

Name: _____
Student ID: _____

Quiz 6

This quiz is graded out of 10 marks. No books, calculators, notes or cell phones are allowed. You must show all your work, the correct answer is worth 1 mark the remaining marks are given for the work. If you need more space for your answer use the back of the page.

Question 1. (5 marks) §6.1 #20 Evaluate the definite integral.

$$\int_4^9 \frac{\ln y}{\sqrt{y}} dy$$

Question 2. (5 marks) §6.2 #32 Evaluate the indefinite integral.

$$\int \csc^4 x \cot^6 x dx$$

Bonus Question. (5 marks) If

$$\int_2^3 (f(x) - 1) dx = 2, \quad \int_2^1 3f(x) dx = 4,$$

and $f(-x) = -f(x)$ for all $x \in \mathbb{R}$ find

$$\int_{-1}^3 f(x) dx.$$