STAT 320: Principles of Probability Unit 2: A Few Counting Principles & and Their Applications

United Arab Emirates University

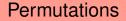
Department of Statistics

Outline

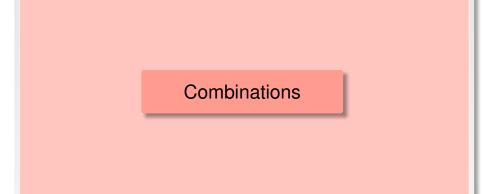




Multiplication Principle







Binomial and Multinomial Coefficient



Overview of Counting Principals

Definition (Multiplication Principle of counting)

Suppose that two experiments are to be performed. Then if experiment 1 can result in any one of m possible outcomes and if, for each outcome of experiment 1, there are n possible outcomes of experiment 2, then together there are $m \times n$ possible outcomes of the two experiments.

