

Mathematics 1110H – Calculus I: Limits, Derivatives, and Integrals

TRENT UNIVERSITY, Summer 2023 (S61)

Quiz #10

Integration

Due just before midnight on Thursday, 8 June.*

Please show all your work when answering the questions below. Do them by hand, please! Feel free to check your work using SageMath, though.

1. Work out $\int \frac{e^{2x}}{\sqrt{e^x + 1}} dx$. [2.5]

2. Compute $\int_1^2 \frac{1}{\sqrt{x+1} + \sqrt{x-1}} dx$. [2.5]

* You should submit your solutions via Blackboard's Assignments module, preferably as a single pdf. If this fails, you may submit your work to the instructor on paper or by email to sbilaniuk@trentu.ca.