

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

Name: \_\_\_\_\_  
Section: \_\_\_\_\_

*Show all your work and all important steps.*

1. Find the limit of the sequence  $a_n = \frac{n\pi + \cos(n\pi)}{n\pi}$ .

2. Consider the series  $s = \sum_{n=1}^{\infty} \frac{5 + (-1)^n}{10^n}$ .

a) Determine the 8<sup>th</sup> partial sum,  $s_8$ , as a decimal number.

b) Use geometric series to compute the sum of the infinite series  $s$ .