

**18.175 PROBLEM SET ONE, DUE SEPTEMBER 19**

A. Read and understand the first chapter of Durrett, plus the proof of the Carathéodory extension theorem (or another text covering the same material). Write a few sentences of notes about your reading. (Hand them in, but they won't be graded. This is just to give you an excuse to take some notes.)

B. COMPLETE THE FOLLOWING PROBLEMS FROM DURRETT:

1.1.3, 1.1.6, 1.2.3, 1.2.6, 1.3.4, 1.4.4, 1.5.7, 1.7.1