



Mathematics Standards

State Board of Education Update

April 2, 2015



Consistent Process

- **Utilize Nebraska Educators**
 - K-16 Expertise
 - Large Writing Group
 - Smaller Editing Committee
- **Call Upon Postsecondary Institutions to Provide Input and Certify as College and Career Ready**
- **Review and Incorporate Ideas from Nationally Recognized Resources and Best Practices Research**
- **Employer engagement**
- **Maintain On-going Communication with State Board and Board Subcommittee**
- **Encourage Public Input**

Standards → Curriculum → Instruction

K-12 Comprehensive Content Statements

Determined by State Board
Required for all

Grade Level Expectations

Determined by State Board

Specific Guidance - NeSA Items Intersect
Required for all

Curricular Indicators

Local Curriculum

**Determined by Local School Districts/
Classroom Teachers**

Lesson Plans

Classroom Instructional Strategies

Specific Strategies for Individual Students



State Board Charge

- **Work with the existing Nebraska standards to ensure they are College Ready**
- **Simply adopting the Common Core is not an option**
- **Necessary for ESEA Flexibility Waiver**
- **Ensures Nebraska Students have the same opportunity to learn**



Tiers of Specificity

Each Standard has 3 levels of Specificity

K-12 Comprehensive Statement

Identify broad, general statements that are not grade level specific and cover big ideas in mathematics.

Grade Level Expectations

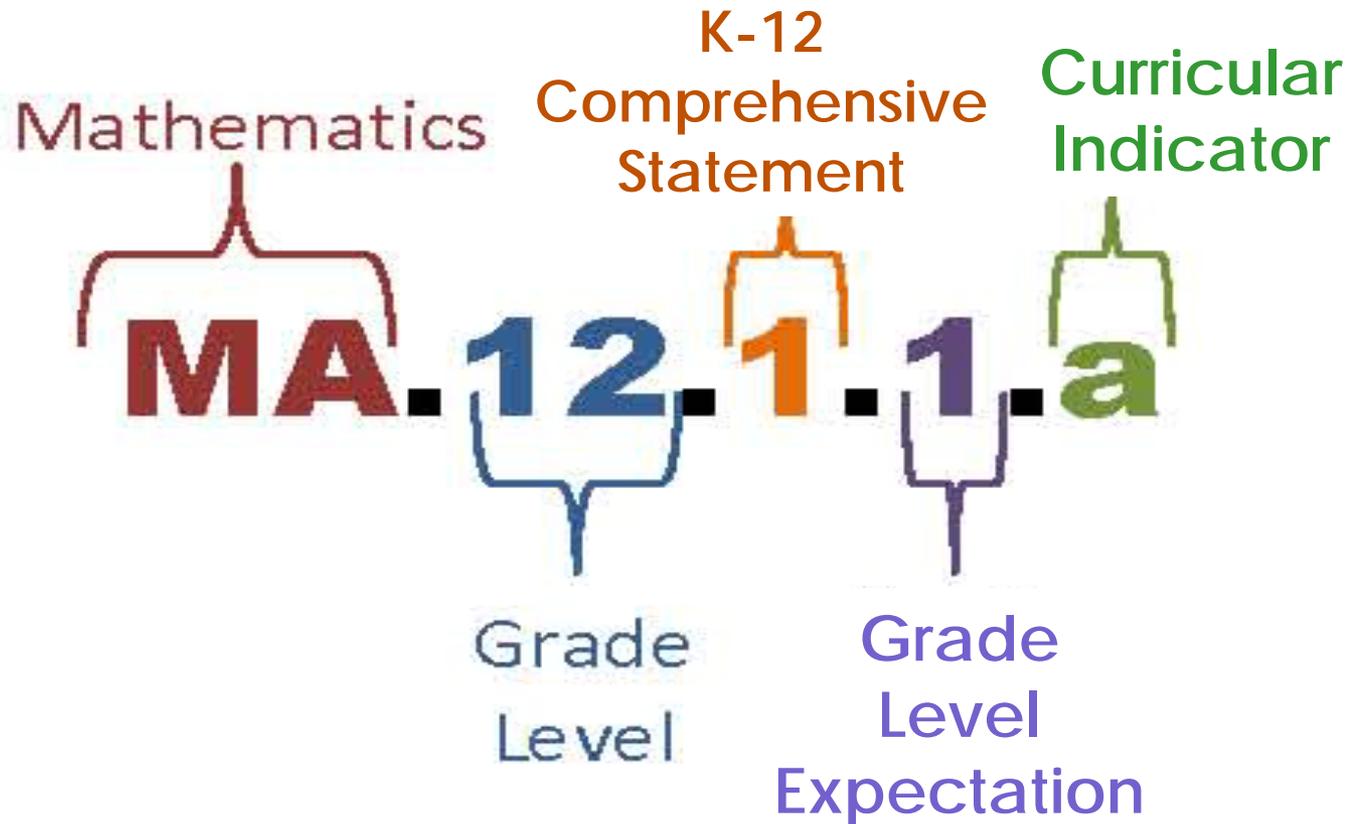
Statements that identify what students should know and be able to do by the end of each identified grade/band. These are organized by concepts.

Curricular Indicators

Specific information to distinguish expectations between grade levels. They are considered an integral part of the standard and must be taught.



Standards Numbering System





K – 12 Comprehensive Statements

NUMBER: Students will communicate number concepts using multiple representations to reason, solve problems, and make connections within mathematics and across disciplines.

Numeric Relationships
Operations

ALGEBRA: Students will communicate algebraic concepts using multiple representations to reason, solve problems, and make connections within mathematics and across disciplines.

Algebraic Relationships
Algebraic Processes
Applications

GEOMETRY: Students will communicate geometric concepts and measurement concepts using multiple representations to reason, solve problems, and make connections within mathematics and across disciplines.

Characteristics
Analytic Geometry
Measurement

DATA: Students will communicate data analysis/probability concepts using multiple representations to reason, solve problems, and make connections within mathematics and across disciplines.

Representations
Analysis & Applications
Probability



Mathematical Processes

Solves mathematical problems.

Models and represents mathematical problems.

Communicates mathematical ideas effectively.

Makes mathematical connections.



Highlights of the Draft

- The four strands remained the same
- Changed grade band in high school to 9-11
- Identified grade 12 “Advanced Topics”
- Streamlined standards by removing duplication from grade to grade
- Concentrated on level of mastery
- Identified mathematical processes to enhance proficiency across all standards



Proposed Timeline

- **April 3 - Draft Released and Posted on the Website**
- **April 13 - Electronic Survey Released**
- **May 29 - Electronic Survey Closed**
- **July - State Board Standards Subcommittee**
- **July-August – Public Input Meeting**
- **August - Postsecondary Reps Verify as College- and Career- Ready**
- **September - State Board Receives the final draft**



Public Input Opportunities

Electronic Survey:

<http://www.education.ne.gov/standardssurvey/>

Monthly State Board Testimony:

301 Centennial Mall South

Public Input Meeting:

Date to be Determined



Public Input Opportunities

E-mail:

nde.standardsinput@nebraska.gov

Written Correspondence:

Standards Input

Nebraska Department of Education

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