

Math Tenth Grade
First Nine Weeks

Integrated Math

Patterns, Functions and Algebra

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

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

Patterns, Functions and Algebra

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

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 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.

Number, Number Sense and Operations

D 1. Connect physical, verbal and symbolic representations of irrational numbers; e.g., construct $\sqrt{2}$ as a hypotenuse or on a number line.

A 1. Formally define and explain key aspects of geometric figures, including:

b. Segments related to triangles (median, altitude, midsegment)

A 2. Recognize and explain the necessity for certain terms to remain undefined, such as point, line and plane.

A 6. Identify the reflection and rotation symmetries of two- and three-dimensional figures.

E 5. Construct congruent or similar figures using tools, such as compass, straight edge, and protractor or dynamic geometry software.

E 7. Perform reflections and rotations using compass and straightedge constructions and dynamic geometry software.

F 8. Derive coordinate rules for translations, reflections and rotation of geometric figures in the coordinate plane.

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 applicable.

H 3. Make, test and establish the validity of conjectures about geometric properties and relationships using counterexample, inductive and deductive reasoning, and paragraph or two column proof, including:

c. Prove theorems involving properties of lines, angles, triangles and quadrilaterals.

Algebra II

Patterns, Functions and Algebra

Geometry

Geometry and Spatial Sense

Algebra I