Math 225: Calculus III Quiz 5 Feb. 22/24, 1994

Name:\_\_\_\_ Section:\_\_

1. Find the equation of the plane tangent to the graph of  $f(x, y) = x^3y - y^2$  at the point (1, 1, 0).

2. Find the local maxima, local minima, and saddle points of the graph of the function  $f(x,y) = \frac{1}{2}x^2y^2 - xy^2 - 2x^2 + 4x + 1$ .