

115b/1 - Homework 5*

Due 14 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 (6.5.7).
2. Do problem (6.5.8).
3. Do problem (6.5.9).
4. Do problem (6.5.15).
5. Do problem (6.6.4).
6. Do problem (6.6.5).
7. Do problem (6.6.6).
8. Do problem (6.6.10).

*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.