

Sources and Types of Data

Continuous data is numerical data.

Quantitative data is numerical data.

Categorical data is Qualitative.

Discrete Data

Can only take in certain values. Normally values that can be counted. Ex: # of students in class.

Ex: # of people in a school
of people who voted on a bill

Proportions - Known as bounded counts are the ratios of counts
of students in school divided by the number of teacher in a school

of people who voted "yes" on a bill

Continuous Data

An unfixed # of possible measurements between two realistic points. Not restricted like discrete data.

Often contains decimal points.

A person's height / weight
Temperature / inches of rain

~~Q~~

Continuous variables have categories within them.
Interval and Ratio

Interval Data:

Ordered units with the same difference.

Interval data does not have a true zero.

Can add and subtract but cannot multiply or divide to calculate ratios.

Ratio Values

Ordered units with the same difference but has a true zero.

Discrete Data

Can be measured in different ways.

Ordered

Unordered

Nominal Variables (Unordered)

gender

location

religion

Ordinal (Ranking or ordered)

Grade levels

income brackets

Continuous Variables

Grouped into a small number of categories
(intervals) - income grouped into subset,
blood pressure levels (normal, high, etc)

Nov 18th

Continuous: Has to be measured

~~Discrete~~ Discrete: Easily counted

Going to talk about Excel

Excel was ~~not~~ released in 1987.

100s of functions to answer statistical,
engineering, and financial needs.

Not a production solution

Good for quick dive and small pbls
for non data people

SQL = Structured Query Language

We did Data Extract / Scraping in Excel