

King Fahd University of Petroleum & Minerals
Department of Mathematical Sciences
First First Semester (20041), 2004 – 2005
Math-102, Quiz-3

Section:

ID Number:

Name:

1. Evaluate the integral

$$\int_0^{\ln 5} (3 - 4e^x)e^x dx$$

2. Evaluate

$$\int_1^3 \frac{dx}{(1+x)\sqrt{x}}$$

3. Solve initial value problem

$$\frac{dy}{dx} = \frac{x+1}{\sqrt{x}}, \quad y(1) = 0$$

4. Sketch the region enclosed by the curves and find its area

$$y = 2 + |x - 1|, \quad y = -\frac{1}{5}x + 7$$