

Name: _____

Section: _____

Solve each inequality. Write the solution in the form of sets and intervals Graph the solution set on a number line

1. $2x - 4 < 6$

2. $3 - 10x \geq 23$

3. $\frac{7x - 1}{4} \leq 12$

4. $\frac{3x + 4}{7} + 8 > 12$

5. $\frac{7-2x}{5} + 2 \leq 13$

6. $\frac{3x-5}{2} \geq \frac{4-5x}{3}$

7. $\frac{2x-15}{3} + 4 < \frac{3+5x}{5} - 2$

8. $\frac{4x-7}{2} + 3x > \frac{3-5x}{2} - 12x$

9. $|4x| > 2$

10. $-|5x| < 48$

11. $|5x| > -12$

12. $|18x| \leq 3$

13. $|4x + 8| > 16$

14. $|2 - 5x| < 17$

15. $|-4x - 3| \geq 37$

16. $2|-5x - 4| + 5 \geq 29$

17. $3 \frac{|-2x + 7|}{5} + 4 < 32$

18. $-5 < 3 - 4x < 9$

19. $\frac{-3x+5}{2} > 5$ or $1 - \frac{2x+3}{4} \leq 5$

20. $11 \leq 2 - 3x \leq -1$

21. $2(-2x+4) - 5 < 9$ and $\frac{2(5-4x)}{3} \geq 6$

22. $7 - 2x < 3(4x - 3) + 2 \leq 4(3 - 5x) + 11$

23. $\frac{4x - 5}{3} + 2 \geq 7$ or $2 - \frac{3 - 4x}{5} < 6$

24.

$$4(5 - 3x) \leq 2\frac{(4x - 5)}{3} + 1 < -2(3 - 4x) + 3$$
