

Quiz #3, 2/1

Math 157 (Calculus II), Spring 2024

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  $\int (x^2 + 3x + 2) \cos(x) dx$  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.