



Please do not write in the margins of the page!

Part A: Fill in the missing parts of the table:

inequality form	graph on the real line	interval notation
$x \leq -2$	 A number line with a grid. A red line is drawn starting from a closed circle at -2 and extending to the left. The number -2 is labeled on the line.	$(-\infty, -2]$
$3 \leq x < 5$	 A number line with a grid. A red line is drawn starting from a closed circle at 3 and ending at an open circle at 5. The numbers 3 and 5 are labeled on the line.	$[3, 5)$

Part B Instructions:

- Solve the absolute value equation.
- Simplify your answer and reduce any rational numbers to lowest terms. No decimals.
- Show ALL your work. You must show some work, or give an explanation, for each problem in order to receive credit.

1) $|2x - 1| = 5$

$$2x - 1 = 5 \text{ or } 2x - 1 = -5$$

$$2x = 6 \text{ or } 2x = -4$$

$$x = 3 \text{ or } x = -2$$

2) $|x + 3| = -2$

This equation has no solutions: absolute value cannot be negative.
