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. §8.3\#17 (5 marks)
Integrate the following indefinite integral:

$$
\int x \sin ^{2} x d x
$$

Question 2. §8.4\#13 (5 marks)
Integrate the following indefinite integral:

$$
\int x \sqrt{1+x^{2}} d x
$$

Bonus. (1 mark)
List the half-angle trigonometric identities given last class.

