

King Fahd University of Petroleum and Minerals

Department of Mathematical Sciences

Math 102 (calculus II)

Quiz 1(A) Semester II, 2004-2005 (042)

Name:.....

ID #:.....

Sec#:.....

(1) Find the exact value of the area bounded by $y = 2x + 3$, $0 \leq x \leq 1$, and the x -axis. (3pts)

(2) Evaluate each of the following.

(7pts)

(i) $\int \frac{4dx}{\sqrt{e^x}}$.

(ii) $\int \frac{\sec^2(x)dx}{\tan(x)\sqrt{\tan^4(x)-1}}$.

(iii) $\int \sqrt{\csc(x)} \cot x dx$.

Dr. M. R. Alfuraidan

King Fahd University of Petroleum and Minerals

Department of Mathematical Sciences

Math 102 (calculus II)

Quiz 1(B) Semester II, 2004-2005 (042)

Name:.....

ID #:.....

Sec#:.....

(1) Find the exact value of the area bounded by $y = 2x$, $0 \leq x \leq 1$, and the x -axis. (3pts)

(2) Evaluate each of the following.

(7pts)

(i) $\int \frac{2^{\frac{1}{x}} dx}{x^2}$.

(ii) $\int \frac{dx}{x\sqrt{x^6-9}}$.

(iii) $\int \frac{1}{2\sqrt{x}} \sec \sqrt{x} (\sec \sqrt{x} - \tan \sqrt{x}) dx$.

Dr. M. R. Alfuraidan