STAT 320: Principles of Probability
Unit 4: Conditional Probability & Statistical Independence

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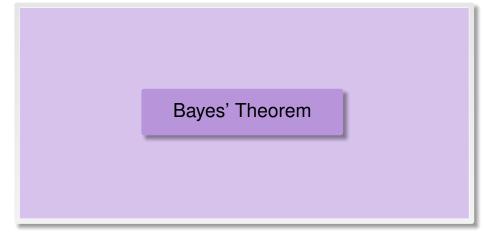
Outline

1. **Conditional Probability**

2. Bayes' Theorem

3. The Notion of Statistical Independence

Conditional Probability

Outline

Bayes' Theorem

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The Notion of
Statistical
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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 × n possible outcomes of the two experiments.

Questions?