

Hypothesis Testing

Step 1: State the claim and put in symbolic form.

Step 2: Give the symbolic form that must be true when the original claim is false.

Step 3: Determine H_0 and H_1 .

Step 4: Determine α . (usually 0.05 or 0.01)

Step 5: Identify the test statistic, distribution and calculate the test statistic.

Step 6: (Traditional) Draw a graph, determine critical values and critical region. (P-value) Draw a graph, determine the P-value.

Step 7: (Traditional) Reject H_0 if the test statistic is in the critical region. Fail to reject H_0 if the test statistic is not in the critical region. (P-value) Reject H_0 if the P-value is $\leq \alpha$. Fail to reject otherwise.

Step 8: Restate in simple non-technical terms, and address the original claim.







