Course: Algebra I

Quarter 3: **Zanesville City**

CLUSTER	STANDARD
Solve systems of equations. A-**REI**.5-7	A-REI.5 Prove that, given a system of two equations in two variables, replacing one equation by the sum of that equation and a multiple of the other produces a system with the same solutions.
	A-REI.6 Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables.
Represent and solve equations and inequalities graphically. A-**REI**.10-12	A-REI.12 Graph the solutions to a linear inequality in two variables as a half-plane (excluding the boundary in the case of a strict inequality), and graph the solution set to a system of linear inequalities in two variables as the intersection of the corresponding half-planes.
Write expressions in equivalent forms to solve problems. A-**SSE**.3a, 3b, 3c	A-SSE.3a Factor a quadratic expression to reveal the zeros of the function it defines.
	A-SSE.3b Complete the square in a quadratic expression to reveal the maximum or minimum value of the function it defines.
	A-SSE.3c Use the properties of exponents to transform expressions for exponential functions.
Summarize, represent and interpret data on a single count or measurement variable. S-**ID**.1-3	S-ID.1 Represent data with plots on the real number line (dot plots, histograms, and box plots).
	S-ID.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.
	S-ID.3 Interpret differences in shape, center, and spread in the context of the data sets, accounting for possible effects of extreme data points (outliers).
Summarize, represent and interpret data on two categorical and quantitative variables. S-**ID**.5, 6a, 6b, 6c	S-ID.5 Summarize categorical data for two categories in two-way frequency tables. Interpret relative frequencies in the context of the data (including joint, marginal, and conditional relative frequencies). Recognize possible associations and trends in the data.

	S-ID.6a Fit a function to the data; use functions fitted to data to solve problems in the context of the data. Uses given functions or choose a function suggested by the context. Emphasize linear, quadratic, and exponential models.
	S-ID.6b Informally assess the fit of a function by plotting and analyzing residuals.
	S-ID.6c Fit a linear function for a scatter plot that suggests a linear association.
Interpret linear models. S-**ID**.7-9	S-ID.7 Interpret the slope (rate of change) and the intercept (constant term) of a linear model in the context of the data.
	S-ID.8 Compute (using technology) and interpret the correlation coefficient of a linear fit.
	S-ID.9 Distinguish between correlation and causation.