

Name: _____ Student Number: _____

Mathematics 1110H, TRENT UNIVERSITY, Fall 2025.

Test #5 for Sections F02 and F04. *Friday, 28 November.* Time: 30 minutes.

Instructions

- Write your name and student number at the top.
- Use only this sheet of paper, including the back side. If you need more paper, ask for it.
- You may use an aid sheet, A4- or letter-size with whatever you want written on all sides, and a calculator, with no restrictions beyond not being able to communicate with other devices.
- **Do any four (4) of questions 1–6.**

$$\begin{array}{lll} 1. \int_0^3 (x - 1)(x + 3) dx & 2. \int x e^{x-1} dx & 3. \int_0^{\pi/8} \tan(2x) dx \\ 4. \int_0^{\pi/2} \frac{\cos(x)}{1 + \sin^2(x)} dx & 5. \int \frac{x}{\sqrt{41 - x^2}} dx & 6. \int_0^1 4x e^{x^2} dx \end{array}$$

