

MATH 3012-QHS: Applied Combinatorics
Fall 2020
Worksheet 1

Name: _____

Due Date: Aug. 25, Tuesday 11.59 pm

Problem 1. The Greek alphabet consists of 24 letters. How many five-character strings can be made using the Greek alphabet (ignoring the distinction between uppercase and lowercase)?

Problem 2. Assume that a license plate consists of 3 Latin alphabet letters followed by 4 numerals. How many license plates are there such that the numerals are distinct from one another and the last numeral is less than 3.

Problem 3. Twenty-three student compete in a math competition in which the top three students are recognized with trophies for first, second, and third place. How many different outcomes are there for the top three places?