

## Combinatorics HW 1.2

Student ID:

Name:

Score:

1. How many odd numbers between 1000 and 9999 whose digits are distinct with each other?
2. How many 7-digit numbers are there such that the digits are distinct integers taken from  $\{1, 2, \dots, 9\}$  and such that the digits 5 and 6 do not appear consecutively in either order?
3. How many different lattice paths from  $(-1,1)$  to  $(5,4)$ ?