Vocabulary: Solving Linear Inequalities in One Variable

Vocabulary

- <u>Boundary point</u> - a point separating the solution of an inequality from points not in the solution.

    - The graph of $x \leq 4$, shown to the right, has a boundary point at 4.

- <u>Inequality</u> – a statement that compares two quantities or expressions that are not equal.

    - A *strict inequality* uses one of the following symbols: < (less than), > (greater than), or ≠ (not equal to).

        - Examples of strict inequalities are $x > 2$, and $x + 1 < 5$.

    - Inequalities that are not strict use the symbols ≤ (less than or equal to) or ≥ (greater than or equal to).

        - Examples of inequalities that are not strict are $x \leq 6$, and $2x \geq 4$.

- <u>Solution</u> – a value that makes an equation or inequality true.

    - For example, 3 is a solution of the inequality $2x \leq 8$ because $2(3) \leq 8$.