## **Math 3593H**

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

Assignment 4 - Due Thursday 2/17/2011

Read: Hubbard and Hubbard Section 3.5, 3.6

## **Exercises:**

Section 3.5 (pages 342-344):  $1, 2, 3, 3b^*, 3c^*, 4, 4b^*, 5, 8, 9, 10, 10d^*, 11, 17, 17c^*, 17d^*$  Section 3.6 (page 350):  $1, 2^*, 6, 7^*, 8^*$ .

## **Comments:**

There will be an exam on February 17 on what we have studied in Sections 2.10, 3.1, 3.1, 3.2, 3.3, and 3.4. The topics are the inverse and implicit function theorems, the various definitions of a manifold and showing that certain sets are or are not manifolds, tangent spaces and Taylor polynomials. On this exam you may use a calculator, but you may not use the book or notes.