Name: _____
Student ID: _____

Quiz 5

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. *(4 marks)* §5.5 #35 Evaluate the indefinite integral.

$$\int \frac{1+x}{1+x^2}\,dx$$

Question 2. *(3 marks)*§5.5 #46 Evaluate the definite integral.

$$\int_{-\pi/2}^{\pi/2} \frac{x^2 \sin x}{1+x^6}\,dx$$

Question 3. *(3 marks)*§5.5 #52 Evaluate the definite integral.

$$\int_0^{1/2} \frac{\sin^{-1} x}{\sqrt{1-x^2}}\,dx$$