## Activity - One-Variable Statistics

The spreadsheet (link on blog) shows the results of a survey of 154 high school students
Make a copy of the spreadsheet in your own Google Docs account, or download it to use in Excel or in Excel Online.

Complete all work in your copy of the spreadsheet.

1. Determine each of the following:

|  | Age | Monthly Expenses |
| :--- | :--- | :--- |
| Mean |  |  |
| Median |  |  |
| Mode |  |  |
| Standard Deviation |  |  |
| First Quartile $Q_{1}$ |  |  |
| Third Quartile $Q_{3}$ |  |  |
| Range |  |  |
| Interquartile Range |  |  |
| Semi-Interquartile Range |  |  |

2. For each datum (data value) for Age in the data set determine the $\mathbf{z}$-score and the percentile.
3. For each datum (data value) for Monthly Expenses in the data set determine the $\mathbf{z}$-score and the percentile.
4. For each Age reported, find the following measures of Monthly Expenses:

- mean
- median
- mode
- standard deviation

5. Generate the following graphs:

- circle graph (pie chart) for Gender
- histogram for Age
- histogram for Monthly Expenses
- bar graph for Pathway

