Your grade is based on the process as well as the final result. Show all your steps clearly so you will be eligible for the most partial credit. You may use a calculator, but no notes, books, or other students. Good luck!

1.) (5 pts.) Let $f(x) = |x|$. Does $f$ satisfy all hypotheses of the Mean Value Theorem on $[a, b] = [-1, 2]$? Explain.

2.) (5 pts.) Use a graph and geometry to evaluate $\int_{2}^{5} u \, du$.

*Hint:* the area of a trapezoid is $\frac{1}{2}(b_1 + b_2)h$. 