## Math 314 Assignment 6, Fall 2016

Due in class on Friday, February 26
Part 1. Read chapter 4 of Hoffman-Kunze.

Part 2. Do and hand in the following problems in Hoffman-Kunze.

- 3.7, problems 6, 7. In addition, for problem 7 please explain in what sense is the map $T \mapsto T^{t}$ an isomorphism: Is it an isomorphism of vector spaces over $F$ ? Does it preserve multiplication? Is it an isomorphism of groups (and which group structures)?
- 4.2, problem 9
- 4.3, problems 4, 6
- 4.4, problems 6, 7
- 4.5 , problems 4,8

