

Homework Assignment

Chapter 3: Solving Inequalities

All homework is done in a notebook or on loose leaf. Unless problem is meant to be a “mental” problem, all work should be shown.

If assigned the alternate evens, do these problems:

2, 6, 10, 14, 18, 22, 26, 30, 34, 38, 42, 46, 50, 54, 58, 62, 66, 70, 74, 78, 82, 86, 90, 94, 98, 102, etc.

Homework

- Section 3-1: pgs. 136-138: 2-14 alt evens; 15-18 all; 20-32 evens;
- Section 3-2: pgs. 142-144: 75-86 all
- Section 3-3: pgs. 149-150: 2-26 alt evens, no graphing or checking; 45-51 all; 62-74 alt evens
- Section 3-4: pgs. 155-158: 14-38 alt evens; 62-74 alt evens
- Section 3-5: pgs. 163-165: 6-18, 24-32 evens; 34-37 all; 38-42 evens; 56 & 57
- Section 3-6: pgs. 169-171: 2-20, 24-34, 38-50 evens; 72-74, 79-80, all
- Chapter Test: pg. 178: 1-34 all (Extra Credit for Test)

Steps to Solving a Single Variable First Degree Inequality

1. **Simplify** both sides of the inequality applying the distributive property & combining like terms.
2. Use addition (subtraction) property of inequality to **isolate the variable(s)** on one side of the inequality.
3. Use addition (subtraction) property of inequality to **isolate the constant(s)** on the other side of the inequality.
4. **Simplify** both sides of the inequality combining like terms.
5. Use multiplication (division) property of inequality and inverse property of multiplication to **make the coefficient of the variable = “1”**. **Remember if you multiply or divide both sides of an inequality by a negative value you MUST REVERSE your inequality sign.**
6. **Check your answer**, by substituting **two** values found for the variable into the **original inequality**.
(Remember to check the minimum / maximum value of the solution **and** one other value)

***** Remember: **The Equations' / Inequalities' Bill of Rights!** *****

What you do to one side of an equation / inequality you **MUST** do to the other side of the equation / inequality.