Math 3592H   **Honors Mathematics I   Fall Semester 2012**

Assignment 11 - Due **Tuesday** 11/27/2012. There will be no quiz during the week of Thanksgiving. There will be a quiz on either 11/27 or 11/29. Let's assume it is on 11/27, but if John prefers it could be on 11/29.

Read: Finish off Hubbard and Hubbard Section 2.5 and maybe even 2.6.

Exercises:
Hand in only the exercises which have stars by them.

Section 2.5 (pages 207-211): 8*, 9*, 10*, 13, 14*, 15*, 19.

Section 2.6 (pages 221-222): 1, 2, 3, 4*, 5, 6, 7*, 8*, 11*
(We have really done question 9 in class with subspaces of R^n, and the argument in abstract is the same. So far as I can see question 10 is pretty much the same as question 5, but maybe I am missing something.)

Comments:
I am tempted to set some more of the questions at the end of Section 2.5, especially the ones with higher numbers. They look scary, and part of the point of looking at them is to realize how they may be done and not be scared as a result.

I assume many of you will already be familiar with expressing a rational function in partial fractions in the manner of question 2.5.12. The point of doing it hear is to establish the theory which shows that it can be done.

In Section 2.6 the 'concrete to abstract function' they introduce is not standard and other mathematicians will not know what is meant by this. On the other hand, we might as well study it.

HAPPY THANKSGIVING!