Math 9th Grade
Third Nine Weeks

Integrated

Number, Number Sense and Operations

G 4. Demonstrate fluency in computations using real numbers.

Algebra I

Number, Number Sense and Operations

G 4. Demonstrate fluency in computations using real numbers.

Patterns, Functions and Algebra

A 2. Generalize patterns using functions or relationships (linear; quadratic and exponential), and freely translate among tabular; graphical and symbolic representations.
B 1. Define function with ordered pairs in which each domain element is assigned exactly one range element.
B 3. Describe problem situations (linear, quadratic and exponential) by using tabular; graphical and symbolic representations.
C 2. Generalize patterns using functions or relationships (linear; quadratic and exponential); and freely translate among tabular, graphical and symbolic representations.
E 5. Describe and compare characteristics of the following families of functions; linear, quadratic and exponential function; e.g., general shape, number of roots, domain, range, and rate of change, maximum or minimum.
F 6. Write and use equivalent forms of equations and inequalities in problem situations; e.g., changing a linear equation to the slope-intercept form.
F 8. Find linear equations that represent lines that pass through a given set of ordered pairs, and find linear equations that represent lines parallel or perpendicular to a given line through a specific point.

Algebra II

Patterns, Functions and Algebra

B 3. Describe problem situations (linear, quadratic and exponential) by using tabular; graphical and symbolic representations.
C 2. Generalize patterns using functions or relationships (linear; quadratic and exponential); and freely translate among tabular, graphical and symbolic representations.
D 11. Add, subtract, multiply and divide monomials and polynomials (division of polynomials by monomials only).
E 4. Demonstrate the relationship among zeros of a function, roots of equations, and solutions of equations graphically and in words.
G 10. Solve quadratic equations with real roots by factoring, graphing, using the quadratic formula and with technology.
J 15. Describe how a change in the value of a constant in a linear or quadratic equation affects the related graphs.

Measurement Standard

D 3. Use ratio of lengths in a similar two-dimensional figures or three-dimensional objects to calculate the ratio of their areas of volumes respectively.

D 5. Solve problems involving unit conversion for situations involving distances, areas, volumes and rates within the same measurement system.

Geometry and Spatial Sense

G 3. Analyze two-dimensional figures in a coordinate plane; e.g., use slope and distance formulas to show that a quadrilateral is a parallelogram.

Geometry