

## Homework Guidelines:

Please follow these guidelines in writing up your assignments.

- Please be neat, do the problems in order, write on only the front side of each page, and *staple* your assignment together. *Leave space between the problems and leave enough room for me to write comments.* (Note: If you are concerned about wasting paper, feel free to turn in your homework on scrap paper.)
- Show enough detail that a fellow student in the class can follow your argument. Don't expect the reader to already know how to solve the problem.
- Proofs should be written in complete English sentences, although your sentences are likely to contain mathematical symbols and statements. Proofread what you have written to be sure it makes sense. Just writing the answer is *never* enough! *You want the way you present your work to enhance the ideas you are trying to communicate, not impede them.*
- Don't try to fake a proof! It is much better to openly acknowledge a gap in your argument than to pretend it isn't there.
- It is important that you learn how to correctly express mathematics yourself; always write your own versions of the solutions to homework problems, even if the details were worked out in your study group. Do not simply copy from the notes you have created together. Do acknowledge your collaboration on the homework.
- *Remember to do (\*) problems entirely on your own.*

**Math 349: Matrix Groups: Introduction to Lie Groups**  
**Professor Kerr**

**Assignment 1**

*This assignment is due in class on Wednesday February 6.*

1. Tapp, # 1, p. 20.
2. Tapp, # 4, p. 20.
3. Tapp, # 5, p. 20.
4. (\*) Tapp, # 6, p. 20.
5. (\*) Tapp, # 12, p. 21.
6. Tapp, # 13, p. 21.
7. Tapp, # 15, p. 21.