

KING FAHD UNIVERSITY OF PETROLEUM AND MINERALS
DEPARTMENT OF MATHEMATICS AND STATISTICS
MATH 102 - QUIZ 1

Name:

Student ID #:

Question 1. Evaluate the following integrals:

(1)
$$\int_0^{\pi/2} |\cos(2x)| dx$$

(2)
$$\int_0^2 (x + \sqrt{4 - x^2}) dx$$

Question 2. If $y = \int_{\sin(2x)}^{5x} \sin(u^2) du$, then find $\frac{dy}{dx}$.

Question 3. Find the total area between the curve $y = (x + 1)^2(x - 1)$ and the x -axis on the interval $[-2, 3]$.

Your Solution.