

# AAD–Applied Mathematical Concepts

<b>Course Code(s):</b>	TBD
<b>Prerequisite(s):</b>	Algebra I, II and Geometry I
<b>Credit:</b>	1
<b>Grade Level:</b>	9-12
<b>Graduation Requirements:</b>	This course satisfies one of four mathematics credit requirements for the alternate academic diploma
<b>Programs of Study and Sequence:</b>	This is typically the fourth course in a mathematics program of study.
<b>Teacher Endorsement(s):</b>	TBD

## Course Requirements

Applied mathematical concepts should be the final math course for a student and is intended to strengthen and further apply the conceptual understanding of the student in applying mathematics to real world situations. While all instruction should be grounded in real experiences this is critical during the final year of formal mathematic instruction.

Designed for students assessed on the alternate, this course also combines the transition, life skills, and daily living skills that have been woven throughout the student’s educational experiences.

Conceptual Category: Number and Quantity (N)		
Domain: Financial Mathematics (NQ)		
Cluster	Standard Code	Standard
A. Use mathematics to solve financial problems	AAD.AM.N.NQ.A.1	Use mathematics to solve real world financial problems including balancing and account, planning a budget, making change, totaling mixed coins, etc.
B. Use mathematics to make financial decisions.	AAD.AM.N.NQ.B.1	Use mathematics to make real world financial decision including determining if a purchase is affordable, estimate tax, estimate paycheck, etc.

Conceptual Category: Algebra (A)		
Domain: Linear Programming (LP)		
Cluster	Standard Code	Standard
A. Use linear equations to solve real world problems.	AAD.AM.A.LP.A.1	Use equations to solve real world problems including workplace situations (i.e. calculating inventory, determining transportation time)
Conceptual Category: Algebra (A)		
Domain: Logic and Boolean Algebra (LB)		
Cluster	Standard Code	Standard
A. Use logic to solve real world problems	AAD.AM.A.LB.A.1	Use logic and problem solving strategies to solve real world and workplace problems. (i.e. estimating the number of items that can fit on a shelf, determining the appropriately sized box for an item)
Conceptual Category: Algebra (A)		
Domain: Problem Solving (PS)		
Cluster	Standard Code	Standard
A. Apply problem solving strategies to real world problems	AAD.AM.A.PS.A.1	Apply effective problem solving strategies to real world and workplace problems.
Conceptual Category: Geometry and Measurement (G)		
Domain: Investigate Logic (L)		
Cluster	Standard Code	Standard
A. Use logic to justify and solve real world problems	AAD.AM.G.L.A.1	Use logic to justify and solve real world and workplace problems.

B. Use logic to determine validity	AAD.AM.G.L.B.1	Use logic to determine the validity of an answer, decision, or opposing option/opinion.
Conceptual Category: Data Analysis, Statistics, and Probability (D)		
Domain: Organize and Interpret Data (ID)		
Cluster	Standard Code	Standard
A. Analyze data for information	AAD.AM.D.ID.A.1	Use data to gather information and make a decision or judgement. (i.e. use a weather chart to determine what to wear)
Conceptual Category: Data Analysis, Statistics, and Probability (D)		
Domain: Counting and Combinatorial Reasoning (CR)		
Cluster	Standard Code	Standard
A. Apply probability and counting to real world problems	AAD.AM.D.ID.A.1	Apply probability and counting to real world and workplace problems.
Conceptual Category: Data Analysis, Statistics, and Probability (D)		
Domain: Normal Probability Distribution (ND)		
Cluster	Standard Code	Standard
A. Calculate and use the mean to make decisions	AAD.AM.D.CR.A.1	Calculate and/or use the mean to make decisions or plan for real world and workplace situations (average paycheck for budgeting, average amount of milk purchased to determine inventory needs).
Conceptual Category: Data Analysis, Statistics, and Probability (D)		
Domain: Understand and Use Confidence Intervals (CI)		
Cluster	Standard Code	Standard
A. Evaluate confidence in	AAD.AM.D.CI.A.1	Apply knowledge of mathematical concepts to determine confidence in calculation results (estimate reasonableness of an answer).

mathematical calculation		
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## 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.