

Introduction to Statistics

Notes - Day 1

Categorical vs Quantitative

One of the most common places that mathematics can be found in real life is in statistics. As humans, we constantly collect data and analyze it in order to understand our world better.

For the most part, data can be classified as one of two types categorical variables vs quantitative variables.

Categorical data is data that is sorted based on a category or characteristic (ex; eye color, gender, or area code). In categorical data, there is usually a finite number of options that the data can fall into.

On the other hand, Quantitative data is data that is based on measurements or amounts. This type of data tends to be numerical and, therefore, usually has an infinite number of options.

Examples of quantitative data include age, height, or weight.

Examples:

Sort the following variables into categorical or quantitative. Write a C for categorical and a Q for quantitative.

Q number of siblings

C hair color

Q weight

C ethnicity

C favorite color

C area code

C zip code

C favorite music genre

C grade level

C letter grade on test

Q number of rushing yards

C favorite subject

Q numerical grade on test

Q batting average

Q GPA

Q number of pets

Q height