## Math 208 Homework 12.

Problems from P.M. Fitzpatrick, Advanced Calculus.

**Section 14.1 , p.378**: Problems: 2, 3, 10, 15, 17, 18

Section 13.3, p.370: Problems: 1, 3, 4, 9...

and the follwing problem:

Problem 1. Find the second derivative of the function

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

in direction from the point (1,1) to the point (1.2).