Math 362: Mathematical Statistics II

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Chapter 6. Hypothesis Testing

§ 6.1 Introduction

§ 6.2 The Decision Rule

§ 6.3 Testing Binomial Data – $H_0 : p = p_0$

§ 6.4 Type I and Type II Errors

§ 6.5 A Notion of Optimality: The Generalized Likelihood Ratio

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1. H_0: the null hypothesis

vs.

2. H_1: the alternative hypothesis

Comments: Hypothesis testing and confidence intervals are dual concepts to each other:

- One can be obtained from the other.
- However, it is often difficult to specify H_0 or the null hypothesis.

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