

Class X, Syllabus – ICSE

Subject Mathematics.

Chapter – Linear Inequations.

Important Practice Questions.

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1. If $-4 < 2x + 6 < 2$, x belongs to \mathbb{R} then x lies in –
a.) $(-4, 6)$ b.) $(-5, -2)$ c.) $(-4, -2)$ d.) $(-5, 6)$
2. If n is real number then $|x| \geq n$ represent :
a.) $x \geq n$ b.) $x \leq -n$ c.) $-n \leq x \leq n$ d.) $x > -10$
3. Find the interval in the inequation in which x lies $(x-5)^3 > 125$, $x \in \mathbb{R}$.
a. $x < 5$ b. $x > 10$ c. $x < -5$ d. $x > -10$
4. Find the solution set of the inequation $2y - 5 \leq 5y + 4 \leq 11$ where $x \in \mathbb{I}$.
a.) $[1, 2, 3, 4, 5]$ b.) $[0, 1, 2, 3, 4, 5]$ c.) $[-3, -2, -1, 0, 1]$ d.) None of these.
5. Find the solution set of the inequation $4 < 3 - 2x < 5$, $x \in \mathbb{N}$.
a.) $-\frac{1}{2} > x > 1$ b.) $\$$ c.) $1 \leq x \leq 4$ d.) $-\frac{1}{2} < x < 3$
6. Find the solution set of the inequality $\frac{3x}{5} - \frac{(2x-1)}{3} > 1$, $x \in \mathbb{W}$.
a. $\{0, 1, 2\}$ b. $\{3, 4\}$ c. $\$$ d. None of these.
7. The solution set for the linear Inequation $-8 \leq x - 7 < -4$, $x \in \mathbb{I}$ is :
a.) $\{x: x \text{ belongs to } \mathbb{R}, -1 \leq x < 3\}$ b. $\{0, 1, 2, 3\}$ c.) $\{-1, 0, 1, 2, 3\}$ d.) $\{-1, 0, 1, 2\}$
8. Find the solution set for :
a) $(-\frac{8}{5}, \infty)$ b) $(-\infty, -\frac{8}{5})$ c) $(\frac{8}{5}, \infty)$ d) $(-\infty, \frac{8}{5})$
9. One fourth of a stick is in water, two third of it is buried in mud and rest part of stick above the water, is greater than or equal to 2m. Find the length of the shortest stick.
a) 22 cm b) 23 cm c) 24 cm d) 25 cm
10. Solve the following in equation and represent the solution set on a number line :
 $-8\frac{1}{2} < -\frac{1}{2} - 4x \leq 7\frac{1}{2}$; $x \in \mathbb{I}$