## Summary: Differences between univariate and bivariate data.

Univariate Data	Bivariate Data
involving a single variable	involving two variables
does not deal with causes or relationships	deals with causes or relationships
the major purpose of univariate analysis is to describe	<ul> <li>the major purpose of bivariate analysis is to explain</li> </ul>
<ul> <li>central tendency - mean, mode, median</li> <li>dispersion - range, variance, max, min, quartiles, standard deviation.</li> <li>frequency distributions</li> <li>bar graph, histogram, pie chart, line graph, box-and-whisker plot</li> </ul>	<ul> <li>analysis of two variables simultaneously</li> <li>correlations</li> <li>comparisons, relationships, causes, explanations</li> <li>tables where one variable is contingent on the values of the other variable.</li> <li>independent and dependent variables</li> </ul>
Sample question: How many of the students in the freshman class are female?	Sample question: Is there a relationship between the number of females in Computer Programming and their scores in Mathematics?