Specification Tables
Subject Area: High School Algebra I

Item Type

Content Strand(s)	MC	SCR	ECR	Total
Expressions & Equations	4	0	0	4
Creating Equations	5	0	0	5
Structure in Expressions	3	0	0	3
Ratios & Proportions	3	2	0	5
Reasoning with Equations & Inequalities	4	1	0	5
Interpreting Functions	3	2	1	6
Real Number System	5	1	1	7
Grand Totals	***27***	***6***	***2***	***35***

*Performance measure contains 35 items/tasks.

Item Points/Weights

Content Strand(s)	MC (1 pt.)	SCR (2pts.)	ECR (4pts.)	Total
Expressions & Equations	4	0	0	4
Creating Equations	5	0	0	5
Structure in Expressions	3	0	0	3
Ratios & Proportions	3	4	0	7
Reasoning with Equations & Inequalities	4	2	0	6
Interpreting Functions	3	4	4	11
Real Number System	5	2	4	11
Grand Totals	***27***	***12***	***8***	***47***

*Performance measure score based upon 47 points.

Technical Note: In designing a "rigorous" performance measure, all items and tasks must be developmentally appropriate. Also, the overall performance measure must have approximately two-thirds of all items rated above Level I/DoK I.

Item Level/DoK

Content Strand(s)	DoK 1	DoK 2	DoK 3	Total
Expressions & Equations	1	2	1	4
Creating Equations	1	2	2	5
Structure in Expressions	2	0	1	3
Ratios & Proportions	0	5	0	5
Reasoning with Equations & Inequalities	3	2	0	5
Interpreting Functions	0	2	4	6
Real Number System	1	4	2	7
Grand Totals	**8**	**17**	**10**	**35**

*Performance measure contains items/tasks with the following Level/DoK distribution:

DoK 1 = 23%
DoK 2 & 3 = 77%

Passage Type

Content Strand(s)	Fiction	Non-Fiction	Poetry	Total

*Performance measure contains no literacy components.

Blueprint
Subject Area: High School Algebra I

Standard/ Content ID	Content Statement	Item Count	DoK 1	DoK 2	DoK 3
8.EE.1	Know and apply the properties of integer exponents to generate equivalent numerical expressions.	2	1	0	1
8.EE.2	Use square root and cube root symbols to represent solutions to equations of the form x2 = p and x3 = p, where p is a positive rational number. Evaluate square roots of small perfect squares and cube roots of small perfect cubes.	2	0	2	0
A-CED.1	Create equations and inequalities in one variable and use them to solve problems.	5	1	2	2
A-SSE.1	Interpret expressions that represent a quantity in terms of its context.	3	2	0	1
7.RP.3	Use proportional relationships to solve multistep ratio and percent problems. Examples: simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, percent error.	5	0	5	0
A.REI.3	Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters.	5	3	2	0
F-IF.1	Understand that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range. If *f* is a function and *x* is an element of its domain, then *f*(*x*) denotes the output of *f* corresponding to the input *x*. The graph of *f* is the graph of the equation *y* = *f*(*x*).	6	0	2	4
N-RN.2	Explain how the definition of the meaning of rational exponents follows from extending the properties of integer exponents to those values, allowing for a notation for radicals in terms of rational exponents.	7	1	4	2