GRAPHING AND ANALYZING DATA

Unit and Unit Outcomes

\*Aligned with Ohio Content Standards, Grade 9 Indicators

**Unit One – Line Plots**

* Demonstrate fluency in computations using real numbers.
* To construct graphs and interpret information illustrated by them.
* Students will define line plot and how it relates to Algebra.
* Students will record the data and analyze the data each time it occurs to represent the frequency of the data.

**Unit Two – Stem and Leaf Plots**

* Demonstrate fluency in computations using real numbers.
* To construct graphs and interpret information illustrated by them.
* Students will define stem-and-leaf plot and how it relates to Algebra.
* Students will compare and contrast information in a back-to-back stem and leaf plot.
* Analyze and interpret frequency distributions based on spread and outliers.
* Classify data as univariate or bivariate.
* Classify data as quantitative or qualitative data.
* To compute mean, median, and mode in a set of data.

**Unit Three – Box-and-Whisker Plots**

* Demonstrate fluency in computations using real numbers.
* To construct graphs and interpret information illustrated by them.
* Students will define box-and-whisker plot and how it relates to Algebra.
* Analyze and interpret frequency distributions based on extreme values.
* Interpret and construct box-and-whisker plot.
* To compute mean, median, and mode in a set of data.
* To compute range and interquartile range in a set of data.
* To compute upper and lower quartiles in a set of data.

**Unit Four – Frequency Table and Histogram**

* Demonstrate fluency in computations using real numbers.
* To construct graphs and interpret information illustrated by them.
* To organize and interpret data in a bar graph
* Students will define frequency and how it relates to Algebra.
* To organize and interpret data in a frequency table.
* To compute intervals for equal width of measurement.
* To organize data from a frequency table to construct a histogram.

**Unit Five – Circle Graph**

* Demonstrate fluency in computations using real numbers.
* To construct graphs and interpret information illustrated by them.
* Students will define circle graph and how it relates to Algebra.
* To compute percentages from a survey.
* To compute degrees from a set of data.
* To construct a circle graph from a set of data with accurate percentages and degrees using a compass and protractor.
* To understand acute, obtuse, and right angles.