

## 8<sup>th</sup> Grade Statistics

- 2/12 • Scatter plot - a graph with points plotted to show the relationship between two sets of data
- cluster - a group of closely grouped data
  - outlier - a point that is very different from the rest of the set of data
  - association - describes how sets of data are related +/-/none
  - trend line - a straight line that comes closest to the points on a scatter plot

To find an equation of a trend line:

- 1) Choose two points on or close to your trend line and find the slope  $\Delta y / \Delta x = m$
- 2) Plug slope into  $y = mx + b$
- 3) Choose one point to plug in to the  $x$  and  $y$  of equation
- 4) solve for  $b$

you can use the trend line and it's equation to make predictions

- interpolate - a predicted value between data points you know
- extrapolate - a predicted value outside the data you know

## Two Way Frequency Tables

- shows the frequencies of data that is categorized two ways
- relative frequency - the ratio of the number of times an event occurs to the total number of events (%)
- joint relative frequency - dividing a frequency that is not in the total row or total column by the grand total
- marginal relative frequency - dividing a number in a row or column total by the grand total
- conditional relative frequency - dividing a frequency that is not in the total row or column by a row or column total