

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

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

- (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 $x = 2\sqrt{2} \cos t$, $y = \frac{1}{2} \sin 2t$,
 $-\frac{\pi}{2} \leq t \leq \frac{\pi}{2}$.