

Solve, write your answer in interval notation and graph the solution set.

2c. $|6x + 5|$ greater than or equal to -5

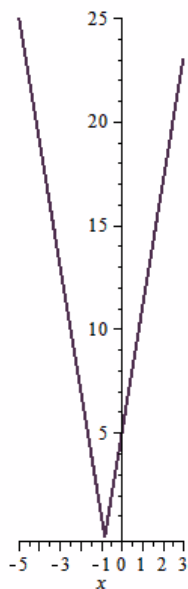
2d. $|3x|$ less than -1

Solution:

Inequalities involving absolute value can be written as $|6x + 5| \geq -5$.

Use the definition of absolute value to apply the inequality without absolute values. Solve the linear inequalities. We have -5 are negative, but the absolute value is always positive, and any positive number is greater than any negative number.

The solution - all real numbers (R), since the absolute value, being itself positive or zero, must then always be greater than any negative number. All positive numbers are greater than -5 .



2d. $|3x| < -1$

Use the definition of absolute value to apply the inequality without absolute values. The absolute value, being itself positive or zero, must then always be greater than any negative number. So there is no solution to this inequality. The absolute value is always positive, and positive values are always greater than negative values.

The answer is no solution.