

Math 126: Calculus II
Quiz 7 *October 24, 2000*

Name: _____
Section: _____

1. Find the limit of the sequence

$$a_n = \left(\frac{x^n}{2n+1} \right)^{1/n} + \ln \left(1 + \frac{1}{n} \right)^n$$

carefully **showing your work** and **all** important steps.

2. Calculate the following, carefully **showing your work** and **all** important steps.

$$\sum_{n=1}^{\infty} e^{-2n}.$$