1/28/19

Percent Change

Tables

Percent Change

$$\frac{New - Old}{Old}$$

(see Excel)

Summarize data in a tables

One-way table: is one set of variable values, with counts (or percents)

Two-Way Table: compares two variables, one set of variable values is in the rows, and one set goes across the columns, and then the body of the table has counts or percents

Typically tables are used for variables which are categorical (or qualitative)

The variable values can be expressed in WORDS

When there is no order to values, this called nominal

When there is an order, this is called ordinal (gradations like preferences : like a lot to despise)

Examples of nominal are things like favorite colors, names of states, etc.

Examples of ordinal are things like preferences, or letter grades

All are categorical or qualitative variables

Opposite is numerical or quantitative variables

We can use tables when the numerical variables are discrete (whole numbers), and few in number

Can group numerical variables to make them categorical

Making a table:

Low-tech way: Sort the data, and then count manually.

High-tech way: Pivot Table

Once we have the data summarized in a table, we can make graphs of the data.

Pie Chart/Pie Graph/Circle Graph/Donut Graph

Qualities of Good Graphs

1) Graph should have a descriptive Title
2) Data Labels (percents should display)
3) Legend

Pie Graphs are for displaying percents of the whole – all percents should add up to 100%