Unit 7 Objective 9 Remediation

Solve two-step inequalities in one variable

Goal: Get the variable by itself.

Steps:

-Distribute to remove the parentheses

- Then do the reverse order of operations to solve the inequality

- **Write all answers with the variable coming first**

When you divide or multiply both sides on an inequality by a negative number you must FLIP the inequality sign!

Examples:

A. $5x - (2 + 2x) < 31$

$5x - 2 - 2x < 31$

$3x - 2 < 31$

+2 +2

$3x < 33$

$\div 3 \quad \div 3$

$x < 11$

B. $4x - 4 > 2x - 2$

-2x -2x

$2x - 4 > -2$

+4 +4

$2x > 2$

$\div 2 \quad \div 2$

$x > 1$

Try These:

1.) $6x - (3 + 5x) > 17$

2.) $7x - 2(x + 4) < 3x - 6$

3.) $-3x + 2x < 6$

4.) $3 - 6n - 4 \leq 17$

5.) $-(2 + 2m) - 2 > 6$

6.) $8(1 - 4x) \geq 40$

7.) $-p + 6p < 4 + 6p$

8.) $5 + 4x \geq x + 8$

9.) $0 < -(n + 1) + 6$

10.) $4(n - 3) \leq 16$