Unit 03 - Correlation and Regression

Content Area: **Math**
Course(s): **Prob/Stat A**
Time Period: **Marking Period 1**
Length: **2 weeks**
Status: **Published**

Unit Introduction

Standards

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.6b	Informally assess the fit of a function by plotting and analyzing residuals, including with the use of technology.
MA.S-ID.B.6c	Fit a linear function for a scatter plot that suggests a linear association.
MA.S-ID.C.7	Interpret the slope (rate of change) and the intercept (constant term) of a linear model in the context of the data.
MA.S-ID.C.8	Compute (using technology) and interpret the correlation coefficient of a linear fit.
MA.S-ID.C.9	Distinguish between correlation and causation.

Essential Questions

Content

- Section 10.1: Introduction (Pgs. 528-529)
- Section 10.2: Scatter Plots (Pgs. 529-533)
- Section 10.3: Correlation (Pgs. 533-544)
- Section 10.4: Regression (Pgs. 544-553)

Skills

- Construct and interpret residual plots
- Construct, interpret and use least-squares regression lines
- Create and analyze patterns in scatter plots
- Create and interpret conditional relative frequencies and determine association
- Create and interpret marginal and joint frequencies for two-way tables
- Identify and describe outliers and influential points

- Understand correlation and linearity