

**Assignment 1** - Due Thursday 1/27/2011

**Read:** Hubbard and Hubbard Section 2.10, missing out pages as indicated in the comments below. We may get on to 3.1 as well, but the homework is not about that section.

**Exercises:**

Section 2.10 (pages 276-278): 1c\*d\*e\*, 2, 3, 4, 5, 8, 9\*, 10\*, 12\*, 13, 15, 16\*

Section 2.11 (pages 278-283): 29\*, 30, 31, 32

So far as I can see, question 31 is exactly the same as 2.10.12, which is presumably an error in the book.

**Comments:**

In Section 2.10 we will do the 'short versions' of the inverse and implicit function theorems, 2.10.4 and 2.10.11, and we will not study the proof given of the inverse function theorem. This means we will study up to the top of page 264 and then pages 268-270. Example 2.10.18 is useful, as are examples 2.10.15 - 2.10.17 provided we ignore Lipschitz conditions whenever they are mentioned. However, it is probably better to go straight to the exercises.