MATH 102, Spring 2023 **Name:** _____
In class work 9 **Row and Seat**: _____

Mistakes are a fact of life. It is the response to the error that counts. NIKKI GIOVANNI

In class work 9 has questions 1 through 1 with a total of 12 points. This assignment is due at the end of the class period (9:55 AM). This assignment is printed on **both** sides of the paper.

1. Find the solution set to $\frac{2x+3}{4x+1} \leq 1$ by following these steps.

[2] (a) Use algebra tools to find an equivalent inequality of the form $\frac{P(x)}{Q(x)} \leq 0$, where P and Q are polynomials.

[2] (b) Find all x-intercepts and all VAs for $\frac{P(x)}{Q(x)}$.

[2] (c) Put all x-intercepts and VAs on to a number line.

2 (d) Build the chart with columns for the interval, the test number, evaluation at the test number, and the true/false value.

2 (e) Test each interval endpoint for inclusion or exclusion into the solution set.

2 (f) Express the solution set in either interval notation, pictorially, or set builder notation.