Introduction to Statistics

Notes - Day 1

<u>Categorical vs. Quantitative</u>

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.

__ number of siblings	__ hair color	__ weight
__ ethnicity	__ favorite color	__ area code
__ zip code	__ favorite music genre	__ grade level
__ letter grade on test	__ number of rushing yards	__ favorite subject
__ numerical grade on test	__ batting average	__ GPA
__ number of pets	__ height	