

Study Guide for Week 3-4

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Introduction

1. Basic statistics: 1.2
2. Set theory and axioms of probability: 1.13, 1.14, $B.1$, $B.5(a)$
3. Counting methods: 1.7, 1.8, 1.26

Conditional Probability

1. Conditional probability: 2.2, 2.7
2. Law of total probability: 2.6
3. Bayes Formula: 2.33, 2.37, 2.40
4. Independence: 2.13, 2.17
5. Conditional independence: 2.27, Example 2.38

Solution

Please see **Week 4** folder of the course repo in GitHub.

Note: This study guide is used for Botao Jin's sections only. Comments, bug reports: b_jin@ucsb.edu