MATH 113: DISCRETE STRUCTURES
HOMEWORK DUE WEDNESDAY WEEK 3

Problem 1. I have ten pieces of candy, all of different types, to distribute among six people. How many ways are there to do this? It's OK to, for instance, give all ten pieces to one of the six people. (Hint: To be sure of your answer, on scratch paper, you might experiment with smaller numbers for which you can list all possible distributions.)

Problem 2. I have ten large bags of candy (each of a different type). I want to distribute candy to six people subject only to this rule: no person will receive two pieces of the same type. (Thus, each person receives at most ten pieces of candy. One extreme possibility is that no one receives any candy.) How many ways are the to do this?