

Blitzstein's Introduction to probability

March 2, 2023

Chapter 1

Probability and counting

1.1 Counting

Exercise 1.1.1. *1 How many ways are there to permute the letters in the word mississippi?*

Proof. Notice that there are exactly 10 words out of which 4 I's, 4 S's, 2 Ps and 1 M. Therefore, permutation after accounting overcounting would be $\frac{10!}{4!4!2!}$. □