# Unit 02 - Data Display and Description 

Content Area: Math<br>Course(s): Prob/Stat A<br>Time Period: Marking Period 1<br>Length:<br>4 weeks<br>Status:<br>Published

## Unit Introduction

## Standards

| MA.S-ID.A. 1 | Represent data with plots on the real number line (dot plots, histograms, and box plots). |
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| MA.S-ID.A. 2 | Use statistics appropriate to the shape of the data distribution to compare center <br> (median, mean) and spread (interquartile range, standard deviation) of two or more <br> different data sets. |
| MA.S-ID.A. 3 | Interpret differences in shape, center, and spread in the context of the data sets, <br> accounting for possible effects of extreme data points (outliers). |
| MA.S-ID.B.5 | Summarize categorical data for two categories in two-way frequency tables. Interpret <br> relative frequencies in the context of the data (including joint, marginal, and conditional <br> relative frequencies). Recognize possible associations and trends in the data. |

## Essential Questions

## Content

- Section 2-1: Introduction (Pg. 34-35)
- Section 2-2: Organizing Data (Pgs. 35-48)
- Section 2-3: Histograms, Frequency Polygons, and Ogives (Pgs 48-62)
- Section 2-4: Other Types of Graphs (Pgs. 63-85)
- Section 3.1: Introduction (Pgs. 96-97)
- Section 3.2: Measures of Central Tendency (Pgs. 97-114)
- Section 3.3: Measures of Variation (Pgs. 115-132)
- Section 3.4: Measures of Position (Pgs. 133-151)
- Section 3.5: Exploratory Data Analysis (Pgs. 152-160)


## Skills

- Compare center and spread both within a group and between groups
- Construct and interpret dot plots, stem plots, histograms, and cumulative frequency plots.
- Describe center, shape, spread, clusters, gaps, outliers and other unusual features.
- Discuss shape, outliers, center, and spread of distributions
- Measure center using mean and median
- Measure position using quartiles, percentiles, and standardized (z) scores
- Measure spread using range, interquartile range, and standard deviation
- Use box plots (and modified) with the five number summary
- Use dot plots, back-to-back stem plots, and parallel box plots

