## 115b/1 - Homework $7^{\ast}$

## Due 28 February 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 (7.1.3).
- **2.** Do problem (7.1.4).
- **3.** Do problem (7.1.5).
- **4.** Do problem (7.1.10).

<sup>\*</sup>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.