Some additional details for assertions in <u>advancednotes2012.pdf</u>.

The files <u>details*.pdf</u>, where * takes values 01, 02, ..., all contain writeups for some relatively routine details that are skipped over in the notes. One reason for posting such files to show explicitly that these details actually can be filled in, and another is to give the reader examples of how he or she might proceed to do this on his or her own when going through mathematical writings. Perhaps the best way for the reader to use these files is to begin by trying to fill in the details before looking at them and then to use them either as a check on his or her own work to help clarify points that might be hard to understand.

The intention was to provide details for most points which are not covered explicitly or do not have specific references for details; some points may have been overlooked, and additions will be posted if these are brought to my attention (likewise if there are other assertions in the notes which seem to need clarification). Two exceptions to this principle are some omitted details Sections **II.5** and **III.5**, which represent material not to be covered in the course but included for reference purposes.