M362K (57055), Homework #7
Instructor: Ravi Srinivasan

Due: 12pm, Wednesday, Mar. 24

Note: Please include your name and UT EID on the front page. To get credit, please show your work and not only your final answer. Please keep answers organized in the same order the problems have been assigned.

Complete the following problems from ``Probability,'' by Jim Pitman:

--Midterm sample test #1, 1 hour (5 points)--
* p. 490
[Note: Solutions can be checked on p. 498. For #2(a),(b) use that P(third is an ace) = P(first is an ace). For #5(a), first compute the joint distribution of X_2 and X_3.]

--Midterm sample test #2, 1 hour (5 points)--
* p. 491
[Note: Solutions can be checked on p. 499. For #3, use the Poisson approximation to binomial to confirm your exact answers in (a),(b),(c). For #4(b), use additivity of variance for independent r.v.'s.]

--Extra credit: Poisson distribution (2 points)--
* p. 234, #2,8