



Foundational Skills Mathematics 9-12 Year-at-a-Glance

Scope and Sequence 2024 - 2025

Please Note: All standards in the state course description are designed to be learned by the end of the course. This guide represents a recommended timeline and sequence to be used voluntarily by teachers for planning purposes. Specific question regarding when content will be addressed in a specific course are best answered by the individual teacher.

Course Resources

Publisher Resource:

Aleks program via McGraw-Hill resources

In Foundational Skills Mathematics 9-12, instructional time will emphasize:

Semester 1

- (1) Instruction and strategies that will support students as they prepare to take the FSA Algebra 1 EOC retake;
- (2) Extending understanding of functions to linear, quadratic and exponential functions and using them to model and analyze real-world relationships;
- (3) Solving quadratic equations in one variable and systems of linear equations and inequalities in two variables;
- (4) Representing and interpreting categorical and numerical data with one and two variables.

Semester 2

- (1) Proving and applying relationships and theorems involving two-dimensional figures using Euclidean geometry and coordinate geometry;
- (2) Establishing congruence and similarity using criteria from Euclidean geometry and using rigid transformations;
- (3) Extending knowledge of geometric measurement to two-dimensional figures and three-dimensional figures;
- (4) Creating and applying equations of circles in the coordinate plane and;
- (5) Developing an understanding of right triangle trigonometry.



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Quarter 1 (August 12 – October 11)	Quarter 2 (October 15 – December 20)
<p>Curriculum Map 1: Statistics Represent data using various presentations Interpreting data distributions and comparing center and spread Interpreting differences in shape, center and spread of data Represent and interpret categorical and numerical data with one and two variables</p> <p>Curriculum Map 2A: Linear Relationships Solving multi-step equations Multiple representations of linear functions Determining key features of linear functions Write equations of lines.</p>	<p>Curriculum Map 2B: Linear Relationships Write equations and inequalities of linear relationships Solve and graph linear equations Solve and graph linear inequalities</p> <p>Curriculum Map 3: Quadratic Functions Identify, interpret, and compare key features of quadratic functions mathematically and within context. Identify transformations of quadratic functions. Write and graph quadratic functions Calculate and interpret the average rate of change over a specified interval Solve quadratic equations using factoring, completing the square, taking square roots, and quadratic formula. Rewrite equivalent expressions of radicals using rational exponents. Rewrite equivalent expressions/equations of quadratic functions. Solve and interpret the solution of non-linear systems.</p>
Quarter 3 (January 6 – March 13)	Quarter 4 (March 24 – May 30)
<p>Geometry Unit 7: Quadrilaterals Students will extend applications of coordinate geometry to model real-world situations with parallelograms, rectangles, rhombi, squares, trapezoids, and kites.</p> <p>Geometry Unit 8: Similarity Students will explore how similarity in polygons and triangles can be used in problem-solving in real world contexts.</p> <p>Geometry Unit 9: Right Triangles and Trigonometry Students will apply trigonometric ratios in finding missing side and angle measures of right triangles in both mathematical and real-world contexts.</p>	<p>Geometry Unit 10: Circles Students will explore features of circles, including circumference, angles, arcs, chords, tangents, secants, and more. Students will extend their understanding of features of circles in problem-solving situations.</p> <p>Geometry Unit 11 Geometric Measurement Students will determine Area, Surface Area, and Volume of two-dimensional and three-dimensional figures, including quadrilaterals, regular polygons, prisms, pyramids, cylinders, cones, and spheres. Students will use angle relationships to make statements and draw conclusions about the measures of angles. Additionally, students will use coordinate geometry to measure two-dimensional and three-dimensional figures.</p>



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