Mathematics 1110H – Calculus I: Limits, Derivatives, and Integrals
Trent University, Fall 2025
Workshop Problems for 2025-11-28

Some more problems like those that could turn up on Test #5. These are on the easy side.

- $\displaystyle\int_2^4 \frac{x^2 - 2x + 1}{x - 1}\, dx$ *[Simplify the integrand by cancelling $x - 1$.]*

- $\displaystyle\int \ln(x)\, dx$ *[Parts with $u = ln(x)$ and $v' = 1$.]*

- $\displaystyle\int \frac{8x}{1 + x^2}\, dx$ *[Substitute for $1 + x^2$.]*

- $\displaystyle\int_{\pi/4}^{\pi/2} \frac{\cos(x)}{\sin(x)}\, dx$ *[Substitute for $\sin(x)$.]*