KING FAHD UNIVERSITY OF PETROLEUM AND MINERALS
DEPARTMENT OF MATHEMATICS AND STATISTICS
MATH 201
QUIZ 1

Name:
Student ID #:

Question 1. Find the parametric equation for the path of a particle that moves along the circle $x^2 + (y-1)^2 = 4$ once in the counterclockwise direction starting at the point $(2, 1)$.

Question 2. Set up but do not evaluate the integral that represents the area of the surface obtained by rotating the curve

$$x = 1 + te^t, \qquad y = (t^2 + 1)e^t, \qquad 0 \leq t \leq 1$$

about the x-axis.

Your Solution.