

Algebra 1 Math Essential Standards

A.SSE.1 Interpret expressions that represent a quantity in terms of its context.
a. Interpret parts of an expression, such as terms, factors, and coefficients, etc.

A.SSE.2 Use the structure of an expression to identify ways to rewrite it. (*Focus on polynomials: multiplication and factoring patterns.*)

A.SSE.3 Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression.
a. Factor a quadratic expression to reveal the zeros of the function it defines.

A.APR.1 Understand that polynomials form a system analogous to the integers. Namely, they are closed under the operations of addition, subtraction, and multiplication; add, subtract, and multiply polynomials.

A.CED.1 Create equations and inequalities in one variable and use them to solve problems.
A.CED.2 Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes.
A.CED.3 Represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret solutions as viable or nonviable options in a modeling context.

A.REI.3 Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters.

A.REI.4 Solve quadratic equations in one variable.
b. Solve quadratic equations by inspection (e.g., for $x^2 = 49$), taking square roots, the quadratic formula and factoring, as appropriate to the initial form of the equation.

A.REI.6 Solve systems of linear equations exactly and approximately (e.g., with graphs), focus on pairs of linear equations in two variables.

A.REI.12 Graph the solutions to a linear inequality in two variables as a half plane (excluding the boundary in the case of a strict inequality), and graph the solution set to a system of linear inequalities in two variables as the intersection of the corresponding half-planes.

F.IF.2 Use function notation, evaluate functions for inputs in their domains.

F.IF.6 Calculate and interpret the average rate of change of a function over a specified interval. Estimate the rate of change from a graph.