Quiz 2

Student ID Number: Name _____

Math 140B, 5 PM

Please justify all your answers   January 24, 2018

Please also write your full name on the back

1. Find the interval of convergence of the following power series.

$$\sum_{n=1}^{\infty} \frac{(-1)^n n}{4^n} x^n$$

2. Compute the pointwise limit of the sequence of functions $f_n(x) = e^{-nx}$ on the interval $[1, 2]$. Does this sequence converge uniformly? Prove your answer.