Quiz #5, 9/24
Math 157 (Calculus II), Fall 2025

Problem 1 is worth 5 points, and Problem 2 is worth 5 points, for a total of 10 points. Remember to *show your work* on all problems!

1. Compute the indefinite integral $\displaystyle\int \frac{x-2}{x(x-1)}\,dx$ by finding the partial fraction decomposition.

2. Approximate the definite integral $\displaystyle\int_{-1}^{5} x^2 - 1\,dx$ using the midpoint approximation with $n = 3$ subintervals. What is the error of your approximation compared to the actual value of this definite integral? Is your approximation an over- or under-approximation?