

UNIVERSITY OF REGINA
DEPARTMENT OF MATHEMATICS AND STATISTICS
MATH 110 200730 Quiz 9 (Section 003)

Time: 20 minutes

Name: _____

Instructor: Dr. Edward Doolittle

Student #: _____

(marks) Please do questions 1 and 2. You have 10 minutes to do each question, for a total of 20 minutes for the quiz. A non-programmable calculator of the type mentioned in the course outline is allowed. If you finish early, I suggest you check your work thoroughly. **Please do not disturb your colleagues by climbing over them while they are trying to write the quiz.**

(10) 1. Evaluate $\int_0^1 (1+x^3)^2 dx$

(10) 2. Find $\int_{-1}^3 f(x) \, dx$ where

$$f(x) = \begin{cases} 2 - x & \text{if } -1 \leq x \leq 1 \\ 2x^2 - 1 & \text{if } 1 \leq x \leq 3 \end{cases}$$