

Math Grade 3

Summative Blueprint

Arkansas Math Standards

# - Operational Items		Estimated Average Test Time			
Total - 35		60 to 70 minutes			
Reporting Category	Components	Standards	Minimum # of Items	Maximum # of Items	Approximate % of Test
Number & Place Value	Place Value Comparison Fraction Foundations Equivalent Fractions	3.NPV.1	12	14	38%
		3.NPV.2			
		3.NPV.3			
		3.NPV.4			
		3.NPV.5			
		3.NPV.6			
		3.NPV.7			
		3.NPV.8			
		3.NPV.9			
		3.NPV.10			
		3.NPV.11			
Computation & Algebraic Reasoning	Operations & Properties Problem Solving Algebraic Concepts	3.CAR.1	11	13	31%
		3.CAR.2			
		3.CAR.3			
		3.CAR.4			
		3.CAR.5			
		3.CAR.6			
		3.CAR.7			
		3.CAR.8			
		3.CAR.9			
Geometry & Measurement Data Analysis	Shapes Length & Width Area & Volume Time Charts, Graphs, & Tables	3.GM.1	10	12	31%
		3.GM.2			
		3.GM.3			
		3.GM.4			
		3.GM.5			
		3.GM.6			
		3.GM.7			
		3.GM.8			
		3.GM.9			
		3.GM.10			
		3.GM.11			
		3.DA.1			
		3.DA.2			
		Depth of Knowledge			
DOK 1			6	9	17% - 26%
DOK 2			18	22	51% - 63%
DOK 3			6	9	17% - 26%

Standards in **bold**: Key Concepts indicate *possible* emphasis on number of items, though all standards may be assessed.

Math Grade 4

Summative Blueprint

Arkansas Math Standards

# - Operational Items		Estimated Average Test Time			
Total - 35		60 to 70 minutes			
Reporting Category	Components	Standards	Minimum # of Items	Maximum # of Items	Approximate % of Test
Number & Place Value	Place Value Comparison Fraction Foundations Equivalent Fractions	4.NPV.1	11	13	31%
		4.NPV.2			
		4.NPV.3			
		4.NPV.4			
		4.NPV.5			
		4.NPV.6			
		4.NPV.7			
		4.NPV.8			
		4.NPV.9			
		4.NPV.10			
Computation & Algebraic Reasoning	Operations & Properties Problem Solving Algebraic Concepts	4.CAR.1	12	14	38%
		4.CAR.2			
		4.CAR.3			
		4.CAR.4			
		4.CAR.5			
		4.CAR.6			
		4.CAR.7			
		4.CAR.8			
		4.CAR.9			
		4.CAR.10			
4.CAR.11					
Geometry & Measurement Data Analysis	Shapes Perimeter, Area, & Volume Time & Conversions Charts, Graphs, & Tables	4.GM.1	10	12	31%
		4.GM.2			
		4.GM.3			
		4.GM.4			
		4.GM.5			
		4.GM.6			
		4.GM.7			
		4.GM.8			
		4.GM.9			
		4GM.10			
4.GM.11					
4.DA.1					
4.DA.2					
Depth of Knowledge			Min	Max	%
DOK 1			6	9	17% - 26%
DOK 2			18	22	51% - 63%
DOK 3			6	9	17% - 26%

Standards in **bold**: Key Concepts indicate *possible* emphasis on number of items, though all standards may be assessed.

Math Grade 5

Summative Blueprint

Arkansas Math Standards

# - Operational Items		Estimated Average Test Time			
Total - 35		60 to 70 minutes			
Reporting Category	Components	Standards	Minimum # of Items	Maximum # of Items	Approximate % of Test
Number & Place Value	Place Value Comparison Fraction Foundations	5.NPV.1 5.NPV.2 5.NPV.3 5.NPV.4 5.NPV.5 5.NPV.6	10	12	31%
Computation & Algebraic Reasoning	Operations & Properties Problem Solving Algebraic Concepts	5.CAR.1 5.CAR.2 5.CAR.3 5.CAR.4 5.CAR.5 5.CAR.6 5.CAR.7 5.CAR.8 5.CAR.9 5.CAR.10 5.CAR.11 5.CAR.12 5.CAR.13 5.CAR.14	12	14	38%
Geometry & Measurement Data Analysis	Shapes Perimeter, Area, & Volume Conversions Coordinate Plane System Charts, Graphs, & Tables	5.GM.1 5.GM.2 5.GM.3 5.GM.4 5.GM.5 5.GM.6 5.GM.7 5.GM.8 5.DA.1 5.DA.2	10	12	31%
Depth of Knowledge			Min	Max	%
DOK 1			6	9	17% - 26%
DOK 2			18	22	51% - 63%
DOK 3			6	9	17% - 26%

Standards in **bold**: Key Concepts indicate *possible* emphasis on number of items, though all standards may be assessed.

Math Grade 6

Summative Blueprint

Arkansas Math Standards

# - Operational Items		Estimated Average Test Time			
Total - 35		60 to 70 minutes			
Reporting Category	Components	Standards	Minimum # of Items	Maximum # of Items	Approximate % of Test
Number Concepts & Computations (non-calculator)	Rational Numbers Rational Number Operations Common Factors & Multiples	6.NCC.1	12	14	36%
		6.NCC.2			
		6.NCC.3			
		6.NCC.4			
		6.NCC.5			
		6.NCC.6			
		6.NCC.7			
		6.NCC.8			
		6.NCC.9			
		6.NCC.10			
		6.NCC.11			
		6.NCC.12			
		6.NCC.13			
Proportional Relationships Algebra (non-calculator)	Ratio & Rates Expressions Equalities & Inequalities	6.PR.1	13	15	38%
		6.PR.2			
		6.PR.3			
		6.PR.4			
		6.PR.5			
		6.ALG.1			
		6.ALG.2			
		6.ALG.3			
Geometry & Measurement Statistics & Probability (calculator)	Area, Volume & Surface Area Coordinate Plane System Conversions Statistical/Non Statistical Measures of Center Measures of Variation Numerical Data	6.GM.1	10	10	26%
		6.GM.2			
		6.GM.3			
		6.GM.4			
		6.GM.5			
		6.GM.6			
		6.GM.7			
		6.SP.1			
		6.SP.2			
		6.SP.3			
Depth of Knowledge			Min	Max	%
DOK 1			5	17	17% - 25%
DOK 2			14	17	50% - 61%
DOK 3			5	7	17% - 25%

Standards in **bold**: Key Concepts indicate *possible* emphasis on number of items, though all standards may be assessed.

Math Grade 7

Summative Blueprint

Arkansas Math Standards

# - Operational Items		Estimated Average Test Time				
Total - 35		60 to 70 minutes				
Reporting Category	Components	Standards	Minimum # of Items	Maximum # of Items	Approximate % of Test	
Number Concepts & Computations	Rational Numbers Rational Number Operations	7.NCC.1	10	12	32%	
		7.NCC.2				
		7.NCC.3				
		7.NCC.4				
		7.NCC.5				
		7.NCC.6				
		7.NCC.7				
		7.NCC.8				
		7.NCC.9				
Proportional Relationships Algebra	Ratio & Rates	7.PR.1	12	14	36%	
	Constant of Proportionality	7.PR.2				7.ALG.1
	Expressions	7.PR.3				7.ALG.2
	Equations & Inequalities	7.PR.4				7.ALG.3
	Relationships b/t Quantities	7.PR.5				7.ALG.4
		7.PR.6				7.ALG.5
		7.PR.7				
Geometry & Measurement Statistics & Probability	Area, Volume & Surface Area	7.SP.1	10	12	32%	
		7.SP.2				
	Cross Sections	7.GM.1				7.SP.3
	Triangles & Angles	7.GM.2				7.SP.4
	Scale	7.GM.3				7.SP.5
		7.GM.4				7.SP.6
		7.GM.5				7.SP.7
		7.GM.6				7.SP.8
						7.SP.9
						7.SP.10
Depth of Knowledge			Min	Max	%	
DOK 1			6	9	17% - 25%	
DOK 2			18	22	50% - 61%	
DOK 3			6	9	17% - 25%	

Standards in **bold**: Key Concepts indicate *possible* emphasis on number of items, though all standards may be assessed.

Math Grade 8

Summative Blueprint

Arkansas Math Standards

# - Operational Items		Estimated Average Test Time			
Total - 35		60 to 70 minutes			
Reporting Category	Components	Standards	Minimum # of Items	Maximum # of Items	Approximate % of Test
Number Concepts & Computations Algebra	Rational & Irrational Numbers	8.NCC.1 8.NCC.2	10	12	32%
	Rational Number Operations	8.NCC.3 8.NCC.4 8.NCC.5			
	Equations & Inequalities	8.NCC.6 8.NCC.7 8.NCC.8			
	Systems of Equations	8.ALG.1 8.ALG.2 8.ALG.3			
Functions	Proportional & Linear Relationships	8.FN.1 8.FN.2 8.FN.3 8.FN.4 8.FN.5 8.FN.6 8.FN.7 8.FN.8 8.FN.9	10	12	32%
	Functions				
Geometry & Measurement Statistics & Probability	Area, Volume, & Surface Area Cross Sections	8.GM.1 8.GM.2 8.GM.3	12	14	36%
	Pythagorean Theorem	8.GM.4 8.GM.5 8.GM.6 8.GM.7 8.GM.8 8.GM.9 8.GM.10 8.GM.11			
	Transformations & Congruence on a Coordinate Plane	8.SP.1 8.SP.2 8.SP.3 8.SP.4 8.SP.5 8.SP.6			
	Bivariate Data Probability				
Depth of Knowledge			Min	Max	%
DOK 1			6	9	17% - 25%
DOK 2			18	22	50% - 61%
DOK 3			6	9	17% - 25%

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Algebra I

Summative Blueprint

Arkansas Math Standards

# - Operational Items		Estimated Average Test Time			
Total - 47		75 to 85 minutes			
Reporting Category	Components	Standards	Minimum # of Items	Maximum # of Items	Approximate % of Test
Expressions, Functions & Statistics and Probability	Polynomials, Roots & Exponent Laws	A1.EX.1	11	13	25%
	Domain & Range	A1.EX.2			
	Function Notation	A1.EX.3			
	Construct & Compare	A1.EX.4			
	Numerical Data	A1.FN.1			
Linear Functions, Equations, & Inequalities	Interpret Key Features	A1.LFE.1	14	16	31%
	Systems of Equations & Inequalities	A1.LFE.2			
	Graphing & Transformations	A1.LFE.3			
	Statistical Relationships	A1.LFE.4			
		A1.LFE.5			
Quadratic Functions & Equations	Create & Solve	A1.QFE.1	10	12	23%
	Interpret Key Features	A1.QFE.2			
	Graphing & Transformations	A1.QFE.3			
	Statistical Relationships	A1.QFE.4			
		A1.QFE.5			
Exponential Functions & Equations	Create & Solve	A1.EFE.1	10	11	21%
	Interpret Key Features	A1.EFE.2			
	Graphing	A1.EFE.3			
	Statistical Relationships	A1.EFE.4			
		A1.EFE.5			
Depth of Knowledge			Min	Max	%
DOK 1			8	12	17% - 25%
DOK 2			24	29	50% - 61%
DOK 3			8	12	17% - 25%

Standards in **bold**: Key Concepts indicate *possible* emphasis on number of items, though all standards may be assessed.

Geometry

Summative Blueprint

Arkansas Math Standards

# - Operational Items		Estimated Average Test Time			
Total - 46		75 to 85 minutes			
Reporting Category	Components	Standards	Minimum # of Items	Maximum # of Items	Approximate % of Test
Right Triangles Lines & Angles	Special Right Triangles & Pythagorean Theorem	G.RT.1 G.LA.1	12	14	26%
	Trigonometry Ratios	G.RT.2 G.LA.2			
	Define & Construct	G.RT.3 G.LA.3			
	Coordinate Geometry	G.RT.4 G.LA.4			
	Parallel & Perpendicular Lines	G.RT.5 G.LA.5			
Geometric Figures	Three-Dimensional	G.GF.1 G.GF.7	12	14	26%
	Two-Dimensional	G.GF.2 G.GF.8			
	Geometric Probability	G.GF.3 G.GF.9			
		G.GF.4 G.GF.10			
		G.GF.5 G.GF.11			
Circles	Circle Relationships	G.CIR.1	10	12	24%
	Equation of a Circle	G.CIR.2			
		G.CIR.3			
		G.CIR.4			
		G.CIR.5 G.CIR.6			
Transformations Similarities & Congruence	Coordinate Plane	G.TRF.1 G.SC.1	10	12	24%
	Plane	G.TRF.2 G.SC.2			
	Similarity	G.TRF.3 G.SC.3			
	Triangle Congruence	G.TRF.4 G.SC.4			
		G.TRF.5 G.SC.5			
Depth of Knowledge			Min	Max	%
DOK 1			8	12	17% - 25%
DOK 2			23	28	50% - 61%
DOK 3			8	12	17% - 25%

Standards in **bold**: Key Concepts indicate *possible* emphasis on number of items, though all standards may be assessed.