Name: _____
Student ID: _____

Quiz 11

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)* §9.4 #23
Use the limit comparison test to determine the convergence or divergence of the series.

$$\sum_{n=1}^{\infty} \frac{1}{n\sqrt{n^2+1}}$$

Question 2. *(5 marks)* §9.6 #23
Use the ratio test to determine the convergence or divergence of the series.

$$\sum_{n=1}^{\infty} \frac{n!}{n3^n}$$