

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) §6.2 #62 Evaluate the integral by first completing the square.

$$\int \frac{x^2}{(3 + 4x - 4x^2)^{3/2}}$$

Question 2. (5 marks) §6.1 #39 Make a substitution to express the integrand as a rational function and then evaluate the integral.

$$\int \frac{e^{2x}}{e^{2x} + 3e^x + 2} dx$$