MATH 113: DISCRETE STRUCTURES
HOMEWORK DUE WEDNESDAY WEEK 11

Problem 1. Ten fair six-sided dice are rolled. Five of the dice are red and five are green.

(a) Give a formula for the probability of rolling i sixes among the five red dice.

(b) What is the probability that there are the same number of sixes among the red dice as among the green dice? Use a calculator to estimate this probability with a decimal number accurate to at least 3 significant digits.

Problem 2. Five cards are dealt from a standard deck of 52 cards. What is the probability that two or more of the cards are aces? Use a calculator to estimate this probability with a decimal number accurate to at least 3 significant digits.