

MthU242
Northeastern University
Quiz #3
20 Minutes

Calculus II
Professor Gilmore
Jan. 31, 2008

Name: _____.

Show All Your Work

1. Calculate, using careful notation, the following integrals:

a. $\int_4^{\infty} \frac{dx}{x-3}$

b. $\int_1^3 \frac{x}{\sqrt{9-x^2}} dx$

2. Calculate the following areas:

a. The area under the graph of the function $y = \sqrt[4]{x}$ and above the x axis from $x = 0$ to $x = 16$.

b. The area between the graph of the function $y = \cos^2(x)$ and the x axis, from $x = 0$ to $x = \pi$.