STAT 2593 Lecture 032 - Tests Regarding a Population Proportion

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Tests Regarding a Population Proportion

Learning Objectives

1. Understand how we test population proportions.

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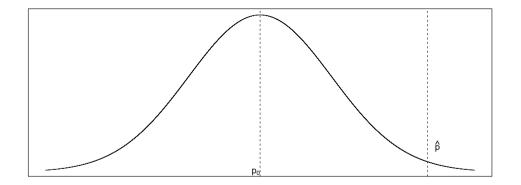
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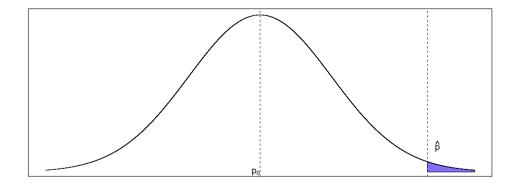
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If p₀ is the correct mean, this will be approximately N(0,1).
How do we find our p-value?

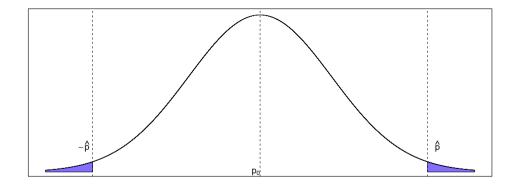
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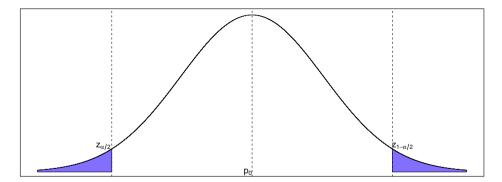
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 - If $H_0: p \leq p_0$, then only consider $P(Z \geq z)$.
 - Note here we do not take the absolute value.

Rejection Regions for Hypothesis Tests - Critical Values



Two Sided Hypothesis Test – Rejection Region



• When the normal approximation to the binomial distribution applies, can use a N(0, 1) to run hypothesis tests.

The rejection region depends on the alternative being considered.