
MATH 107H Quiz 7

Name: _____

Score: _____

Instructions: You must show supporting work to receive full and partial credits. No text book, notes, formula sheets allowed.

- 1(5pts)** Determine the following for the power series $\sum_{n=0}^{\infty} n \frac{(3x+2)^n}{2^{n+1}}$: a) The center and radius of convergence, b) interval of absolute convergence, c) interval of convergence, and d) intervals of divergence.

- 2(5pts)** Estimate the number of terms needed in order for the n th partial sum S_n to approximate this series $\sum_{n=1}^{\infty} (-1)^n \frac{1}{n2^{n+1}}$ to the 8th decimal place accuracy.

(... The End)