

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

Math 234 Quiz 6

Section: 328           329

Oct 23, 2014

1. Consider the function

$$f(x, y) = 2x^2 - 4xy + y^4.$$

- (a) (10 pts) Find the critical points of  $f$ .
- (b) (10 pts) Apply the second derivative test to the points of you find.

**Bonus.** (5 pts) Find the maximum and minimum (values) of the above function.