

Math 201 Quiz 1

Name_____ id#_____ Serial number_____

Q1)

a) Sketch the curve by using the parametric equations. Indicate by arrow the direction in which the curve is traced as t increases:

$$x = 2\cos t, y = t - \cos t, 0 \leq t \leq 2\pi \quad (7 \text{ points})$$

b) Eliminate t and give Cartesian equations of the curve (3 points)

Q2): Find the values of t for which the curve $x = t - e^t, y = t + e^{-t}$ is concave upward (10 points)