King Fahd University of Petroleum and Minerals
Department of Mathematics and Statistics
Math 201 - Quiz 1

Name:
Student ID #:

Question 1. Consider the parametric curve

$$x = e^{-t},\ y = t + 1,\ 0 \leq t.$$

(1) Eliminate the parameter to find the cartesian equation of the curve.
(2) Sketch the curve, indicate with an arrow the direction in which the curve is traced as the parameter increases, and identify it.

QUESTIONS 2 IS ON THE BACK OF THE PAGE.

Question 2. Find the exact length of the parametric curve $x = 2\sqrt{2}\cos t,\ \ y = \dfrac{1}{2}\sin 2t,$ $-\dfrac{\pi}{2} \leq t \leq \dfrac{\pi}{2}$.