

Accelerated Road Map to Algebra I

Grade 5

Cluster	Standard(s)	Post-Test	Extension Standards	Post-Test
Write and interpret numerical expressions.	NY-5.OA.1	X	NY-6.EE.1	
	NY-5.OA.2	X	NY-6.EE.2a, 2b, 2c	
Analyze patterns and relationships.	NY-5.OA.3	X	NY-6.EE.9	
Understand place value system.	NY-5.NBT.1			
	NY-5.NBT.2			
	NY-5.NBT.3a		NY-4.NF.5, NY-4.NF.6	
	NY-5.NBT.3b		NY-4.NF.7	
	NY-5.NBT.4			
Perform operations with multi-digit whole numbers and with decimals to hundredths.	NY-5.NBT.5 (Fluency)		NY-6.NS.2 (Fluency)	
	NY-5.NBT.6			
	NY-5.NBT.7		NY-6.NS.3 (Fluency)	
Use equivalent fractions as a strategy to add and subtract fractions.	NY-5.NF.1			
	NY-5.NF.2			
Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	NY-5.NF.3		NY-4.MD.2a, 2b	
	NY-5.NF.4a, 4b			
	NY-5.NF.5a, 5b		NY-6.RP.1	
	NY-5.NF.6			
	NY-5.NF.7a, 7b, 7c		NY-6.NS.1	
Convert like measurement units within a given measurement system.	NY-5.MD.1		NY-4.MD.1, NY-6.RP.3d	
Represent and interpret data.	NY-5.MD.2		NY-6.SP.4	
Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.	NY-5.MD.3a, 3b			
	NY-5.MD.4			
	NY-5.MD.5a, 5b, 5c		NY-6.G.2	
Graph points on the coordinate plane to solve real-world and mathematical problems.	NY-5.G.1	X		
	NY-5.G.2	X	NY-6.NS.8	
Classify two-dimensional figures into categories based on their properties.	NY-5.G.3			
	NY-5.G.4			

X = Standards designated for instruction in May-to-June

Domain-Level Test Blueprint—Percent Ranges for Grade 5 Test				
Operations and Algebraic Thinking	Number and Operations in Base Ten	Number and Operations—Fractions	Measurement and Data	Geometry
Post ²	25–35%	34–44%	22–32%	2–7%

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Cluster	Standard(s)	Post Test	Extension Standards	Post Test
<i>Understand ratio concepts and use ratio reasoning to solve problems.</i>	NY-6.RP.2		NY-7.RP.1	
	NY-6.RP.3a		NY-7.RP.2b	
	NY-6.RP.3b			
	NY-6.RP.3c		NY-7.RP.3	
<i>Compute fluently with multi-digit numbers and extend previous understandings of multiplication and division to multi-digit numbers.</i>	NY-6.NS.4			
	NY-6.NS.5			
	NY-6.NS.6a		NY-7.NS.1a	
	NY-6.NS.6b			
	NY-6.NS.6c		NY-7.NS. 1b, 1c, 1d	
	NY-6.NS.7a, 7b, 7c,			
<i>Apply and extend previous understandings of arithmetic to algebraic expressions.</i>				
	NY-6.EE.2		NY-5.OA.1, NY-5.OA.2	
	NY-6.EE.3		NY-7.EE.1	
<i>Reason about and solve one-variable equations and inequalities.</i>	NY-6.EE.4		NY-7.EE.2	
	NY-6.EE.5			
	NY-6.EE.6			
	NY-6.EE.7		NY-7.EE.4a	
	NY-6.EE.8		NY-7.EE.4b	
<i>Solve real-world and mathematical problems involving area, surface area, and volume.</i>	NY-6.G.1		NY-7.G.6	X
	NY-6.G.3		NY-5.G.3, NY-5.G.2	
	NY-6.G.4			
	NY-6.G.5			
<i>Develop understanding of statistical variability.</i>	NY-6.SP.1a,1b	X		
	NY-6.SP.1c	X	NY-7.SP.4	
	NY-6.SP.2	X	NY-7.SP.3	
	NY-6.SP.3	X	NY-7.SP.4	
<i>Summarize and describe distributions.</i>	NY-6.SP.4	X	NY-7.SP.1	
	NY-6.SP.5a, 5b, 5d	X		
	NY-6.SP. 5c	X	NY-7.SP.1	
<i>Investigate chance processes and develop, use, and evaluate probability models.</i>	NY-6.SP.6	X		
	NY-6.SP.7	X		
	NY-6.SP.8a, 8b	X	NY-7.SP.8	

Domain-Level Test Blueprint—Percent Ranges for Grade 6 Test				
Ratios and Proportional Relationships	The Number System	Expressions, Equations, and Inequalities	Geometry	Statistics and Probability
21–30%	17–26%	25–43%	14–24%	Post ²

Accelerated Road Map to Algebra I

Grade 7

Cluster	Standard(s)	Post -Test Standard	Extension Standards	Post-Test Standard
<i>Analyze proportional relationships and use them to solve real-world and mathematical problems.</i>	NY-7.RP.2a		NY-8.F.2	
	NY-7.RP.2c		NY-8.EE.5	
	NY-7.RP.2d		NY-8.F.5	
	NY-7.RP.3			
<i>Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.</i>	NY-7.NS.2a, 2b, 2c, 2d		NY-8.NS.1	
	NY-7.NS.3			
			NY-8.NS.2	
<i>Solve real-life and mathematical problems using numerical and algebraic expressions, equations, and inequalities.</i>	NY-7.EE.3			
	NY-7.EE.4a (Fluency)		NY-8.EE.7a, 7b NY-8.F.4	X
	NY-7.EE.4b			
			NY-8.EE.1	
			NY-8.EE.3	X
<i>Draw, construct, and describe geometrical figures and describe the relationships between them.</i>	NY-7.G.1			
	NY-7.G.2	X		
	NY-7.G.3	X		
<i>Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.</i>	NY-7.G.4	X	NY-8.G.9	
	NY-7.G.5	X	NY-8.G.5	
	NY-7.G.6	X	NY-8.G.6	
	NY-8.G.1a, 1b, 1c			
	NY-8.G.2			
	NY-8.G.3			
	NY-8.G.4			
	NY-8.G.7			
	NY-8.G.8			

Domain-Level Test Blueprint—Percent Ranges for Grade 7 Test				
Ratios and Proportional Relationships	The Number System	Expressions, Equations, and Inequalities	Geometry	Statistics and Probability
24–33%	16–25%	26–39%	2–7%	12–21%

X = Standards designated for instruction in May-to-June

Accelerated Road Map to Algebra I

Algebra I

Conceptual Category	Domain	Cluster	Standard	Grade 8 Standard
Number & Quantity 4% - 10%	The Real Number System	Use properties of rational and irrational numbers.	N-RN.3(a,b)	
	Quantities	Reason quantitatively and use units to solve problems.	N-Q.1	
N-Q.3			NY-8.EE.4	
Algebra 48% - 61%	Seeing Structure in Expressions	Interpret the structure of expressions.	A-SSE.1(a,b)	
			A-SSE.2	
	Arithmetic with Polynomials and Rational Expressions	Write expressions in equivalent forms to reveal their characteristics.	A-SSE.3(c)	
	Creating Equations	Perform arithmetic operations on polynomials.	A-APR.1	
	Arithmetic with Polynomials and Rational Expressions	Understand the relationship between zeros and factors of polynomials.	A-APR.3	
	Creating Equations	Create equations that describe numbers or relationships.	A-CED.1	
			A-CED.2	
			A-CED.3	
			A-CED.4	
	Reasoning with Equations and Inequalities	Understand solving equations as a process of reasoning and explain the reasoning.	A-REI.1a	
			A-REI.3	
		Solve equations and inequalities in one variable.	A-REI.4(a,b)	NY-8.EE.2
Solve systems of equations.		A-REI.6a	NY-8.EE.8a,	
		A-REI.7a	NY-8.EE.8b	
Represent and solve equations and inequalities graphically.	A-REI.10	NY-8.EE.6		
	A-REI.11			
A-REI.12				
Functions 24% - 32%	Interpreting Functions	Understand the concept of a function and use function notation.	F-IF.1	NY-8.F.1
			F-IF.2	
			F-IF.3	
		Interpret functions that arise in applications in terms of the context.	F-IF.4	
			F-IF.5	
			F-IF.6	
	Analyze functions using different representations.	F-IF.7(a,b)		
		F-IF.8(a)		
		F-IF.9		
	Building Functions	Build a function that models a relationship between two quantities.	F-BF.1a	
			F-BF.3a	
	Linear, Quadratic and Exponential Models	Construct and compare linear, quadratic, and exponential models and solve problems.	F-LE.1 (a,b,c)	NY-8.F.3
F-LE.2				
F-LE.3				
Interpret expressions for functions in terms of the situation they model.		F-LE.5		
Statistics & Probability 7% - 15%	Interpreting Categorical and Quantitative Data	Summarize, represent, and interpret data on a single count or measurement variable.	S-ID.1	
			S-ID.2	
			S-ID.3	
		Summarize, represent, and interpret data on two categorical and quantitative variables.	S-ID.5	
			S-ID.6(a)	NY-8.SP.1
		Interpret linear models.	S-ID.7	NY-8.SP.3
S-ID.8	NY-8.SP.2			
S-ID.9	NY-8.SP.1			

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