

MA 182 GROUP WORK (8.6)

NAME \_\_\_\_\_

1. Find a power series representation for the function and determine the interval of convergence.

$$f(x) = \frac{1}{1 + 9x^2}$$

2. Use a power series to approximate the definite integral to six decimal places.

$$\int_0^{0.3} \frac{x^2}{1 + x^4} dx$$