MATH Grade Eight - CP Algebra IA – Unit 8



Essential Understandings

- the slope (rate of change) and the intercept (constant term) of a linear model in the context of the data.
- · Linear functions expressed symbolically
- key features of the graph
- a linear function for a scatter plot that suggests a linear association
- · the slope criteria for parallel and perpendicular lines and
- the equation of a line parallel or perpendicular to a given line that passes through a given point.
- · equations in two variables to represent relationships between quantities
- that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane.
- the parameters in a linear function in terms of its context
- · data on two quantitative variables on a scatter plot
- how the variables are related
- a function to the data
- · functions fitted to data to solve problems in the context of the data
- appropriate quantities
- parts of an expression
- · a function that describes a relationship between two quantities
- linear functions given a graph, a description of the relationship, or two input-output pairs (include reading these from a table)
- that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range
- the domain of a function to its graph and to the quantitative relationship it describes
- the average rate of change of a function over a specified interval.
- the rate of change of the graph
- formulas using the same reasoning as in solving equations

Vocabulary Rate of change Slope Horizontal slope Vertical slope Linear function Linear equation y-intercept Slope-intercept form Parallel Perpendicular Reciprocal Negative (opposite) reciprocal Scatter Plot Positive correlation Negative correlation No correlation Trend line Line of Best Fit Linear Regression Domain Range Continuous function Discrete function Standard form x-intercept