Quiz #3, 2/4
Math 157 (Calculus II), Spring 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 $\int (x^2 + 2x + 1) \, \cos(x) \, dx$ using integration by parts.

2. Compute the *definite* integral $\int_1^{\sqrt{e}} x \, \ln(x) \, dx$ using integration by parts. Express your answer in the simplest form you can.