

İzmir University of Economics, Department of Mathematics

MATH 205 ANALYTIC GEOMETRY Quiz 4

01.12.2003

Name

Student No.

1. Find *center, foci, vertices, eccentricity, directrix* of the curve

$$9x^2 + 4(y - 1)^2 = 36.$$

2. Find a new representation of $x^2 + 4xy - 2y^2 - 6 = 0$ after rotating through an angle $\alpha = \arctan(1/2)$. Sketch the curve, showing both the old and new coordinate systems.