

Math 202 Quiz 4

April 6, 2005

Name _____

id:

Section

1. Find singular points of the differential equation $\cos(x)y'' + xy' + y = 0$

This equation has a power series solution $y = \sum a_n x^n$. If R is the radius of convergence of this series, then $R \geq$ _____

2. Using $\sum_0^{\infty} n(n-1)a_n x^{(n-2)} - \sum_{n=0}^{n=\infty} a_n x^{(n+1)} = 0$ find a recursion relation for a_n .