Math 6+: Algebraic Concepts
Linear Functions, Slope, and Rate of Change

Linear Functions

Students	Learning Continuum Statements:
Students:	**RIT 191-200:** • Expresses the linear relationship between variables in words
Students:	**RIT 201-210:** • Compares the rate of change between two proportional relationships represented in different ways • Expresses the linear relationship between variables in words • Identifies the table of values given a verbal description of a nonproportional linear relationship
Students:	**RIT 211-220:** • Calculates the rate of change from a graph representing a real-world linear relationship • Calculates the rate of change from a table or description of a real-world linear relationship • Compares the rate of change between two proportional relationships represented in different ways • Graphs a linear function of the form y = mx given a simple scenario • Identifies the table of values given a graph of a linear relationship in the form y = mx + b • Identifies the table of values given a verbal description of a nonproportional linear relationship • Interprets the meaning of the slope of a graph in a real-world linear relationship • Translates between the graph of a piecewise linear function and a verbal description of the real-world relationship
Students:	**RIT 221-230:** • Calculates the rate of change from a graph representing a real-world linear relationship • Calculates the rate of change from a table or description of a real-world linear relationship • Compares the rate of change between two proportional relationships represented in different ways • Creates a table to represent a real-world relationship between an independent and a dependent variable in the form y = x + c, given a graph • Graphs a linear function of the form y = mx given a simple scenario • Identifies the table of values given a graph of a linear relationship in the form y = mx + b • Identifies the table of values given a verbal description of a nonproportional linear relationship • Interprets a point on the graph of a real-world proportional relationship • Interprets the meaning of the slope of a graph in a real-world linear relationship • Interprets the meaning of the x-intercept of a graph within the context of a real-world linear relationship

- Translates between the graph of a linear function and a verbal description of the real-world relationship
- Translates between the graph of a piecewise linear function and a verbal description of the real-world relationship
- Understands independent and dependent variables within a linear context
- Writes an equation in the form y = mx + b to represent the relationship between real-world quantities given the slope and y-intercept
- Writes an equation in the form y = mx to represent the relationship between real-world quantities given a simple scenario
- Writes an equation in the form y = x + c to represent the relationship between real-world quantities given a table of values
- Writes the equation of a line in the form y = mx + b given a table of values or two ordered pairs