MATH 152
Mrs. Bonny Tighe

QUIZ 9A

25 points
12.9.12.10

NAME_____

Section_____ Wed 4/26/06

1. Find a power series representation for the functions and determine the interval of convergence. a) $f(x) = \dfrac{x}{2+x^2}$

b) $f(x) = \ln(1-x)$

c) $f(x) = \dfrac{1}{(4+x)^2}$

2. Find the Taylor series for f(x) centered at the given value of a. $f(x) = \frac{1}{\sqrt{x}}, \quad a = 9$

3. Find the Maclaurin series of f and its radius of convergence. $f(x) = \sqrt{4+x}$

4. Evaluate the indefinite integral as an infinite series. $\int x \cos(\sqrt{x}\ )dx$