

**Math Tenth Grade  
Second Nine Weeks**

**Integrated Math**

**Patterns, Functions and Algebra**

**F 10.** Solve real-world problems that can be modeled using linear, quadratic, and exponential or square root functions.

**G 10.** Solve real-world problems that can be modeled using, linear, quadratic, and exponential or square root functions.

**Data Analysis and Probability**

**A 2.** Represent and analyze bivariate data using graphical displays (scatter plots, parallel box and whisker plots, histograms with more than one set of data, tables, charts, spreadsheets) with and without technology.

**A 3.** Display bivariate data where at least one variable is categorical.

**A 4.** Identify outliers on a data display; e.g., use interquartile range to identify outliers on a box and whisker plot.

**A 6.** Interpret the relationship between two variables using multiple graphical displays and statistical measures e.g., scatter plots, parallel box and whisker plots, and measures of center and spread.

**D 6.** Interpret the relationship between two variables using multiple graphical displays and statistical measures; e.g., scatter plots, parallel box and whisker plots, and measures of center and spread.

**G 5.** Provide examples and explain how a statistic may or may not be an attribute of the entire population; e.g., intentional or unintentional bias may be present.

**K 8.** Differentiate and explain the relationships between the probability of an event and the odds of an event, and compute on given the other.

**Patterns, Functions and Algebra**

**D 3.** Solve equations and formulas for a specified variable | e.g., express the base of a triangle in terms of the area and height.

**D 4.** Use algebraic representations and functions to describe and generalize geometric properties and relationships.

**D 6.** Solve equations and inequalities having rational expressions as coefficients and solutions.

**J 9.** Recognize and explain that the slopes of parallel lines are equal and the slopes of perpendicular lines are negative reciprocals.

**Patterns, Functions and Algebra**

**B 1.** Define function formally and with  $f(x)$  notation.

**F 10.** Solve real-world problems that can be modeled using linear, quadratic, and exponential or square root functions.

**H 7.** Solve systems of linear inequalities.

**H 11.** solve real-world problems that can be modeled using linear; quadratic, exponential or square root functions.

**A1.** Formally define and explain key aspects of geometric figures, including:

- a. Interior and exterior angles of polygons
- b. Segments related to triangles (median, altitude, midsegment)

**F 9.** Show and describe the results of combinations of translations, reflections and rotations (compositions); e.g., perform compositions and specify the result of a composition as the outcome of a single motion, when applications.

**Patterns, Functions and Algebra**

**D 4.** Use algebraic representations and functions to describe and generalize geometric properties and relationships.

**J 9.** Recognize and explain that the slopes of parallel lines are equal and the slopes of perpendicular lines are negative reciprocals.