

Sub-strand 2.3 — Linear Inequalities



INSTRUCTIONS: SECTION A:

SECTION A — Multiple Choice (20 marks)

1. Which symbol means "less than or equal to"?
A. > B. ≥ C. ≤ D. <

2. Solve inequality: x + 3 < 7 → x <
A. 4 B. −4 C. 10 D. 3

3. If 2x − 5 ≥ 9, then x ≥
A. 7 B. 2 C. 3 D. 5/2

4. Which shading shows x ≤ 2 on a number line?
A. dot at 2 filled and shading left
B. dot open at 2 shading right
C. filled dot right
D. none

5. Write inequality: "A number y is at least 10"
A. y > 10 B. y ≥ 10 C. y = 10 D. y < 10

6. Solve: 3x < 12 → x <
A. 4 B. $\frac{12}{3}$ C. 8 D. 3

7. Which of these numbers satisfy x > 0?
A. −1 B. 0 C. 1 D. −0.1

8. If −x > 4, then x <
A. −4 B. 4 C. −1 D. 0

9. Compound inequality: 2 ≤ x < 5 includes which integer(s)?
A. 1 B. 2,3,4 C. 5 only D. 2,5

10. Solve: $(\frac{x}{2})$ + 3 ≥ 5 → x ≥
A. 4 B. 2 C. 6 D. 8

11. If 5 − x ≤ 2, then x ≥
A. 3 B. −3 C. 7 D. 5

12. Which is solution for 4x − 6 < 2?
A. x < 2 B. x < 1 C. x < 4 D. x < 0

13. If x ≠ 0, the inequality 6/x > 2 for positive x gives x < 3 or x > 3? (Pick correct)
A. x > 3 B. x < 3 C. x = 3 D. none

14. Which number line representation shows x > −1?
A. open dot at −1 shading right
B. closed at −1 shading left
C. open at −1 shading left
D. closed at −1 shading right

15. Inequality: "At most 12 children" → symbol form:
A. c ≥ 12 B. c ≤ 12 C. c > 12 D. c = 12

16. Which of these is a compound inequality?
A. x < 5 B. 2 < x ≤ 7 C. x ≥ 3 D. −x < 4

17. Solve: −2x ≤ 6 → x ≥
A. −3 B. 3 C. −6 D. 6

WORKING SPACE



