

## Middle School: Content Knowledge (0146/5146) Match to Common Core State Standards

Knowledge and skills assessed by Mathematics questions are designated by their outline numbering in the test content specifications that appear on page 2. For example, **IID2** is **II** Mathematics / **D** Algebraic Concepts / **2** Describe patterns by writing or identifying a formula

Common Core Mathematics Domain		Grade Level					
		4	5	6	7	8	High School
NUMBER and OPERATIONS	Counting and Cardinality (CC)						
	Operations and Algebraic Thinking (OA)*	<b>IIA1, IID1, IID2, IIE1, IIF1, IIF2</b>	<b>IIA1, IID2, IIF1</b>				
	Numbers and Operations in Base Ten (NBT)	<b>IIA1, IIF1, IIF2</b>	<b>IIA1, IID2, IIF1, IIF2</b>				
	Number and Operations — Fractions (NF)	<b>IIA1, IIF1, IIF2</b>	<b>IIA1, IIF1, IIF2</b>				
	Ratios and Proportional Relationships (RP)			<b>IIA1, IIC1, IIF1</b>	<b>IIA1, IIC1, IIF1</b>		
	The Number System (NS)			<b>IIA1, IIE1, IIF1, IIF2</b>	<b>IIA1, IIF1, IIF2</b>	<b>IIA1, IIF1, IIF2</b>	
	Number and Quantity (NQ)						<b>IIA1, IIC1, IIF1, IIF2</b>
ALGEBRA	Algebra (A)						<b>IID1, IID2, IIE1</b>
	Expressions and Equations (EE)			<b>IID1, IID2, IIF1</b>	<b>IID1, IID2, IIF1</b>	<b>IIA1, IID1, IID2, IIF1</b>	
FUNCTIONS and their graphs	Functions (F)					<b>IID2, IIF1</b>	<b>IID2, IIF1</b>
GEOMETRY and MEASUREMENT	Measurement and Data (MD)**	<b>IIB1, IIB2, IIC1, IIG1</b>	<b>IIB1, IIC1, IIG1</b>				
	Geometry (G)	<b>IIB1, IIB2</b>	<b>IIB1, IIB2</b>	<b>IIB1, IIB2, IIC1, IIF1</b>	<b>IIB1, IIB2, IIC1, IIF1</b>	<b>IIB1, IIB2, IIC1, IIF1</b>	<b>IIB1, IIB2, IIC1, IID2</b>
STATISTICS and PROBABILITY	Statistics and Probability (SP)			<b>IIF1, IIG1, IIG2, IIG3</b>	<b>IIF1, IIG1, IIG2, IIG3, IIG4</b>	<b>IIG1, IIG2, IIG3, IIG4</b>	<b>IIE1, IIG1, IIG2, IIG3, IIG4</b>

\* The Operations and Algebraic Thinking domain also links to the conceptual category of Algebra.  
 \*\* The Measurement and Data domain also links to the conceptual category of Statistics and Probability.

**Key**

- A vacant cell indicates that there are no CCSS Standards at that grade level in that Domain.
- A dash (—) indicates that the test does not have content specifications matching the Domain.

## II. Mathematics

### A. Number sense and numeration

1. understand the meaning/implication of number and number concepts as they relate to problem solving, using cardinal and ordinal numbers, place value, ordering of fractions, decimals, whole numbers

### B. Geometry

1. knowledge of relationships in both two and three dimensions
2. ability to draw inferences based on precepts/concepts of parallelism, perpendicularity, congruence and similarity, angle measures and polygons

### C. Measurement

1. knowledge and application of standard units of both the English and metric systems, nonstandard units, estimation, perimeter, area, volume, mass, weight, angle measure, time, temperature

### D. Algebraic concepts

1. recognize and apply algebraic concepts and properties
2. describe patterns by writing or identifying a formula

### E. Number theory

1. problem solving that demonstrates an understanding of prime and composite numbers, divisibility rules, least common multiple, greatest common divisor and set theory

### F. The real number system and its subsystems

1. solve real-world situational problems
2. work with both standard and alternate algorithms

### G. Probability and statistics

1. understand the organization, presentation, and interpretation of data in various forms
2. recognize valid and invalid inferences
3. solve basic problems
4. make predictions involving probability and statistics

