

Homework 6

Due Monday, October 23 at 1:00pm

- (1) Lee, Chapter 8, Problem 18, on page 202.
- (2) Lee, Chapter 8, Problem 29, on page 203: Only prove the first two isomorphisms in the list, i.e. $\text{Lie}(\text{SL}(n, \mathbb{R}))$ and $\text{Lie}(\text{SO}(n))$.
- (3) Lee, Chapter 9, Problem 2, on page 245.
- (4) Lee, Chapter 9, Problem 3, Parts (c)-(d), on page 245.
- (5) Lee, Chapter 9, Problem 16, on page 247.
- (6) Lee, Chapter 20, Problem 5, on page 536.
- (7) Lee, Chapter 20, Problem 3, on page 536.