MATH 216 PROBLEM SET 13

This set is due by noon on Friday, March 9. Hand in your homework to me by email.

This problem set covers everything up to 17.3.

Please *read all of the problems*, and ask me about any statements that you are unsure of, even of the many problems you won't try. Many of you have seen much of this material, and I don't want you to waste your time; please just work on problems that you haven't thought through before. Conversely, you should be familiar with all the results, so if you are stuck on any problems (including ones not assigned), please come and talk with me.

Hand in at least **ten** solutions. If you are ambitious (and have the time), go for more. If you have already seen this material before (graduate students only!), then you need only do three problems, but they should be very interesting problems. You should try the starred problems unless you have seen them before. Problems marked with a "-" are worth half a problem. Problems marked with a "+" are worth two problems. Try to solve problems on a range of topics (e.g. at least one from each section you haven't seen). You are encouraged to talk to each other, and to me, about the problems. Some of these problems require hints, and I'm happy to give them!

Problems (from the **February 25 version**): 15.2C-, 15.2.E**, 152.F, 15.2.G*, 15.2.I*, some fun examples from 15.2.10 of your choice, 16.1.D (will you find this hard?), 16.2.B, 16.3.C, 16.3.E-, 16.3.F*, 17.2.A, 17.3.A*, 17.3.B*, 17.3.C*, 17.3.D*, 17.3.E*++, 17.3.G, 17.3.H.

Up to four of the ten problems can be from the Problem Set 12, but be careful: the problems listed there are from the February 24 version, and the labels may have shifted.

If curiosity moves you, feel free to try problems from 16.4 on graded modules.

If you feel like other problems are interesting enough that they should be done, please do them, and I'll count them for half a problem or a whole problem (depending on how hard *you* think they are).

Finally, the usual **mandatory** question. **Notice the extra problem this time!** (A sentence for each part suffices.) (a) Which problems did you particularly like, and why? (b) Which ones did you like less? (c) What is the most confusing topic we've discussed recently? **(d) If you read them, what were the hard parts of 15.2, 16.3, and 17.3? Were any parts harder than necessary, or impenetrable, or hopelessly confusing? Were there other sections that were hard to read?**

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Date: Tuesday, February 28, 2012.