

Unit 03: A1 - Ch. 12 - Data Analysis

Content Area: **Math**
Course(s): **Algebra1 CP, Algebra 1A, Algebra 1H**
Time Period: **Marking Period 4**
Length: **12 Days**
Status: **Published**

Unit Introduction

Standards

MA.S-ID.A.1	Represent data with plots on the real number line (dot plots, histograms, and box plots).
MA.S-ID.A.2	Use statistics appropriate to the shape of the data distribution to compare center (median, mean) and spread (interquartile range, standard deviation) of two or more different data sets.
MA.S-ID.A.3	Interpret differences in shape, center, and spread in the context of the data sets, accounting for possible effects of extreme data points (outliers).
MA.S-ID.B.6a	Fit a function to the data (including with the use of technology); use functions fitted to data to solve problems in the context of the data.
MA.S-ID.B.6c	Fit a linear function for a scatter plot that suggests a linear association.
MA.S-ID.C.8	Compute (using technology) and interpret the correlation coefficient of a linear fit.

Essential Questions

- How can collecting and analyzing data help you make decisions or predictions?
- How can you make and interpret different representations of data?
- How can you make predictions based on a scatter plot?

Content

- 12.2 - Frequency and Histograms (2 Days)
- 12.3 - Measures of Central Tendency and Dispersion (1 Day)
- 12.4 - Box-and-Whisker Plots (1 Day)
- 5.7 - Scatter Plots & Line of Best Fit (Calculator) (2 Days)
- Supplement - 1.5 Method of Finding Outliers (2 Days)
- Supplement - 5 Number Summary with and without Calculator (2 Days)

Skills

- Comparing Measures of Central Tendency

- Find Outliers Using the 1.5 Method
- Find the 5-Number Summary With and Without the Calculator
- Finding a Data Value
- Finding a Percentile Rank
- Finding Measures of Central Tendency
- Finding the Line of Best Fit on the Calculator
- Finding the Range
- Identifying Whether Relationships are Causal
- Interpreting a Box-and-Whisker Plot
- Interpreting Histograms
- Making a Box-and-Whisker Plot
- Making a Cumulative Frequency Table
- Making a Frequency Table
- Making a Histogram
- Making a Scatter Plot and Describing Its Correlation
- Summarizing a Data Set
- Use graphing calculators and technology where appropriate
- Use relevant vocabulary, notations, and symbols when appropriate
- Writing an Equation of a Trend Line