Name: _____

Student ID: _____

Quiz 7

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)* §6.6 #48 Find the values of p for which the integral converges and evaluate the integral for those values of p.

$$\int_e^\infty \frac{1}{x(\ln x)^p} \, dx$$

Question 2. *(5 marks)* §7.1 #34a Find the number a such that the line $x = a$ bisects the area under the curve $y = 1/x^2$, $1 \le x \le 4$.