

AAD–Algebra I

Course Code(s):	TBD
Prerequisite(s):	None
Credit:	1
Grade Level:	9-12
Graduation Requirements:	This course satisfies one of four mathematics credit requirements for the alternate academic diploma
Programs of Study and Sequence:	This is the first course in mathematics program of study.
Teacher Endorsement(s):	TBD

Course Requirements

Conceptual Category: Number and Quantity (N)*		
Domain: Quantities (Q)		
Cluster	Standard Code	Standard
A. Units and quantitative reasoning	AAD.A1.N.Q.A.1	Identify and interpret appropriate quantity represented by a symbol/picture or number
	AAD.A1.N.Q.A.2	Recognize and use units to understand problems and guide the solution of the problem including units in formulas, graphs, and data displays.
	AAD.A1.N.Q.A.3	Solve problems involving units of measurement. H.ME.1a2
	AAD.A1.N.Q.A.4	Simplify expressions that include exponents H.NO.1a1
Conceptual Category: Algebra (A)		
Domain: Seeing Structure in Expressions (SEE)		
Cluster	Standard Code	Standard

A. Interpret expressions	AAD.A1.A.SEE.A.1*	Interpret accurately compute using the symbols of operation (+, -, x, ÷) and equation (=).
	AAD.A1.A.SEE.A.2	Interpret the parts of an expression including terms and variables (coefficients).
B. Write equivalent expressions	AAD.A1.A.SEE.B.1	Write a linear expression for a graphic representation. (i.e. "3 x 4 =" to represent a drawing of three bags with four pencils in each in a word problem requesting a total).
Conceptual Category: Algebra (A)		
Domain: Arithmetic with Polynomials and Rational Expressions (APR)		
Cluster	Standard Code	Standard
A. Perform arithmetic operations on polynomials	AAD.A1.A.APR.A.1	Solve an equation that includes one or two variables. H.PRF.2b2
Conceptual Category: Algebra (A)		
Domain: Creating Equations* (CED)		
Cluster	Standard Code	Standard
A. Create equations to describe numbers, relationships, or represent a graphic/picture	AAD.A1.A.CED.A.1	Write a linear equation for a real world or narrative problem. H.PRF.2b1
	AAD.A1.A.CED.A.2	Create equations to represent the relationship between two quantities.
	AAD.A1.A.CED.A.3	Create an equation from a graphic, data display, or picture representation.
Conceptual Category: Algebra (A)		
Domain: Reasoning with Equations and Inequalities (REI)		
Cluster	Standard Code	Standard
A. Understand that solving equations is a	AAD.A1.A.REI.A.1	Solve a multi-step equation or problem using calculation, picture or graphic representations,

process of reasoning		reference charts, or mathematical tools and check the answer to reasonableness.
B. Solve equations to determine equality or inequality	AAD. A1.A.REI.B.1	Compare two quantities or equations for equality and inequality (>, =, <).
C. Solve equations	AAD.A1.A.REI.C.1	Solve equations written in various formats (horizontal, vertical, narrative).
D. Represent and solve equations graphically	AAD.A1.A.REI.D.1	Identify a graphic representation of a linear model of a real world problem. H.PRF.1c1

Conceptual Category: Functions (F)

Domain: Interpreting Functions (IF)

Cluster	Standard Code	Standard
A. Understand patterns of computation	AAD.A1.F.IF.A.1	Understand the relationship of addition to multiplication and subtraction to division (repeated addition is multiplication, repeated subtraction is division)
	AAD.A1.F.IF.A.2	Understand and recognize the calculations for skip counting (ex. Counting by 5 means each number is 5 more than the last).
B. Interpret and predict based on a pattern demonstrated in context.	AAD.A1.F.IF.B.1	Determine or predict a missing quantity from a representation of a mathematical pattern.
	AAD.A1.F.IF.B.2	Determine or predict based on a graphic model of a pattern. (ex. Temperature weather chart, running total of projects assembled). H.PRF.2c1
C. Analyze equations	AAD.A1.F.IF.C.1	Write an equivalent or simplified equation (ex. $5 \times 3 = 15$ is the simplified equivalent of $3 + 3 + 3 + 3 + 3 = 15$)

Conceptual Category: Functions (F)

Domain: Building Functions (BF)

Cluster	Standard Code	Standard
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A. Build an equations that represents the relationship between two quantities	AAD.A1.F.BF.A.1	*Write an equation that shows the relationship between two quantities (ex. $40 > 14$; $37 = 37$; $20 + 5 = 25$)
Conceptual Category: Functions (F)		
Domain: Linear, Quadratic, and Exponential Models* (LE)		
Cluster	Standard Code	Standard
A. Construct and solve linear equations to solve problems	AAD.A1.F.LE.A.1	Create and solve a linear equation for a real world problem.
	AAD.A1.F.LE.A.2	Create and solve a linear equation using a graph, geometric representation, or table.
B. Solve a linear equation for a missing attribute	AAD.A1.F.LE.B.1	Solve a linear equation to find a missing attribute when given the area, volume, or surface area. H.ME.1b2
Conceptual Category: Statistics and Probability (S)		
Domain: Interpreting Categorical and Quantitative Data (ID)		
Cluster	Standard Code	Standard
A. Summarize and interpret data	AAD.A1.S.ID.A.1	Use a graph, data chart, table, histogram, of other data display to draw conclusions or identify trends (i.e. most, least, popular, not as popular)
B. Develop and interpret data displays	AAD.A1.S.ID.B.1	Create and/or complete a graph from data sets, histograms, or box plots. H.DPS.1b1

Standards Numbering Notes

The numbering is not exactly parallel to the state standards but is designed to create some consistency across disciplines for the special education teachers who may be teaching multiple subjects.

The following system was used to number the mathematics standards:

AAD.A1.A.SSE.A.1

Alternate academic diploma (**AAD**) standards

Algebra I (**A1**) is the course

Algebra (**A**) is the conceptual category

Seeing Structure in Expressions (**SSE**) is the domain.

A is the first cluster (ordered A, B, C etc. for first, second, third cluster within the domain, etc.)

1 is the standard number in the cluster (standards numbered consecutively within each cluster)

Domains indicated with a * are the major work of the grade

For standards that align to the MSAA Core Content Connectors (CCC), the code for that connector will appear after the standard and either begins with an "H" indicating high school level.