

Math 230

Quiz 4

Name: _____

Section: 1 & 2

Fall 2006

Instructor: Vitaliy Gyrya

Date: October 27, 2006

All work must be shown to receive full credit!

1. (10 points) Find the maximum and minimum of the function

$$f(x, y) = \frac{1}{3}x^3 - x + y$$

on the domain

$$D = \left\{ (x, y) \mid (x^2 - 1)^2 + y^2 \leq \frac{9}{4} \right\}$$

interior to the curve shown on the picture.

