

AHSAA Homeschool Student Eligibility Exams Algebraic Connections		
Standard Reference	Standard Text	Percentage of Test Items
A	Algebra	20%
A-MOD	Modeling	
A-MOD.1	Create algebraic models for application-based problems by developing and solving equations and inequalities, including those involving direct, inverse, and joint variation.	
A-MOD.2	Solve application-based problems by developing and solving systems of linear equations and inequalities.	
A-MOD.3	Use formulas or equations of functions to calculate outcomes of exponential growth or decay.	
	Graphing and Finance	45%
A-GRA	Graphing	
A-GRA.4	Determine maximum and minimum values of a function using linear programming procedures.	
A-GRA.5	Determine approximate rates of change of nonlinear relationships from graphical and numerical data.	
A-GRA.5.a	Create graphical representations from tables, equations, or classroom-generated data to model consumer costs and to predict future outcomes.	
A-GRA.6	Use the extreme value of a given quadratic function to solve applied problems.	
A-FIN	Finance	
A-FIN.7	Use analytical, numerical, and graphical methods to make financial and economic decisions, including those involving banking and investments, insurance, personal budgets, credit purchases, recreation, and deceptive and fraudulent pricing and advertising.	
A-FIN.7.a	Create, manually or with technological tools, graphs and tables related to personal finance and economics.	
G	Geometry	20%
G-MOD	Modeling	
G-MOD.8	Determine missing information in an application-based situation using properties of right triangles, including trigonometric ratios and the Pythagorean Theorem.	
G-SYM	Symmetry	
G-SYM.9	Analyze aesthetics of physical models for line symmetry, rotational symmetry, or the golden ratio.	
G-MEA	Measurement	
G-MEA.10	Critique measurements in terms of precision, accuracy, and approximate error.	
G-MEA.11	Use ratios of perimeters, areas, and volumes of similar figures to solve applied problems.	

Standard Reference	Standard Text	Percentage of Test Items
S	Statistics and Probability	15%
S-GRA	Graphing	
S-GRA.12	Create a model of a set of data by estimating the equation of a curve of best fit from tables of values or scatter plots.	
S-GRA.12.a	Predict probabilities given a frequency distribution.	