

# Introduction to Statistical Method

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## Hypothesis Testing

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A second major statistical method for gaining information on a probability.

The goal is to reject or fail to reject statements (hypotheses) based on statistical data.

### Hypothesis Definition

A statement about a population parameter called  $\theta$ . The hypothesis will compare  $\theta$  to a null value donated  $\theta_0$ .

### Fisher's Null Hypothesis Test

This hypothesis will be donated by  $H_0$  and is null hypothesis.

Three forms:

- $H_0 : \theta = \theta_0$
- $H_0 : \theta \leq \theta_0$
- $H_0 : \theta \geq \theta_0$

A hypothesis test is based on rejecting a hypothesis.