

KING FAHD UNIVERSITY OF PETROLEUM AND MINERALS
DEPARTMENT OF MATHEMATICS AND STATISTICS
MATH 102 - QUIZ 2

Name:

Student ID #:

Question 1. Evaluate the following integrals using substitution:

(1)
$$\int \frac{e^x}{e^{2x} + 1} dx$$

(2)
$$\int_0^2 \frac{x}{\sqrt{2x+1}} dx$$

(3)
$$\int \tan(x) \ln(\cos(x)) dx$$

Question 2. Find the area between $y = \cos(x)$ and $y = \sin(x)$ from $x = 0$ to $x = \pi$.

Your Solution.