Neatly write your homework on notebook paper.

Graph each inequality on a separate number line.

1. $x > 5$
2. $x \leq -3$
3. $x \neq 2$
4. $x \geq 0$
5. $2 < x < 6$
6. $-3 \leq x < 1$

Solve the inequalities. Show your work.

7. $3x - 1 < 14$
8. $5 - 2x > -3$
9. $\frac{x}{-4} \leq 2x$
10. $4x + 6 > 5x - 7$
11. $-2(x + 3) \leq 5(x - 8)$
12. $4 + \frac{x}{3} > 2x - 7$
13. $-6 < 2x - 4 < 10$
14. $11 \leq 3 - x < 4$

Conjunctions: Solve the inequalities and graph the solution set that works for BOTH inequalities.

15. $x \geq -2$ AND $x < 4$
16. $x \leq -3$ AND $x > 8$
17. $7x + 2 < -5$ AND $-2x - 8 < 12$
18. $4x - 5 < 2x + 3$ AND $10 + 2x < x + 11$
19. $5x + 1 < 3$ AND $9 + 4x \geq x + 15$

Disjunctions: Solve the inequalities and graph the solution set that works for EITHER inequality.

20. $x < 2$ OR $x > 6$
21. $x > 1$ OR $x < 9$
22. $3 - 2x > -3$ OR $3x + 6 < 9$
23. $4x - 5 > x + 1$ OR $x - 7 < -3$
24. $7x > 2x + 15$ OR $2x > 5x - 12$