

**GROUPS AND REPRESENTATIONS II: PROBLEM SET 3**  
**Due Tuesday, March 7**

**Note:** The problems in this problem set are from Kirillov, An Introduction to Lie Groups and Lie Algebras.

**Problem 1:** Kirillov Problem 7.2.

**Problem 2:** Kirillov Problem 7.11

**Problem 3:** Kirillov Problem 7.16

**Problem 4:** Kirillov Problem 8.4

**Problem 5:** Kirillov Problem 8.6