How do I solve a compound inequality?

**3-Sided Inequality**

**AND**

**Rule 1:** what you do to one side, you must do to the other 2 sides of the inequality  
**Rule 2:** WATCH OUT! If you $x$ / ÷ all 3 sides of an inequality by a negative number, reverse the direction of both inequality signs  
**Step 1:** Follow the steps for Solving a Multi-Step Inequality  
**Step 2:** Leave your answer as a 3-part inequality going from least to greatest, left to right

**Examples:**
1. $-2 \leq x + 3 \leq 8$
2. $5 > -10(x - 6) \geq 12$
3. $-2x < 3 + 5(x - 6) \leq 4$

**Two Separate Inequalities**

**OR**

**Rule 1:** Treat the inequality as two separate inequalities  
**Rule 2:** Leave your answer as ___ or ___  
**Step 1:** Follow rules for Multi-Step Inequalities

**Examples:**
1. $-2x + 5 < 6$ or $3x > 12$
2. $3(x + 6) - 1 \geq 0$ or $\frac{x}{5} - 3 < 4$