ING FAHD UNIVERSITY OF PETROLEUM AND MINERALS DEPARTMENT OF MATHEMATICAL SCIENCES MATH 201-11

Quiz # 1
September 18, 2007

NAME:	ID#:

SHOW ALL YOUR WORK

1. (3points) Find the length of the curve $x = 1 + 3t^2$, $y = 4 + 2t^3$, $0 \le t \le 1$.

2. (4points) Find $\frac{dy}{dx}$ and $\frac{d^2y}{dx^2}$ for the parametric curve $x = t + \ln t$, $y = t - \ln t$.

3. (3points) Eleminate t to find the Cartesian equation of the curve $x = t^2 - 1, y = t^2 - 2t + 3, -1 \le t \le 0$.