

Calculus II, Quiz 4: 10.6, 10.7

Name:

Please answer the following questions in the spaces provided. You may not use your textbook, calculator, or notes on this quiz.

1. (10 pts) Determine whether $\sum_{k=1}^{\infty} \frac{(-1)^{k+1}}{k \tan^{-1} k}$ converges absolutely, converges conditionally, or diverges. If it converges, find an upper bound for the error if the series is approximated by $\sum_{k=1}^{10} \frac{(-1)^{k+1}}{k \tan^{-1} k}$.

2. (10 pts) Find the n^{th} Maclaurin polynomial for $f(x) = \sinh x + \cosh x$.