

Instructor: Prof. A. Suci

Name: _____

MTH 1124

Calculus 2

Winter 2001

QUIZ 4

Instructions: Put your name in the blanks above. Show your work—if there is not enough room, use another sheet. Give numerical answers to at least 3 decimals.

(1) [3 points] Compute: $\int te^{3t^2+1} dt =$

(2) [3 points] Compute: $\int \frac{(\ln x)^3}{x} dx =$

(3) [3 points] Compute: $\int \sqrt{\sin \theta} \cos \theta d\theta =$

(4) [4 points] Compute: $\int_0^1 \frac{e^x}{1+e^x} dx =$

(5) [4 points] Compute: $\int_{-1}^1 \frac{2x+1}{(x^2+x+2)^2} dx =$

(6) [4 points] Find the area between the curves $y = 4x^2$ and $y = 3x + 1$.