Unit 2: Solving Linear Inequalities

Definitions

$> \text{ or } \geq$ GREATER THAN   or
GREATER THAN OR EQUAL TO

$< \text{ or } \leq$ LESS THAN   or
LESS THAN OR EQUAL TO

How to Solve Inequalities

5 Step Plan

1. Simplify the BS (<u>B</u>oth <u>S</u>ides)
2. Move **variable terms** to one side by add. or sub.
3. Move **constant terms** to one side by add. or sub.
4. Multiply or divide the coefficient of variable term.
5. **Flip the sign if you multiplied or divided by a negative**.

Ex1: 2x + 7 > -3

X > -5

Ex 2: $-\dfrac{x}{4} + 2 < 6$ X > 16

Challenge Question

$$2(x + 4) - 2 \leq 4x + 5 - x$$

$$x \geq 1$$