

Lesson #10 B-5 Review: Solving and Graphing One and Two Variable Inequalities and Compound Inequalities (Reference: Lesson #45, #50, #66, #70, #73, #77, #81, #82 & #97 in book)**Problem**

1. For each of the following inequalities, solve the inequality for the given variable and then graph the inequality, and give me the solution set in interval notation.

1. $3(5x + 1) + 15x \geq -3(2x - 4) + 21x - 24$

2. $2(x - 8) - 3x > 6 - 3(2x + 4)$

3. For each of the following compound inequalities, please solve the inequality, graph the inequality, and give me the solution set for the inequality in interval notation.

3. $-18 \leq 9x - 6 - 4x + 3 \leq 22$

4. $-9 < -4(5x - 3) + 23x - 9 \leq 15$

5. $-6x - 6 + 4x + 7 \geq -5$ or $-4(4 - 5x) - 19x + 14 \geq 6$

6. $3(2x - 3) - 4x + 7 < -6$ or $-2(4x - 3) + 11(x - 1) > 13$

7. For each of the following inequalities, please graph the inequalities and shade the solution region of the inequality on the coordinate plane.

7. $y \leq -3x - 1$

8. $-12x + 6y > -18$

9. $-9x + 3y \leq 24$

10. $21x - 28y \geq -140$