

Math 347F1, HW #9

Due Wednesday, April 22, 2009

1. A restaurant offers 8 appetizers, 12 main dishes, 6 side dishes and 6 deserts available on their menu. How many ways can you make your dinner if you want order 2 appetizers, 1 main dish, 3 side dishes and 1 desert ?
2. Suppose that we have a stack of 10 books and want to arrange them in all possible ways.
 - a. How many different ways to arrange these books if these books are all different ?
 - b. How many different ways to arrange these books if 4 of them are the same and all others are different ?
3. How many different strings can be made by reordering the letters of the word "difference" ?

Plus Book: page 119, #5.18, #5.36, #5.39 and page 134, #6.8 and #6.13.