İzmir University of Economics, Department of Mathematics

MATH 205 ANALYTIC GEOMETRY **Quiz 8** 22.01.2004

Name **Student No.**

1. Show that the conic with focus at the origin, directrix $y = \pm d$, and eccentricity e has polar equation

$$r = \frac{ed}{1 \pm e \sin\theta}.$$

2. Graph the conic

$$r = \frac{8}{4 + \sin\theta},$$

placing the pole at a focus and the polar axis along the positive x-axis. What is the value of a in the cartesian form of the conic ?