

King Fahd University of Petroleum and Minerals

Department of Mathematical Sciences

Math 102 (calculus II)

Quiz 4(A) Semester II, 2004-2005 (042)

Name:.....

ID #:.....

Sec#:.....

(1) Evaluate the telescoping sum $\sum_{k=1}^n \left[\frac{1}{k} - \frac{1}{k+1} \right]$

(3pts)

(5) Given $\int_0^{x^2} f(t)dt = x \cos(\pi x)$, find $f(4)$.

(4pts)

(6) Find $\frac{d}{dx} \int_e^{\ln(x)} e^t dt$.

(3pts)

(7) Solve the initial value problem: $\frac{dy}{dx} = xe^{x^2} \quad y(0) = 0$.

(5pts)

Dr. M. R. Alfuraidan

King Fahd University of Petroleum and Minerals

Department of Mathematical Sciences

Math 102 (calculus II)

Quiz 4(B) Semester II, 2004-2005 (042)

Name:.....

ID #:.....

Sec#:.....

(1) Evaluate the telescoping sum $\sum_{k=2}^{n+1} [\frac{1}{k-1} - \frac{1}{k}]$

(3pts)

(5) Given $\int_0^{x^2} f(t)dt = x \cos(\pi x)$, find $f(4)$.

(4pts)

(6) Find $\frac{d}{dx} \int_e^{\ln(x)} e^t dt$.

(3pts)

(7) Solve the initial value problem: $\frac{dy}{dx} = xe^{x^2}$ $y(0) = 0$.

(5pts)

Dr. M. R. Alfuraidan