

Math 225: Calculus III
Quiz 6 Mar. 1/3, 1994

Name: _____

Section: _____

1. Find the absolute maximum of the function $f(x, y) = x^2 - 2xy^2 - 4y$ on the rectangle $-2 \leq x \leq 2$, $-2 \leq y \leq 2$.

2. Find the extreme values of the function $f(x, y) = x^3y$ subject to the constraint $x^2 + 4y^2 = 1$.