

Notes #4 ~ Sect. 1.5: Absolute Value Inequalities

Rules:

Let k represent a positive real number.

$|x| \geq k$ is equivalent to $x \leq -k$ or $x \geq k$

$|x| \leq k$ is equivalent to $-k \leq x \leq k$

Examples:

$|x - 4| \leq 6$ is equivalent to

$|3x + 2| > 26$ is equivalent to

Ex. 1: Solve and graph the solution.

$$|2x - 5| > 3$$

Ex. 2: Solve and graph the solution.

$$-2|x + 1| + 5 \geq -3$$