



Class 11 Mathematics | Linear Inequalities

MCQ WORKSHEET • 15 questions • Choose one correct option • Suggested time: 25 minutes

1. Solve $3x-5<7$.

A. $x>4$ B. $x\leq 4$ C. $x<4$ D. $x<2$

2. Solve $-2x\geq 6$.

A. $x\leq 3$ B. $x\geq -3$ C. $x\geq 3$ D. $x\leq -3$

3. Solve $2\leq x+1<5$.

A. $3\leq x<6$ B. $1<x\leq 4$ C. $1\leq x<4$ D. $-1\leq x<6$

4. The integer solutions of $-2<x\leq 2$ are:

A. -1,0,1,2 B. 0,1,2
C. -2,-1,0,1,2 D. -2,-1,0,1

5. Solve $x/3+2\geq 5$.

A. $x\leq 9$ B. $x\geq 7$ C. $x\geq 9$ D. $x\geq 1$

6. Solve $5-2x>1$.

A. $x<2$ B. $x<3$ C. $x\leq 2$ D. $x>2$

7. Which value satisfies both $x>1$ and $x\leq 3$?

A. 4 B. 0 C. 1 D. 2

8. Solve $4x+1\leq 2x+9$.

A. $x<4$ B. $x\geq 4$ C. $x\leq 4$ D. $x\leq 5$

9. The solution of $x>5$ and $x<3$ is:

A. (3,5) B. $\emptyset$ C. R D. $(5,\infty)$

10. Solve $(x-1)/2>(x+2)/3$.

A. $x<7$ B. $x>1$ C. $x>7$ D. $x>-7$

11. A taxi charges ₹50 plus ₹12/km. For a bill at most ₹170, distance d satisfies:

A. $d\leq 12$ B. $0\leq d<12$ C. $0\leq d\leq 10$ D. $d\geq 10$

12. Solve $-3\leq 2x+1\leq 7$.

A. $-2<x<3$ B. $-4\leq x\leq 6$ C. $-2\leq x\leq 3$ D. $-1\leq x\leq 4$

13. The least integer satisfying $2x+3>12$ is:

A. 3 B. 5 C. 6 D. 4

14. If $7x-2<5x+8$, the greatest integer solution is:

A. 5 B. 3 C. 4 D. 6

15. A student needs an average of at least 75 in three tests. Scores are 70,80,x. Find x.

A. $x\leq 75$ B. $x\geq 75$ C. $x\geq 70$ D. $x>75$

ANSWER KEY — check after completing all 15 questions

1.C 2.D 3.C 4.A 5.C 6.A 7.D 8.C 9.B 10.C 11.C 12.C 13.B 14.C 15.B