

MATH 202 QUIZ 3

Name _____, id# _____, Serial # _____

Q1: Give the first three nonzero terms of the power series in x for the function

$\frac{\sin x}{1-x}$, using the series for sine and the series $\frac{1}{1-x} = \sum_{n=0}^{\infty} x^n$ (5 points)

Q2: Find a recurrence a series solution of $y'' + xy = 0$ about the ordinary point

$x = 0$. Use this to find the first four terms of the series solution.