

Assignment 1 - Due Thursday 1/25/2018. The first quiz will be on this day.

Read: Hubbard and Hubbard Section 2.10, missing out pages as indicated in the comments below. We already did this material briefly at the end of the last semester, so we are revisiting it and doing some homework questions on this material. We will 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): 31*, 32, 32

Comments:

In Section 2.10 we 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. Here is what you should and should not read. You don't need to know Theorem 2.10.2. It is optional and may be useful for background. Do read pages 260 and 261. Example 2.10.6 on page 262 is optional. Do not read pages 264-267 (top). Do read page 267 Example 2.10.10 through to page 269 Example 2.10.13. 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 at this point.