## Math 18 fall 2010

## Homework Set #6

## due Thursday October 21, 2010 at noon

**Topics covered:** Lagrange multipliers, constrained extrema, introduction to double integrals (definition, volume, double integral over a rectangle), Fubini's Theorem

Suggested reading<sup>1</sup>: Sections 13.9 and 14.1

## Problems:

Sections	13.9	Chap 13 Review Exercices	14.1
Problem no.	7,14,16,33,34	38,39,42	9,16,23,26,27,28,31,33,37

In Problem 13.9.33 b) you can use a graphical tool of your choice. One nice tool is Mathematica and is free for Brown students: http://software.brown.edu/dist/index.html. For Chap 13 Review Exercices 38 and 39 see the instructions before 37.

<sup>&</sup>lt;sup>1</sup>All problems and readings are from H.Anton, I.Bivens and S.Davis, Calculus Multivariable, 9 edition