. Find the solution set $\frac{3x+1}{4} \leq \frac{5x-2}{3}, x \in \mathbb{R}$
10. Evaluate $3x - 8 + 2x < 12$

Answer

1. S.S = $\{-3, -2\}$
2. S.S = $\{1, 2\}$
3. S.S = $\{\dots, -3, -2, -1, 0, 1, 2, 3, 4, 5\}$
4. $y > -8$
5. S.S = $\{1, 2\}$
6. S.S = $\{-3, -2, -1, 0, 1, 2, 3\}$
7. $-6 \leq x < -4$
8. $x \leq 4$
9. S.S = $\{x \in \mathbb{R}: x \geq 1\}$
10. $x < 4$