

UNIVERSITY OF REGINA  
DEPARTMENT OF MATHEMATICS AND STATISTICS  
MATH 110 200730 Quiz 10 (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  $\int_2^6 \frac{x}{\sqrt{1+4x}} dx$

- (10)      2. Find a function  $f$  and a number  $a$  such that

$$6 + \int_a^x \frac{f(t)}{t^2} dt = 2\sqrt{x}$$

for all  $x > 0$ .