Name: _____

Student ID: _____

Quiz 1

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. pg.653#42 *(4 marks)* Evaluate the following limit.

$$\lim_{x \to \infty} \frac{1 - 2x^2}{(4x + 3)^2}$$

Question 2. pg.657#9 *(6 marks)* Calculate the slope of the tangent line of the function $y = 2x^2 + 5x$ at the point $(-2, -2)$. *Bonus. (1 mark) write the equation of the tangent line*