Introduction to Financial Mathematics
Math 30610 Homework 9

Andrei Jorza

due at 3pm Friday, 5/7 on Gradescope
Late homework not accepted

There are 8 exercises on this homework sheet. Unless otherwise specified, all exercises are from the textbook. You are welcome to use any calculator, spreadsheet or programming language, as long as you explain clearly and completely your solution.

1. 7.1.1

2. 7.1.2

3. 7.1.6

4. 7.1.11

5. 7.2.1 (a) and (b) only

6. 7.2.2

7. 7.2.5

8. 7.2.12

Extra Credit

9 7.1.8

10 (Worth 2 problems) Suppose you have a portfolio with various assets and liabilities. Pick any asset. Show that the portfolio can be fully immunized by potentially increasing the size of the chosen asset, but only if the first cashflow in the portfolio doesn't consist only of liabilities.