

2: Formulation of H_a

- The alternate hypothesis assigns the values to the population parameter that is not contained in the null hypothesis.
- For example,
 - $H_a: \mu > \mu_0$
 - $H_a: \mu \neq \mu_0$
 - $H_a: \mu < \mu_0$
- The null hypothesis is accepted or rejected on the basis of the information provided by the sample.



3: Definition of a Test Statistic

- A test statistic must be defined to test the validity of the hypothesis.
- The test statistic is computed from sample information.
- A number calculated to represent the match between a set of data and the expectation under the null hypothesis

A test that uses the z-score as a test statistic is called a z-test.