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Mat no: 17/mhs01/315

Course code: sta 312

Assignment

1 What do you understand by hypothesis testing.

Hypothesis testing is an act in statistics whereby an analyst tests an assumption regarding a population parameter. The methodology employed by the analyst depends on the nature of data used and the reason for the analysis.

Hypothesis testing is used to assess the plausibility of a hypothesis by using sample data. Such data may come from a larger population, or from a data generating process.

2 . what is the importance of hypothesis testing in research

A hypothesis is a theory or proposition set forth as an explanation for the occurrence of some observed phenomenon, asserted either as a provisional conjecture to guide investigation, called a working hypothesis, or accepted as highly probable in lieu of the established facts.

A scientific hypothesis can become a theory or ultimately a law of nature if it is proven by repeatable experiments.

Hypothesis testing is common in statistics as a method of making decision using data. In other words, testing a hypothesis is trying to determine if your observation of some phenomenon is likely to have really occurred based on statistics.

According to **san jose state university statistics department**, hypothesis testing is one of the most important concepts in research because it Is how you decide if something is really happened, or if certain treatments have positive effects, or if groups differ from each other or if one variable predicts another.