

AP Statistics Flashcards PDF

AP Statistics Flashcards PDF

Disclaimer: The ap statistics flashcards pdf was generated with the help of StudyBlaze AI. Please be aware that AI can make mistakes. Please consult your teacher if you're unsure about your solution or think there might have been a mistake. Or reach out directly to the StudyBlaze team at max@studyblaze.io.

What is the definition of a population in statistics?

A population is the entire group of individuals or instances about whom we hope to learn.

What is a sample in statistics?

A sample is a subset of the population that is used to represent the entire group.

What is the difference between descriptive and inferential statistics?

Descriptive statistics summarize and describe the features of a dataset, while inferential statistics use a random sample of data to make inferences about the population.

What is a null hypothesis?

A null hypothesis is a statement that there is no effect or no difference, and it serves as the starting point for statistical testing.

What is a p-value?

A p-value is the probability of obtaining test results at least as extreme as the observed results, assuming that the null hypothesis is true.

What does it mean if a result is statistically significant?

A result is statistically significant if the p-value is less than the predetermined significance level, typically 0.05, indicating strong evidence against the null hypothesis.

What is a confidence interval?

A confidence interval is a range of values, derived from a dataset, that is likely to contain the value of an unknown population parameter.

What is the Central Limit Theorem?

The Central Limit Theorem states that the sampling distribution of the sample mean will approach a normal distribution as the sample size increases, regardless of the population's distribution.

What is a Type I error?

A Type I error occurs when the null hypothesis is true, but we incorrectly reject it.

What is a Type II error?

A Type II error occurs when the null hypothesis is false, but we fail to reject it.