

Math 132

Quiz 4 – April 13, 2012

Name \_\_\_\_\_

1. (1 points) Give a power series representation for the function  $\frac{1}{1-x}$ .

2. (5 points) Find the radius and interval of convergence for the power series  $\sum_{i=0}^{\infty} \frac{x^i}{2i^2 + 1}$ .

(See back)

3. (4 points) Find a power series representation for the function  $\frac{2x}{x^2 - 4} = \frac{1}{x - 2} + \frac{1}{x + 2}$ .