

Answer all questions and show your work. Unsupported answers may receive *no credit*. You may not use a calculator on this quiz. Allow 15 minutes for the quiz.

Name: _____ Section: _____

1. (a) (5 points) What is the radius of convergence for $\sum_{n=1}^{\infty} \frac{(-1)^n}{(2n-1)2^n} (x-1)^n$? What is the interval of convergence?

- (b) (5 points) Find a power series representation for $f(x) = \frac{x}{2x^2+1}$.