

Name: \_\_\_\_\_ MATH 210 Quiz 5 (Oct 7, 2005) no calculators!

(1) What is(are) the critical point(s) of  $f(x, y) = x^3 - 3xy + 3y$ ?

Classify the point(s) using the 2nd derivative test

(2) Find the absolute minimum and maximum of  $f(x, y) = 2 - x^2 - y^2$  on the unit disk  $x^2 + y^2 \leq 1$ .