

Solving Linear Inequalities in One Variable

1. Graph each inequality on a number line, and write each inequality in interval notation.

(similar to p.163 #40)

$$x \leq -8$$

2. Use interval notation to express the inequality shown in each graph.

(similar to p.163 #46)



3. Solve the inequality and express the solution set in set builder notation and interval notation. Graph the solution set on a real number line.

(similar to p.163 #60)

$$x + 7 \leq 2$$

4. Solve the inequality and express the solution set in set builder notation and interval notation. Graph the solution set on a real number line.

(similar to p.163 #66)

$$-8x \geq -24$$

5. Solve the inequality and express the solution set in set builder notation and interval notation. Graph the solution set on a real number line.

(similar to p.163 #68)

$$3x - 5 > 7$$

6. Solve the inequality and express the solution set in set builder notation and interval notation. Graph the solution set on a real number line.

(similar to p.163 #74)

$$-5(2 - 3x) > x + 4$$

7. Solve the inequality and express the solution set in set builder notation and interval notation. Graph the solution set on a real number line.

(similar to p.163 #78)

$$7x - 2 > \frac{1}{4}(x - 3)$$

8. Solve the inequality and express the solution set in set builder notation and interval notation. Graph the solution set on a real number line.

(similar to p.163 #84)

$$7x - 3(x - 2) \leq x + 4$$