## Math 3593H

## **Honors Mathematics II Spring Semester 2011**

**Assignment 6** - Due Thursday 3/3/2011

**Read:** Hubbard and Hubbard Sections 4.1 and 4.3.

## **Exercises**:

Section 4.1 (pages 406-409): 3, 5, 6, 9\*, 10\*, 11, 14a\*, 15, 16. Section 4.3 (page 429-430): 1\*, 2, 5\*.

## **Comments:**

Sections 4.1 and 4.3 are theoretical in nature, concentrating on the foundations of what can and cannot be done. There is a lot to read, and it probably looks rather complicated. However, if you could somehow instantly read everything the authors write, I think you may think that you could have guessed the highlights anyway (e.g. Theorem 4.3.8: continuous functions can be integrated). From Section 4.1 I have asked questions about the foundations of the integral, but they are the same as questions that could have been asked about one-dimensional integrals, which you may well have been able to answer anyway.

We are skipping Section 4.2.