

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)
$$\int \frac{2^{\ln(x)}}{x} dx$$

(2)
$$\int_{-\pi}^{\pi} \frac{\cos(x)}{\sqrt{4 + 3 \sin(x)}} dx$$

(3)
$$\int \frac{\sin(2x)}{1 + \sin^2(x)} dx$$

Question 2. Find the area between $y = 4 - x^2$ and $y = |x|$.

Your Solution.