## MATH 216 PROBLEM SET 2

This set is due at noon on Friday October 9. Hand it in to Jack Hall (jhall@math) in the big yellow envelope outside his office, 380-U.

Please *read all of the problems*, and ask me about any statements that you are unsure of, even of the problems you won't try. Hand in at least twelve solutions, where each "-" problem is worth half a solution. If you are ambitious (and have the time), go for more. Up to two can be from problem set 1 if you'd like. You should do the starred problems unless you have seen them before. Try to solve problems on a range of topics (e.g. at least one from each section). 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:

2.1.A-, 2.1.2 (only for those with some differential geometry background: prove the statement), 2.2.A-, 2.2.B, 2.2.C, 2.2.D, 2.2E\*, 2.2.F, 2.2.G(a), 2.2.H\*, 2.2.I\*, 2.3.A, 2.3.B\*, 2.3.C, 2.3.D, 2.3.E, 2.3.F, 2.3.G\*, 2.3.H\*.

One additional question: (a) Which problems did you particularly like, and why? (b) Which ones did you like less? (c) What is the most confusing topic so far?

E-mail address: vakil@math.stanford.edu

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