

Chapter III. Problems 3.4.6, 3.5.15.

Two more problem are given below:

**2-A.** Roll two dice. Let  $A$  = “The first die is odd”,  $B$  = “The second die is odd” and  $C$  = “The sum is odd”. Show that these three events are pairwise independent but not jointly independent.

**2-B.** Three couples that were invited to dinner will independently show up with probabilities 0.9, 0.8 and 0.7. Let  $N$  be the number of couples that show up. Find the probability that  $N = 3, 2, 1, 0$ .

The starred problems are for extra credit. Each problem is graded on the base of “4 points max”.