Quiz 1 for Math 055 Calculus III. January 23, 2009

Name and ID:

General guidelines: Write down all your work. That is the way you will be asked to do it in the tests. You are not allowed to use calculators during this quiz.

Question 1: Sketch the curve with polar equation $r = -\theta$ with $\theta \geq 0$.

Question 2: Which conic section is represented by $4x^2 + 4x = y^2$? Find vertices and foci and graph it.

Question 3: Given $x = e^t - 1$ and $y = e^{2t}$. (a) Find a Cartesian equation of the curve. (b) Sketch the curve and indicate the direction in which the curve is traced as the parameter increases.