

# Wisconsin Standards for Mathematics

*From Model Academic Standards (1998) to Common Core State Standards*

1

## World Class Standards

Learning mathematics with understanding is a focus of the Common Core State Standards. Many of the Common Core State Standards begin with the verb "understand." Students understand a mathematical concept if they can use mathematical reasoning along with a variety of representations, explain the concept to someone else, and apply the concept to another situation. The old Wisconsin standards have less emphasis on these higher order skills.

2

## Clearer Standards

Common Core State Standards are clearer than the Wisconsin Model Academic Standards (1998) and provide a specific staircase of skills that build upon one another. Wisconsin Model Academic Standards (1998) were written only for fourth, eighth and twelfth grades. This made it difficult to know what students should master at specific grade levels. For example, the old Wisconsin standards stated that students should be able to "use numbers effectively for various purposes." The student's development of mathematical operations and number sense is never specified.

3

## More Specific Standards

Common Core State Standards provide grade-level priorities not found in the Wisconsin Model Academic Standards (1998). Wisconsin Model Academic Standards (1998) have only six total standards and rely instead on a handful of performance indicators that are broad, optional, and appear only at three grade levels (4, 8, and 12).

Wisconsin  
Model  
Academic  
Standards for  
Mathematics  
(1998)

**Number Operations & Relationships  
Content Standard**

(same standard K-12th grade)

Use numbers effectively for various purposes, such as counting, measuring, estimating, and problem solving.

One (of over 20) Common Core State Standard for Mathematics:  
Operations and Algebraic Thinking to Algebra

Grade	*Notice how mathematics skills build on one another to college and career readiness.
K	Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.
1	Understand and apply properties of operations and the relationship between addition and subtraction.
2	Represent and solve problems involving addition and subtraction.
3	Understand properties of multiplication and the relationship between multiplication and division.
4	Use the four operations with whole numbers to solve problems.
5	Write and interpret numerical expressions.
6	Apply and extend previous understandings of arithmetic to algebraic expressions.
7	Solve real-life and mathematical problems using numerical and algebraic expressions and equations.
8	Analyze and solve linear equations and pairs of simultaneous linear equations.
HS	Understand solving equations as a process of reasoning and explain the reasoning.