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, …, 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)?