Name: _____

Student ID: _____

Quiz 10

This quiz is graded out of 15 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)* §9.3 #15
Use the Integral Test to determine the convergence or divergence of the series.

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

Question 2. *(5 marks)* §9.2 #48
Find the sum of the convergent series.

$$\sum_{n=1}^{\infty} \left[(0.7)^n + (0.9)^n \right]$$

Question 3. *(5 marks)* §9.1 #35
Find the sum of the convergent series.

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