

## Math 392: Homework 1 (due W January 16)

Remember I am away on Wednesday and Friday of next week... This also means I will not have office hours on Tuesday or Wednesday, so if you have questions about this homework you've got to ask them in my office hour on Monday!!!! This homework has fewer questions than normal (but more reading) as a result...

**Part I: reading.** Read sections 2.2 and 5.1. Read appendix A.7. If you find you are rusty on the material in appendix A.7 now is the time to try to review some things about vector spaces which you *should* have seen in a course like math 341/2... You need to know what a vector space, a subspace and a basis is, what the dimension of a vector space is, and have some vague recollection about what a linear transformation might be. I will review these things in class again as we need them but did I ever say "repetition is the key"?

### **Part II: questions from the book.**

Exercises 2.2: 10,11.

Exercises 5.2: 2,4,5,7.