

Quiz 8

Math 1220-7

November 30, 2012

Name: _____

Directions: Show all work for full credit. Clearly indicate all answers. Simplify all mathematical expressions completely. No calculators are allowed on this quiz.

1. Find the Maclaurin Series for $f(x) = e^{-x}$. Include terms through at least the x^3 term. (25 points)

2. Find the Taylor Polynomial in $\left(x - \frac{\pi}{3}\right)$ of order 2 for the function $f(x) = \cos x$. (25 points)

3. Find a good (upper) bound for $\left| \frac{c+2}{c+3} \right|$, where $c \in [0, 2]$. (10 points)