18.440 PROBLEM SET 8: DUE DECEMBER 4

A. FROM TEXTBOOK CHAPTER NINE:

1. Problems and Theoretical Exercises: 4, 7, 8, 10, 15, 18

2. Self-Test Problems and Exercises: 1, 3, 4

B. Carefully read the Wikipedia articles on martingales and the optional stopping theorem and write a two or three paragraph summary. Read `http://math.mit.edu/~sheffield/martingalenote.pdf` (as linked to on course web page) and complete the problems therein.

C. Carefully read the Wikipedia article on Black-Scholes. Write a short summary of the "elementary derivation" section and fill in the details left out of that derivation.