

Linear Inequalities Worksheet – 2

1. If the replacement set = $\{-8, -7, -5, -3, -1, 0, 1, 3, 4, 5\}$, then find solution set of

i) $-9 < x < 1$

ii) $0 \leq x \leq 4$

2. Solve: $\frac{x}{4} + \frac{1}{5} < \frac{x}{8} + \frac{1}{2}$, $x \in W$

3. Solve: $-2 < \frac{x}{2} + 2 \leq 5$, $x \in I$

4. Solve: $5 > 4x - 11$, $x \in N$

5. Solve: $9 - x \leq 12 - 2x$, $x \in N$, represent solution set on number line.

6. Solve: $5(x - 2) < 3(x - 4)$, $x \in I$

7. Solve: $-3x + 8 \leq 2$, $x \in N$

8. Solve: $-9(m + 2) > 7$, $m \in I$, represent solution set on number line.

9. Solve: $-3 \leq 3x < 12$, $x \in I$

10. Solve: $2(x - 3) > 3(x + 1) - 7$, $x \in I$

11. Solve: $1 \leq 2(x - 3) + 4 < 12$, $x \in W$

12. Solve: $5x + 2 \leq 17$, $x \in W$, represent solution set on number line.

13. Solve: $\frac{2}{3}(2x + 1) + 5 \leq 3 + \frac{5}{3}(x + 1)$, $x \in I$

14. Solve: $15 < 3x + 1 \leq 28$, $x \in I$

15. Solve: $7x - 5 \leq 25 + 2x$, $x \in N$

16. Solve: $9 - 3(2 + 5x) < 33$

17. Solve: $-8 \geq 3x - 5$, $x \in I$

18. Solve: $-2 < \frac{2x}{3} + 2 \leq 10$, $x \in I$

19. Solve: $5 - 20x \geq -5$, $x \in N$

20. Solve: $5 - 2x \geq x - 16$, $x \in W$, represent solution set on number line.