115b/1 - Homework 8*

Due 11 March 2011

For any problem involving inner products, you may assume that the underlying field is either the real numbers or the complex numbers.

- **1.** Do problem (7.2.2).
- **2.** Do problem (7.2.6).
- **3.** Do problem (7.2.15).
- **4.** Do problem (7.2.17).
- **5.** Do problem (7.2.18).
- **6.** Do problem (7.4.2.a).
- **7.** Do problem (7.4.5).

^{*}Numbers in parentheses like (1.2.11) refer to the 11th problem in the second section of the first chapter of Friedberg *et. al.*, while [Prasolov] refers to the book *Problems and Theorems in Linear Algebra* by Prasolov.