

MthU242  
Northeastern University  
Quiz #6  
20 Minutes

Calculus II  
Professor Gilmore  
Mar. 17, 2005

Name: \_\_\_\_\_.

**Show All Your Work**

1. Construct the fourth degree Taylor polynomial for the function  $f(x) = \sin(x)$  near  $a = \frac{\pi}{4}$ .

2. Estimate the error, using the formula from the text, of the following: We use the fourth degree Taylor polynomial for the function  $f(x) = \sqrt{1+x}$  expanded about  $a = 0$  to estimate  $\sqrt{1.3}$

NAME: \_\_\_\_\_.