

Math 362: Mathematical Statistics II

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Chapter 10. Goodness-of-fit Tests

§ 10.1 Introduction

§ 10.2 The Multinomial Distribution

§ 10.3 Goodness-of-Fit Tests: All Parameters Known

§ 10.4 Goodness-of-Fit Tests: Parameters Unknown

§ 10.5 Contingency Tables

Plan

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3. He has been credited with establishing the discipline of mathematical statistics
4. Method of moments; p-Value; Chi-square test; Foundations of statistical hypothesis testing theory; principle component analysis ...



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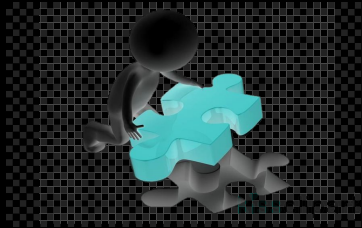
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Pearson's chi-squared test
in one shot



$$\chi^2 = \sum \frac{(\text{Observed} - \text{Expected})^2}{\text{Expected}} \sim \text{Chi Square of } df$$

df = numer of classes – number of estimated parameters – 1

All expected ≥ 5