# Resource Algebra 1 Semester 2 Final Assessment Blueprint

**Year Created:** 2024-2025 **Method of Delivery:** Online
**Subject:** Math **Administration Window:** May Common Finals

## Resources

Resource Algebra 1 Curriculum Map

## Standards At-A Glance

| Standard | Number of Items | Standard Description |
|---|---|---|
| MA.4.G.A.3 | 1 | Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry. |
| MA.9-12.A1.A-APR.A.1 | 3 | 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. |
| MA.9-12.A1.A-APR.B.3 | 1 | Identify zeros of polynomials when suitable factorizations are available, and use the zeros to construct a rough graph of the function defined by the polynomial. Focus on quadratic and cubic polynomials in which linear and quadratic factors are available. |
| MA.9-12.A1.A-REI.B.4 | 3 | Solve quadratic equations in one variable. |
| MA.9-12.A1.A-SSE.A.2 | 1 | Use structure to identify ways to rewrite numerical and polynomial expressions. Focus on polynomial multiplication and factoring patterns. |
| MA.9-12.A1.A-SSE.B | 1 | Write expressions in equivalent forms to solve problems. |
| MA.9-12.A1.F-IF.B.4 | 1 | For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship. Include problem-solving opportunities utilizing real-world context. Key features include: intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums. Focus on linear, quadratic, exponential and piecewise-defined functions (limited to absolute value and step). |
| MA.9-12.A1.F-LE.A.2 | 1 | Construct linear and exponential functions, including arithmetic and geometric sequences, given a graph, a description of a relationship, or input/output pairs. |
| MA.9-12.A1.F-LE.A.3 | 1 | Observe, using graphs and tables, that a quantity increasing exponentially eventually exceeds a quantity increasing linearly or quadratically. |
| MA.9-12.A1.F-LE.B.5 | 1 | Interpret the parameters in a linear or exponential function with integer exponents utilizing real world context. |
| MA.9-12.A2.A-REI.B.4 | 1 | Solve quadratic equations in one variable. |
| MA.9-12.A2.A-SSE.A.2 | 3 | Use structure to identify ways to rewrite polynomial and rational expressions. Focus on polynomial operations and factoring patterns. |
| MA.9-12.A2.N-RN.A.2 | 1 | Rewrite expressions involving radicals and rational exponents using the properties of exponents. |

**Some items may be tagged to more than one standard.*

## Depth of Knowledge

| DOK | Number of Items |
|---|---|
| Level 1: Recall | 9 |
| Level 2: Skill/Concept | 10 |
| Level 3: Strategic Thinking | 0 |

## Item Types Included

| Type | Number of Items | Description |
|---|---|---|
| MC | 18 | Multiple Choice - Select one answer |
| MP | 1 | Multi-Part - A question with more than one part |