

Fall, 2014

**MATH 4600/6600**  
**PROBLEM SET #12**

T. Shifrin

DUE Friday, November 21, 2014.

Problems to work but not hand in:

Self-Test Problems and Exercises, Chapter 7: #4, 5, 24, 25.

To hand in:

Chapter 7: #5, 8, 14, 37, 48, 36\*, 40, 53, 56.

Graduate problems:

Chapter 7, Theoretical Problems: #12, 17, 33.

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\*Perhaps you have a better way, but if not ... Hints: Compute  $E[XY]$  by conditioning. To evaluate the sum you get, recall the formulas for expectation and variance of a binomial random variable, and do your algebra carefully.