Riverdeep Correlations

DESTINATION Math.

Correlation of Destination Math® Courseware to New Mexico State Standards October - 2005

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Standard Code	Standard Description	Standard Grade Levels	Destination Math Sessions	Lesson Grade Levels
	Understand numerical concepts and mathematical operations.	(Mathematics, Level: K - 4)		
	Understand numbers, ways of representing numbers, relationships among numbers, and number systems.			
1	Demonstrate an understanding of the place-value structure of the base-ten number system:	(Mathematics, Level: K)		
1	count with understanding and recognize 'how many' in sets of objects up to 20		MSC1 Module: Number Sense Unit: Numbers from 1 to 5 Session: Counting from 1 to 5	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 5 Session: Creating Representations of the Numbers from 1 to 5	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: Counting from 5 to 10	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: Creating Sets of 5 to 10	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: Creating Representations of the Numbers from 5 to 10	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: One More Than	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: One Fewer Than and Zero	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers to 100 Session: Counting from 10 to 20	Levels: K-1
1			MSC1 Module: Number Sense Unit: Comparing and Ordering Session: More Than, Less Than, or The Same	Levels: K-1
1			MSC1 Module: Addition and Subtraction Unit: Addition Session: Sums within 20	Levels: K-1
1			MSC1 Module: Addition and Subtraction Unit: Subtraction Session: Differences within 10	Levels: K-1
1			MSC1 Module: Addition and Subtraction Unit: Subtraction Session: Differences within 20	Levels: K-1
1	read and write whole numbers up to 20		MSC1 Module: Number Sense Unit: Numbers from 1 to 5 Session: Counting from 1 to 5	Levels: K-1

1			MSC1 Module: Number Sense Unit: Numbers from 1 to 5 Session: Creating Sets of 1 to 5	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 5 Session: Creating Representations of the Numbers from 1 to 5	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: Counting from 5 to 10	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: Creating Sets of 5 to 10	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: Creating Representations of the Numbers from 5 to 10	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: One More Than	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: One Fewer Than and Zero	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers to 100 Session: Counting from 10 to 20	Levels: K-1
1			MSC1 Module: Number Sense Unit: Comparing and Ordering Session: More Than, Less Than, or The Same	Levels: K-1
1			MSC1 Module: Number Sense Unit: Comparing and Ordering Session: Comparing Numbers within 100	Levels: K-1
1			MSC1 Module: Addition and Subtraction Unit: Addition Session: Combining and Joining within 10	Levels: K-1
1			MSC1 Module: Addition and Subtraction Unit: Addition Session: Comparing within 10	Levels: K-1
1			MSC1 Module: Addition and Subtraction Unit: Addition Session: Sums within 20, with 10 as One Addend	Levels: K-1
1			MSC1 Module: Addition and Subtraction Unit: Addition Session: Sums within 20	Levels: K-1
1			MSC1 Module: Addition and Subtraction Unit: Subtraction Session: Differences within 10	Levels: K-1
1			MSC1 Module: Addition and Subtraction Unit: Subtraction Session: Differences within 20	Levels: K-1
1	compare and order whole numbers up to 20		MSC1 Module: Number Sense Unit: Numbers from 1 to 5 Session: Counting from 1 to 5	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 5 Session: Creating Sets of 1 to 5	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 5 Session: Creating Representations of the Numbers from 1 to 5	Levels: K-1

1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: Counting from 5 to 10	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: Creating Sets of 5 to 10	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: Creating Representations of the Numbers from 5 to 10	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: One More Than	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: One Fewer Than and Zero	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers to 100 Session: Counting from 10 to 20	Levels: K-1
1			MSC1 Module: Number Sense Unit: Comparing and Ordering Session: More Than, Less Than, or The Same	Levels: K-1
1			MSC1 Module: Number Sense Unit: Comparing and Ordering Session: Comparing Numbers within 100	Levels: K-1
1			MSC1 Module: Addition and Subtraction Unit: Addition Session: Comparing within 10	Levels: K-1
1			MSC1 Module: Addition and Subtraction Unit: Addition Session: Sums within 20	Levels: K-1
1			MSC1 Module: Addition and Subtraction Unit: Subtraction Session: Differences within 10	Levels: K-1
1			MSC1 Module: Addition and Subtraction Unit: Subtraction Session: Differences within 20	Levels: K-1
1	connect numerals to the quantities they represent using various physical models		MSC1 Module: Number Sense Unit: Numbers from 1 to 5 Session: Counting from 1 to 5	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 5 Session: Creating Sets of 1 to 5	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 5 Session: Creating Representations of the Numbers from 1 to 5	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: Counting from 5 to 10	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: Creating Sets of 5 to 10	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: Creating Representations of the Numbers from 5 to 10	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: One More Than	Levels: K-1

1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: One Fewer Than and Zero	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers to 100 Session: Counting from 10 to 20	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers to 100 Session: Skip-Counting by Tens and Fives	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers to 100 Session: Skip-Counting by Twos	Levels: K-1
1			MSC1 Module: Number Sense Unit: Comparing and Ordering Session: More Than, Less Than, or The Same	Levels: K-1
1			MSC1 Module: Number Sense Unit: Comparing and Ordering Session: Comparing Numbers within 100	Levels: K-1
1			MSC1 Module: Addition and Subtraction Unit: Addition Session: Combining and Joining within 10	Levels: K-1
1			MSC1 Module: Addition and Subtraction Unit: Addition Session: Comparing within 10	Levels: K-1
1			MSC1 Module: Addition and Subtraction Unit: Addition Session: Sums within 20, with 10 as One Addend	Levels: K-1
1			MSC1 Module: Addition and Subtraction Unit: Addition Session: Sums within 20	Levels: K-1
1			MSC1 Module: Addition and Subtraction Unit: Subtraction Session: Differences within 10	Levels: K-1
1			MSC1 Module: Addition and Subtraction Unit: Subtraction Session: Differences within 20	Levels: K-1
1			MSC1 Module: Algebraic Thinking Unit: Patterns and Displays Session: Number Patterns	Levels: K-1
1	use an organized counting method to keep track of quantities while counting (one-to-one correspondence)		MSC1 Module: Number Sense Unit: Numbers from 1 to 5 Session: Counting from 1 to 5	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 5 Session: Creating Sets of 1 to 5	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 5 Session: Creating Representations of the Numbers from 1 to 5	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: Counting from 5 to 10	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: Creating Sets of 5 to 10	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: Creating Representations of the Numbers from 5 to 10	Levels: K-1

1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: One More Than	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: One Fewer Than and Zero	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers to 100 Session: Counting from 10 to 20	Levels: K-1
1			MSC1 Module: Number Sense Unit: Comparing and Ordering Session: More Than, Less Than, or The Same	Levels: K-1
1			MSC1 Module: Number Sense Unit: Comparing and Ordering Session: Comparing Numbers within 100	Levels: K-1
1			MSC1 Module: Addition and Subtraction Unit: Subtraction Session: Differences within 10	Levels: K-1
1			MSC1 Module: Algebraic Thinking Unit: Patterns and Displays Session: Number Patterns	Levels: K-1
1	order sets of objects and numbers from least to most or most to least		MSC1 Module: Number Sense Unit: Numbers from 1 to 5 Session: Counting from 1 to 5	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 5 Session: Creating Sets of 1 to 5	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 5 Session: Creating Representations of the Numbers from 1 to 5	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: Counting from 5 to 10	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: Creating Sets of 5 to 10	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: Creating Representations of the Numbers from 5 to 10	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: One More Than	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: One Fewer Than and Zero	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers to 100 Session: Counting from 10 to 20	Levels: K-1
1			MSC1 Module: Number Sense Unit: Comparing and Ordering Session: Comparing Numbers within 100	Levels: K-1
1	Demonstrate an understanding of the place-value structure of the base-ten number system:	(Mathematics, Level: 1)		
1	read, write, model, and sequence whole numbers up to 100 (including filling in missing numbers in a sequence)		MSC1 Module: Number Sense Unit: Numbers from 1 to 5 Session: Counting from 1 to 5	Levels: K-1

1			MSC1 Module: Number Sense Unit: Numbers from 1 to 5 Session: Creating Representations of the Numbers from 1 to 5	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: Counting from 5 to 10	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: Creating Sets of 5 to 10	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: One More Than	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: One Fewer Than and Zero	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers to 100 Session: Counting from 10 to 20	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers to 100 Session: Counting from 20 to 50	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers to 100 Session: Counting from 50 to 100	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers to 100 Session: Skip-Counting by Tens and Fives	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers to 100 Session: Skip-Counting by Twos	Levels: K-1
1			MSC1 Module: Number Sense Unit: Comparing and Ordering Session: Comparing Numbers within 100	Levels: K-1
1			MSC1 Module: Addition and Subtraction Unit: Addition Session: Combining and Joining within 10	Levels: K-1
1			MSC1 Module: Algebraic Thinking Unit: Patterns and Displays Session: Number Patterns	Levels: K-1
1	count with understanding and recognize 'how many' in sets of objects up to 50		MSC1 Module: Number Sense Unit: Numbers from 1 to 5 Session: Counting from 1 to 5	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 5 Session: Creating Sets of 1 to 5	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 5 Session: Creating Representations of the Numbers from 1 to 5	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: Counting from 5 to 10	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: Creating Sets of 5 to 10	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: Creating Representations of the Numbers from 5 to 10	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: One More Than	Levels: K-1

1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: One Fewer Than and Zero	Levels: K-1
1			MSC1 Module: Addition and Subtraction Unit: Addition Session: Combining and Joining within 10	Levels: K-1
1			MSC1 Module: Addition and Subtraction Unit: Addition Session: Comparing within 10	Levels: K-1
1	count orally by 2s to 20 and by 5s and 10s to 100		MSC1 Module: Number Sense Unit: Numbers to 100 Session: Skip-Counting by Tens and Fives	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers to 100 Session: Skip-Counting by Twos	Levels: K-1
1	count orally backward from 100		MSC1 Module: Number Sense Unit: Numbers to 100 Session: Counting from 50 to 100	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers to 100 Session: Skip-Counting by Tens and Fives	Levels: K-1
1	compare and order numbers up to 100		MSC1 Module: Number Sense Unit: Numbers from 1 to 5 Session: Counting from 1 to 5	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 5 Session: Creating Representations of the Numbers from 1 to 5	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: Counting from 5 to 10	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: Creating Representations of the Numbers from 5 to 10	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: One More Than	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: One Fewer Than and Zero	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers to 100 Session: Counting from 50 to 100	Levels: K-1
1			MSC1 Module: Number Sense Unit: Comparing and Ordering Session: More Than, Less Than, or The Same	Levels: K-1
1			MSC1 Module: Number Sense Unit: Comparing and Ordering Session: Comparing Numbers within 100	Levels: K-1
1			MSC1 Module: Addition and Subtraction Unit: Addition Session: Comparing within 10	Levels: K-1
1	decompose and recombine numbers using manipulatives to create and construct equivalent representations for the same number		MSC1 Module: Number Sense Unit: Numbers to 100 Session: Counting from 20 to 50	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers to 100 Session: Counting from 50 to 100	Levels: K-1

1			MSC1 Module: Addition and Subtraction Unit: Addition Session: Comparing within 10	Levels: K-1
1	group objects by 10s and 1s to explore place value		MSC1 Module: Number Sense Unit: Numbers to 100 Session: Counting from 10 to 20	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers to 100 Session: Counting from 20 to 50	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers to 100 Session: Counting from 50 to 100	Levels: K-1
1	use ordinal numbers and cardinal numbers appropriately		MSC1 Module: Geometry and Measurement Unit: Measurement Session: Clock and Calendar Time	Levels: K-1
1	connect number words and numbers to the quantities they represent		MSC1 Module: Number Sense Unit: Numbers from 1 to 5 Session: Creating Sets of 1 to 5	Levels: K-1
1	Understand the relationship between numbers, quantities, and place value in whole numbers up to 1,000 and develop flexible ways of thinking about numbers:	(Mathematics, Level: 2)		
1	use multiple models to explore place value and the base-ten number system		MSC2 Module: Number Sense Unit: Numbers to 999 Session: Place Value: Tens and Ones	Levels: 2-3
1			MSC2 Module: Number Sense Unit: Numbers to 999 Session: Place Value: Hundreds, Tens, and Ones	Levels: 2-3
1			MSC2 Module: Number Sense Unit: Numbers to 9,999 Session: Place Value: Thousands, Hundreds, Tens, and Ones	Levels: 2-3
1			MSC2 Module: Number Sense Unit: Numbers to 9,999 Session: Comparing and Ordering	Levels: 2-3
1			MSC2 Module: Operations with Numbers Unit: Addition and Subtraction Session: Estimating and Finding Sums less than 1,000	Levels: 2-3
1			MSC2 Module: Operations with Numbers Unit: Addition and Subtraction Session: Estimating and Finding Differences within 1,000	Levels: 2-3
1			MSC2 Module: Operations with Numbers Unit: Addition and Subtraction Session: Estimating and Finding Differences within 9,999	Levels: 2-3
1			MSC2 Module: Operations with Numbers Unit: Multiplication Session: Finding Products Less than 100	Levels: 2-3
1			MSC2 Module: Operations with Numbers Unit: Division Session: Dividing by a 1-digit Number	Levels: 2-3
1	represent whole numbers and use them in flexible ways including decomposing and recombining numbers and see their relationships		MSC2 Module: Number Sense Unit: Numbers to 999 Session: Place Value: Tens and Ones	Levels: 2-3

1			MSC2 Module: Number Sense Unit: Numbers to 999 Session: Expanded Form and Equivalent Representations of a Number	Levels: 2-3
1			MSC2 Module: Operations with Numbers Unit: Addition and Subtraction Session: Estimating and Finding Differences within 1,000	Levels: 2-3
1			MSC2 Module: Operations with Numbers Unit: Addition and Subtraction Session: Estimating and Finding Differences within 9,999	Levels: 2-3
1			MSC2 Module: Operations with Numbers Unit: Division Session: Dividing by a 1-digit Number	Levels: 2-3
1	identify whether a set of objects has an odd or even number of elements			
1	compare and order numbers using a variety of terms		MSC1 Module: Number Sense Unit: Comparing and Ordering Session: More Than, Less Than, or The Same	Levels: K-1
1	apply strategies for computation utilizing an understanding of place value		MSC2 Module: Number Sense Unit: Numbers to 999 Session: Place Value: Tens and Ones	Levels: 2-3
1			MSC2 Module: Number Sense Unit: Numbers to 999 Session: Place Value: Hundreds, Tens, and Ones	Levels: 2-3
1			MSC2 Module: Number Sense Unit: Numbers to 9,999 Session: Place Value: Thousands, Hundreds, Tens, and Ones	Levels: 2-3
1			MSC2 Module: Operations with Numbers Unit: Addition and Subtraction Session: Estimating and Finding Differences within 1,000	Levels: 2-3
1			MSC2 Module: Operations with Numbers Unit: Multiplication Session: Finding Products Less than 100	Levels: 2-3
2	Apply counting skills and number sense through meaningful activities:			
2	count and recognize 'how many' in sets of objects up to 1,000		MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: Counting from 5 to 10	Levels: K-1
2			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: Creating Sets of 5 to 10	Levels: K-1
2			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: One Fewer Than and Zero	Levels: K-1
2			MSC1 Module: Number Sense Unit: Numbers to 100 Session: Counting from 10 to 20	Levels: K-1
2			MSC1 Module: Number Sense Unit: Numbers to 100 Session: Counting from 20 to 50	Levels: K-1
2			MSC1 Module: Number Sense Unit: Numbers to 100 Session: Counting from 50 to 100	Levels: K-1

2			MSC2 Module: Number Sense Unit: Numbers to 999 Session: Counting by Grouping	Levels: 2-3
2	count forward and backward from given numbers to 1,000		MSC1 Module: Addition and Subtraction Unit: Subtraction Session: Differences within 10	Levels: K-1
2			MSC2 Module: Number Sense Unit: Numbers to 999 Session: Counting by Grouping	Levels: 2-3
2	connect number words and numerals to the quantities they represent using physical models and other representations.			
2	model how many parts make a whole using equal fractional parts		MSC2 Module: Operations with Numbers Unit: Division Session: Fractional Parts	Levels: 2-3
1	Exhibit an understanding of the place-value structure of the base-ten number system by:	(Mathematics, Level: 3)		
1	reading, modeling, writing, and interpreting whole numbers up to 10,000		MSC2 Module: Number Sense Unit: Numbers to 999 Session: Counting by Grouping	Levels: 2-3
1			MSC2 Module: Number Sense Unit: Numbers to 999 Session: Place Value: Tens and Ones	Levels: 2-3
1			MSC2 Module: Number Sense Unit: Numbers to 999 Session: Place Value: Hundreds, Tens, and Ones	Levels: 2-3
1			MSC2 Module: Number Sense Unit: Numbers to 999 Session: Expanded Form and Equivalent Representations of a Number	Levels: 2-3
1			MSC2 Module: Number Sense Unit: Numbers to 999 Session: Comparing and Ordering	Levels: 2-3
1			MSC2 Module: Number Sense Unit: Numbers to 9,999 Session: Place Value: Thousands, Hundreds, Tens, and Ones	Levels: 2-3
1			MSC2 Module: Number Sense Unit: Numbers to 9,999 Session: Comparing and Ordering	Levels: 2-3
1	comparing and ordering numbers up to 1,000		MSC2 Module: Number Sense Unit: Numbers to 999 Session: Comparing and Ordering	Levels: 2-3
1			MSC2 Module: Number Sense Unit: Numbers to 9,999 Session: Comparing and Ordering	Levels: 2-3
1	recognizing the position of a given number in the base-ten number system and its relationship to benchmark numbers such as 10, 50, 100, 500		MSC2 Module: Number Sense Unit: Numbers to 999 Session: Place Value: Hundreds, Tens, and Ones	Levels: 2-3
1			MSC2 Module: Number Sense Unit: Numbers to 9,999 Session: Place Value: Thousands, Hundreds, Tens, and Ones	Levels: 2-3
1			MSC2 Module: Operations with Numbers Unit: Addition and Subtraction Session: Estimating and Finding Differences within 9,999	Levels: 2-3

1			MSC2 Module: Operations with Numbers Unit: Multiplication Session: Finding Products Less than 100	Levels: 2-3
1			MSC2 Module: Operations with Numbers Unit: Division Session: Dividing by a 1-digit Number	Levels: 2-3
2	Use whole numbers by using a variety of contexts and models.		MSC2 Module: Number Sense Unit: Numbers to 999 Session: Counting by Grouping	Levels: 2-3
2			MSC2 Module: Number Sense Unit: Numbers to 999 Session: Place Value: Tens and Ones	Levels: 2-3
2			MSC2 Module: Number Sense Unit: Numbers to 999 Session: Place Value: Hundreds, Tens, and Ones	Levels: 2-3
2			MSC2 Module: Number Sense Unit: Numbers to 999 Session: Expanded Form and Equivalent Representations of a Number	Levels: 2-3
2			MSC2 Module: Number Sense Unit: Numbers to 999 Session: Comparing and Ordering	Levels: 2-3
2			MSC2 Module: Number Sense Unit: Numbers to 9,999 Session: Place Value: Thousands, Hundreds, Tens, and Ones	Levels: 2-3
2			MSC2 Module: Number Sense Unit: Numbers to 9,999 Session: Comparing and Ordering	Levels: 2-3
3	Identify some representations for some numbers and generate them by decomposing and recombining numbers.		MSC2 Module: Number Sense Unit: Numbers to 999 Session: Expanded Form and Equivalent Representations of a Number	Levels: 2-3
3			MSC2 Module: Operations with Numbers Unit: Addition and Subtraction Session: Estimating and Finding Differences within 1,000	Levels: 2-3
4	Identify the relationship among commonly encountered factors and multiples.			
5	Use visual models and other strategies to recognize and generate equivalents of commonly used fractions and mixed numbers.		MSC2 Module: Operations with Numbers Unit: Division Session: Fractional Parts	Levels: 2-3
6	Demonstrate an understanding of fractions as parts of unit wholes, parts of a collection or set, and as locations on a number line.		MSC2 Module: Operations with Numbers Unit: Division Session: Fractional Parts	Levels: 2-3
7	Use common fractions for measuring and money.			
1	Exhibit an understanding of the place-value structure of the base-ten number system by reading, modeling, writing, and interpreting whole numbers up to 100,000; compare and order the numbers:	(Mathematics, Level: 4)		

1	recognize equivalent representations for the same number and generate them by decomposing and combining numbers		MSC3 Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Multipliers	Levels: 4-6
1	identify the numbers less than 0 by extending the number line and using negative numbers through familiar applications		MSC3 Module: Operations with Numbers Unit: The Integers Session: Integer Sums	Levels: 4-6
1			MSC3 Module: Numbers and Number Sense Unit: Large and Small Numbers Session: Negative Whole Numbers	Levels: 4-6
2	Identify fractions as parts of unit wholes, as parts of groups, and as locations on number lines:			
2	use visual models and other strategies to compare and order commonly used fractions		MSC3 Module: Fractions Unit: Proper and Improper Fractions Session: Proper Fractions	Levels: 4-6
2			MSC3 Module: Fractions Unit: Proper and Improper Fractions Session: Improper Fractions	Levels: 4-6
2			MSC3 Module: Fractions Unit: Proper and Improper Fractions Session: Equivalent Fractions	Levels: 4-6
2			MSC3 Module: Fractions Unit: Proper and Improper Fractions Session: Ordering and Rounding Fractions	Levels: 4-6
2	use models to show how whole numbers and decimals (to the hundredths place) relate to simple fractions		MSC3 Module: Decimals Unit: Introduction Session: Tenths, Hundredths, and Thousandths	Levels: 4-6
2	identify different interpretations of fractions:			
2	division of whole numbers by whole numbers		MSC3 Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Introduction to Long Division	Levels: 4-6
2			MSC3 Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Divisors	Levels: 4-6
2	ratio			
2	equivalence		MSC3 Module: Fractions Unit: Proper and Improper Fractions Session: Equivalent Fractions	Levels: 4-6
2	ordering of fractions		MSC3 Module: Fractions Unit: Proper and Improper Fractions Session: Proper Fractions	Levels: 4-6
2			MSC3 Module: Fractions Unit: Proper and Improper Fractions Session: Improper Fractions	Levels: 4-6
2			MSC3 Module: Fractions Unit: Proper and Improper Fractions Session: Ordering and Rounding Fractions	Levels: 4-6
2	parts of a whole or parts of a set		MSC3 Module: Fractions Unit: Proper and Improper Fractions Session: Proper Fractions	Levels: 4-6
2			MSC3 Module: Fractions Unit: Proper and Improper Fractions Session: Improper Fractions	Levels: 4-6

2			MSC4 Module: Fractions Unit: Essentials of Fractions Session: Recognizing a Fraction	Levels: 6-8
3	Add and subtract fractions with common and uncommon denominators using a variety of strategies:			
3	recognize and generate equivalent decimal forms of commonly used fractions		MSC3 Module: Decimals Unit: Introduction Session: Ratios, Decimals, and Percents	Levels: 4-6
3	identify the numbers less than 0 by extending the number line and using negative numbers through familiar applications		MSC3 Module: Numbers and Number Sense Unit: Large and Small Numbers Session: Negative Whole Numbers	Levels: 4-6
4	Recognize classes of numbers and apply these concepts in problem-solving situations.			
	Understand the meaning of operations and how they relate to one another.	(Mathematics, Level: K - 4)		
1	Represent numbers using pictures, objects, or numerals.	(Mathematics, Level: K)	MSC1 Module: Number Sense Unit: Numbers from 1 to 5 Session: Counting from 1 to 5	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 5 Session: Creating Representations of the Numbers from 1 to 5	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: Counting from 5 to 10	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: Creating Sets of 5 to 10	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: Creating Representations of the Numbers from 5 to 10	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: One More Than	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: One Fewer Than and Zero	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers to 100 Session: Counting from 10 to 20	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers to 100 Session: Counting from 20 to 50	Levels: K-1
1			MSC1 Module: Number Sense Unit: Comparing and Ordering Session: More Than, Less Than, or The Same	Levels: K-1
1			MSC1 Module: Addition and Subtraction Unit: Addition Session: Combining and Joining within 10	Levels: K-1
1			MSC1 Module: Addition and Subtraction Unit: Addition Session: Comparing within 10	Levels: K-1

1			MSC1 Module: Addition and Subtraction Unit: Addition Session: Sums within 20	Levels: K-1
1			MSC1 Module: Addition and Subtraction Unit: Subtraction Session: Differences within 10	Levels: K-1
2	Use concrete objects to solve simple addition and subtraction story problems.		MSC1 Module: Addition and Subtraction Unit: Addition Session: Combining and Joining within 10	Levels: K-1
2			MSC1 Module: Addition and Subtraction Unit: Addition Session: Comparing within 10	Levels: K-1
2			MSC1 Module: Addition and Subtraction Unit: Addition Session: Sums within 20, with 10 as One Addend	Levels: K-1
2			MSC1 Module: Addition and Subtraction Unit: Addition Session: Sums within 20	Levels: K-1
2			MSC1 Module: Addition and Subtraction Unit: Subtraction Session: Differences within 10	Levels: K-1
2			MSC1 Module: Addition and Subtraction Unit: Subtraction Session: Differences within 20	Levels: K-1
1	Use a variety of models to demonstrate an understanding of addition and subtraction of whole numbers.	(Mathematics, Level: 1)	MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: Counting from 5 to 10	Levels: K-1
1			MSC1 Module: Addition and Subtraction Unit: Addition Session: Combining and Joining within 10	Levels: K-1
1			MSC1 Module: Addition and Subtraction Unit: Addition Session: Comparing within 10	Levels: K-1
1			MSC1 Module: Addition and Subtraction Unit: Addition Session: Sums within 20, with 10 as One Addend	Levels: K-1
1			MSC1 Module: Addition and Subtraction Unit: Addition Session: Sums within 20	Levels: K-1
1			MSC1 Module: Addition and Subtraction Unit: Subtraction Session: Differences within 10	Levels: K-1
1			MSC1 Module: Addition and Subtraction Unit: Subtraction Session: Differences within 20	Levels: K-1
2	Solve addition and subtraction problems with one- and two-digit numbers.		MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: One More Than	Levels: K-1
2			MSC1 Module: Number Sense Unit: Numbers to 100 Session: Counting from 20 to 50	Levels: K-1
2			MSC1 Module: Addition and Subtraction Unit: Addition Session: Combining and Joining within 10	Levels: K-1
2			MSC1 Module: Addition and Subtraction Unit: Addition Session: Comparing within 10	Levels: K-1
2			MSC1 Module: Addition and Subtraction Unit: Addition Session: Sums within 20, with 10 as One Addend	Levels: K-1
2			MSC1 Module: Addition and Subtraction Unit: Addition Session: Sums within 20	Levels: K-1

2			MSC1 Module: Addition and Subtraction Unit: Subtraction Session: Differences within 10	Levels: K-1
2			MSC1 Module: Addition and Subtraction Unit: Subtraction Session: Differences within 20	Levels: K-1
3	Find the sum of three one-digit numbers to the sum of 15.		MSC1 Module: Addition and Subtraction Unit: Addition Session: Sums within 20	Levels: K-1
4	Understand and use the inverse relationship between addition and subtraction to solve problems and check solutions.		MSC1 Module: Algebraic Thinking Unit: Patterns and Displays Session: Number Patterns	Levels: K-1
5	Use concrete materials to investigate situations that relate to multiplication and division.			
6	Given simple story problems, explain verbally how to select and use appropriate operations.		MSC1 Module: Addition and Subtraction Unit: Addition Session: Combining and Joining within 10	Levels: K-1
6			MSC1 Module: Addition and Subtraction Unit: Addition Session: Sums within 20, with 10 as One Addend	Levels: K-1
6			MSC1 Module: Addition and Subtraction Unit: Subtraction Session: Differences within 20	Levels: K-1
1	Find the sum of two whole numbers up to three digits long.	(Mathematics, Level: 2)	MSC1 Module: Addition and Subtraction Unit: Addition Session: Comparing within 10	Levels: K-1
1			MSC1 Module: Addition and Subtraction Unit: Addition Session: Sums within 20	Levels: K-1
1			MSC2 Module: Operations with Numbers Unit: Addition and Subtraction Session: Sums Less than 100	Levels: 2-3
1			MSC2 Module: Operations with Numbers Unit: Addition and Subtraction Session: Estimating and Finding Sums less than 1,000	Levels: 2-3
2	Find the difference of two whole numbers up to three digits long.		MSC2 Module: Operations with Numbers Unit: Addition and Subtraction Session: Differences within 100	Levels: 2-3
2			MSC2 Module: Operations with Numbers Unit: Addition and Subtraction Session: Estimating and Finding Differences within 1,000	Levels: 2-3
2			MSC2 Module: Operations with Numbers Unit: Addition and Subtraction Session: Estimating and Finding Differences within 9,999	Levels: 2-3
3	Understand and use the inverse relationships between addition and subtraction to solve problems and check solutions.		MSC2 Module: Operations with Numbers Unit: Addition and Subtraction Session: Estimating and Finding Differences within 1,000	Levels: 2-3

4	Identify and describe situations that require multiplication and division and develop strategies to solve problems for repeated joining of groups and partitioning into equal subgroups or shares.		MSC2 Module: Operations with Numbers Unit: Multiplication Session: Repeated Addition and Arrays	Levels: 2-3
4			MSC2 Module: Operations with Numbers Unit: Multiplication Session: Skip Counting to Show Multiplication	Levels: 2-3
4			MSC2 Module: Operations with Numbers Unit: Multiplication Session: Finding Products Less than 100	Levels: 2-3
4			MSC2 Module: Operations with Numbers Unit: Division Session: Meaning of Division	Levels: 2-3
4			MSC2 Module: Operations with Numbers Unit: Division Session: Dividing by a 1-digit Number	Levels: 2-3
4			MSC2 Module: Operations with Numbers Unit: Division Session: Fractional Parts	Levels: 2-3
1	Use a variety of models to show an understanding of multiplication and division of whole numbers.	(Mathematics, Level: 3)	MSC2 Module: Operations with Numbers Unit: Multiplication Session: Skip Counting to Show Multiplication	Levels: 2-3
1			MSC2 Module: Operations with Numbers Unit: Multiplication Session: Finding Products Less than 100	Levels: 2-3
1			MSC2 Module: Operations with Numbers Unit: Division Session: Meaning of Division	Levels: 2-3
1			MSC2 Module: Operations with Numbers Unit: Division Session: Dividing by a 1-digit Number	Levels: 2-3
2	Find the sum or difference of two whole numbers between 0 and 10,000.		MSC3 Module: Operations with Numbers Unit: The Integers Session: Differences Between Integers	Levels: 4-6
2			MSC2 Module: Operations with Numbers Unit: Addition and Subtraction Session: Sums Less than 100	Levels: 2-3
2			MSC2 Module: Operations with Numbers Unit: Addition and Subtraction Session: Estimating and Finding Sums less than 1,000	Levels: 2-3
2			MSC2 Module: Operations with Numbers Unit: Addition and Subtraction Session: Estimating and Finding Differences within 9,999	Levels: 2-3
3	Solve simple multiplication and division problems.		MSC2 Module: Operations with Numbers Unit: Multiplication Session: Skip Counting to Show Multiplication	Levels: 2-3
3			MSC2 Module: Operations with Numbers Unit: Multiplication Session: Finding Products Less than 100	Levels: 2-3

3			MSC2 Module: Operations with Numbers Unit: Division Session: Meaning of Division	Levels: 2-3
3			MSC2 Module: Operations with Numbers Unit: Division Session: Dividing by a 1-digit Number	Levels: 2-3
4	Identify how the number of groups and the number of items in each group equals a product.		MSC2 Module: Operations with Numbers Unit: Multiplication Session: Repeated Addition and Arrays	Levels: 2-3
4			MSC2 Module: Operations with Numbers Unit: Multiplication Session: Skip Counting to Show Multiplication	Levels: 2-3
5	Demonstrate the effects of multiplying and dividing on whole numbers.		MSC2 Module: Operations with Numbers Unit: Multiplication Session: Finding Products Less than 100	Levels: 2-3
5			MSC2 Module: Operations with Numbers Unit: Division Session: Dividing by a 1-digit Number	Levels: 2-3
6	Identify and use relationship between multiplication and division to solve problems.		MSC2 Module: Operations with Numbers Unit: Division Session: Meaning of Division	Levels: 2-3
6			MSC2 Module: Operations with Numbers Unit: Division Session: Dividing by a 1-digit Number	Levels: 2-3
7	Select and use operations to solve problems.			
1	Demonstrate an understanding of and the ability to use:	(Mathematics, Level: 4)		
1	standard algorithms for the addition and subtraction of multi-digit numbers			
1	standard algorithms for multiplying a multi-digit number by a two-digit number and for dividing a multi-digit number by a one-digit number		MSC3 Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Multipliers	Levels: 4-6
1			MSC3 Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Divisors	Levels: 4-6
2	Select and use appropriate operations (addition, subtraction, multiplication, and division) to solve problems.		MSC3 Module: Operations with Numbers Unit: The Integers Session: Integer Sums	Levels: 4-6
2			MSC3 Module: Operations with Numbers Unit: The Integers Session: Differences Between Integers	Levels: 4-6
2			MSC3 Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Multipliers	Levels: 4-6
2			MSC3 Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Introduction to Long Division	Levels: 4-6

2			MSC3 Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Divisors	Levels: 4-6
2			MSC3 Module: Operations with Numbers Unit: Addition and Subtraction of Whole Numbers Session: Whole Number Sums	Levels: 4-6
2			MSC3 Module: Operations with Numbers Unit: Addition and Subtraction of Whole Numbers Session: Differences Between Large Numbers	Levels: 4-6
3	Extend the uses of whole numbers to the addition and subtraction of simple decimals (positive numbers to two places).		MSC3 Module: Decimals Unit: Addition and Subtraction Session: Adding Decimals	Levels: 4-6
3			MSC3 Module: Decimals Unit: Addition and Subtraction Session: Subtracting Decimals	Levels: 4-6
4	Demonstrate commutative, associative, identity, and zero properties of operations on whole numbers.		MSC3 Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Multipliers	Levels: 4-6
4			MSC3 Module: Operations with Numbers Unit: Addition and Subtraction of Whole Numbers Session: Whole Number Sums	Levels: 4-6
5	Demonstrate the concept of distributivity of multiplication over addition and subtraction.			
	Compute fluently and make reasonable estimates.	(Mathematics, Level: K - 4)		
1	Estimate quantities of objects up to 20.	(Mathematics, Level: K)	MSC1 Module: Addition and Subtraction Unit: Addition Session: Sums within 20, with 10 as One Addend	Levels: K-1
1			MSC1 Module: Addition and Subtraction Unit: Addition Session: Sums within 20	Levels: K-1
1	Use strategies for whole-number computation, with a focus on addition and subtraction.	(Mathematics, Level: 1)	MSC1 Module: Addition and Subtraction Unit: Addition Session: Comparing within 10	Levels: K-1
1			MSC1 Module: Addition and Subtraction Unit: Addition Session: Sums within 20, with 10 as One Addend	Levels: K-1
1			MSC1 Module: Addition and Subtraction Unit: Addition Session: Sums within 20	Levels: K-1
1			MSC1 Module: Addition and Subtraction Unit: Subtraction Session: Differences within 10	Levels: K-1
1			MSC1 Module: Addition and Subtraction Unit: Subtraction Session: Differences within 20	Levels: K-1
2	Demonstrate a variety of methods to compute.			
3	Perform addition and subtraction with whole number combinations.		MSC1 Module: Addition and Subtraction Unit: Addition Session: Combining and Joining within 10	Levels: K-1

3			MSC1 Module: Addition and Subtraction Unit: Addition Session: Comparing within 10	Levels: K-1
3			MSC1 Module: Addition and Subtraction Unit: Addition Session: Sums within 20, with 10 as One Addend	Levels: K-1
3			MSC1 Module: Addition and Subtraction Unit: Addition Session: Sums within 20	Levels: K-1
3			MSC1 Module: Addition and Subtraction Unit: Subtraction Session: Differences within 10	Levels: K-1
3			MSC1 Module: Addition and Subtraction Unit: Subtraction Session: Differences within 20	Levels: K-1
4	Use and explain estimation strategies to determine the reasonableness of answers involving addition and subtraction.		MSC1 Module: Addition and Subtraction Unit: Addition Session: Sums within 20, with 10 as One Addend	Levels: K-1
4			MSC1 Module: Addition and Subtraction Unit: Addition Session: Sums within 20	Levels: K-1
1	Use and explain strategies for addition and subtraction of multi-digit whole numbers.	(Mathematics, Level: 2)	MSC2 Module: Operations with Numbers Unit: Addition and Subtraction Session: Estimating and Finding Sums less than 1,000	Levels: 2-3
1			MSC2 Module: Operations with Numbers Unit: Addition and Subtraction Session: Differences within 100	Levels: 2-3
1			MSC2 Module: Operations with Numbers Unit: Addition and Subtraction Session: Estimating and Finding Differences within 1,000	Levels: 2-3
1			MSC2 Module: Operations with Numbers Unit: Addition and Subtraction Session: Estimating and Finding Differences within 9,999	Levels: 2-3
2	Model and solve problems representing adding and subtracting amounts of money using dollars and coins.		MSC2 Module: Geometry and Measurement Unit: Measurement Session: Money	Levels: 2-3
3	Use addition combinations (addends through 10) and related subtraction combinations, and develop strategies for computing based on number sense.		MSC1 Module: Addition and Subtraction Unit: Addition Session: Combining and Joining within 10	Levels: K-1
3			MSC1 Module: Addition and Subtraction Unit: Addition Session: Comparing within 10	Levels: K-1
3			MSC1 Module: Addition and Subtraction Unit: Addition Session: Sums within 20, with 10 as One Addend	Levels: K-1
3			MSC1 Module: Addition and Subtraction Unit: Subtraction Session: Differences within 10	Levels: K-1
4	Select and use a variety of appropriate strategies methods to compute.		MSC2 Module: Operations with Numbers Unit: Addition and Subtraction Session: Sums Less than 100	Levels: 2-3

4			MSC2 Module: Operations with Numbers Unit: Addition and Subtraction Session: Estimating and Finding Sums less than 1,000	Levels: 2-3
4			MSC2 Module: Operations with Numbers Unit: Addition and Subtraction Session: Differences within 100	Levels: 2-3
4			MSC2 Module: Operations with Numbers Unit: Addition and Subtraction Session: Estimating and Finding Differences within 1,000	Levels: 2-3
4			MSC2 Module: Operations with Numbers Unit: Addition and Subtraction Session: Estimating and Finding Differences within 9,999	Levels: 2-3
4			MSC2 Module: Operations with Numbers Unit: Multiplication Session: Repeated Addition and Arrays	Levels: 2-3
4			MSC2 Module: Operations with Numbers Unit: Multiplication Session: Skip Counting to Show Multiplication	Levels: 2-3
4			MSC2 Module: Operations with Numbers Unit: Multiplication Session: Finding Products Less than 100	Levels: 2-3
4			MSC2 Module: Operations with Numbers Unit: Division Session: Meaning of Division	Levels: 2-3
4			MSC2 Module: Operations with Numbers Unit: Division Session: Dividing by a 1-digit Number	Levels: 2-3
5	Skip-count by 2, 5, and 10 to develop multiplicative reasoning and notational representations.		MSC1 Module: Number Sense Unit: Numbers to 100 Session: Skip-Counting by Tens and Fives	Levels: K-1
5			MSC1 Module: Number Sense Unit: Numbers to 100 Session: Skip-Counting by Twos	Levels: K-1
5			MSC2 Module: Operations with Numbers Unit: Multiplication Session: Skip Counting to Show Multiplication	Levels: 2-3
1	Choose computational methods based on understanding the base-ten number system, properties of multiplication and division, and number relationships.	(Mathematics, Level: 3)	MSC2 Module: Operations with Numbers Unit: Multiplication Session: Skip Counting to Show Multiplication	Levels: 2-3
1			MSC2 Module: Operations with Numbers Unit: Multiplication Session: Finding Products Less than 100	Levels: 2-3
1			MSC2 Module: Operations with Numbers Unit: Division Session: Meaning of Division	Levels: 2-3
1			MSC2 Module: Operations with Numbers Unit: Division Session: Dividing by a 1-digit Number	Levels: 2-3

1			MSC2 Module: Algebraic Thinking Unit: Properties and Relationships Session: Number Patterns and Properties	Levels: 2-3
2	Use strategies to become fluent with the multiplication pairs up to 10 x 10.			
3	Compute with basic number combinations.		MSC2 Module: Operations with Numbers Unit: Multiplication Session: Finding Products Less than 100	Levels: 2-3
4	Demonstrate reasonable estimation strategies for measurement, computation, and problem solving.			
1	Demonstrate multiplication combinations through 12 x 12 and related division facts, and use them to solve problems mentally and compute related problems.	(Mathematics, Level: 4)	MSC3 Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Multipliers	Levels: 4-6
2	Add, subtract, and multiply up to two double-digits accurately and efficiently.		MSC3 Module: Operations with Numbers Unit: The Integers Session: Integer Sums	Levels: 4-6
2			MSC3 Module: Operations with Numbers Unit: The Integers Session: Differences Between Integers	Levels: 4-6
2			MSC3 Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Multipliers	Levels: 4-6
2			MSC3 Module: Fractions Unit: Multiplication and Division Session: Finding Products	Levels: 4-6
2			MSC3 Module: Operations with Numbers Unit: Addition and Subtraction of Whole Numbers Session: Whole Number Sums	Levels: 4-6
2			MSC3 Module: Operations with Numbers Unit: Addition and Subtraction of Whole Numbers Session: Differences Between Large Numbers	Levels: 4-6
3	Use a variety of strategies to estimate the results of whole number computations and judge the reasonableness of the answers.			
4	Use strategies to estimate computations involving fractions and decimals.		MSC3 Module: Fractions Unit: Addition and Subtraction Session: Sums involving Like Denominators	Levels: 4-6
4			MSC3 Module: Fractions Unit: Multiplication and Division Session: Quotients and Remainders	Levels: 4-6
4			MSC3 Module: Decimals Unit: Addition and Subtraction Session: Adding Decimals	Levels: 4-6
4			MSC3 Module: Decimals Unit: Addition and Subtraction Session: Subtracting Decimals	Levels: 4-6
4			MSC3 Module: Decimals Unit: Multiplication and Division Session: Multiplying Decimals	Levels: 4-6

4			MSC3 Module: Decimals Unit: Multiplication and Division Session: Dividing Decimals by Whole Numbers	Levels: 4-6
	Understand algebraic concepts and applications.	(Mathematics, Level: K - 4)		
	Understand patterns, relations, and functions.			
1	Identify the attributes of objects.	(Mathematics, Level: K)	MSC1 Module: Geometry and Measurement Unit: Measurement Session: Length	Levels: K-1
1			MSC1 Module: Geometry and Measurement Unit: Geometry Session: Triangles and Rectangles	Levels: K-1
1			MSC1 Module: Geometry and Measurement Unit: Geometry Session: Three-Dimensional Shapes	Levels: K-1
1			MSC1 Module: Algebraic Thinking Unit: Patterns and Displays Session: Shapes	Levels: K-1
2	Sort, classify, and order objects by size, number, and other properties.		MSC1 Module: Geometry and Measurement Unit: Measurement Session: Length	Levels: K-1
2			MSC1 Module: Geometry and Measurement Unit: Measurement Session: Weight	Levels: K-1
2			MSC1 Module: Algebraic Thinking Unit: Patterns and Displays Session: Shapes	Levels: K-1
2			MSC1 Module: Algebraic Thinking Unit: Patterns and Displays Session: Tables and Graphs	Levels: K-1
3	Recognize, reproduce, describe, extend, and create repeating patterns.		MSC1 Module: Algebraic Thinking Unit: Patterns and Displays Session: Shapes	Levels: K-1
3			MSC1 Module: Algebraic Thinking Unit: Patterns and Displays Session: Number Patterns	Levels: K-1
3			MSC1 Module: Algebraic Thinking Unit: Patterns and Displays Session: Tables and Graphs	Levels: K-1
1	Recognize, reproduce, describe, extend, and create repeating patterns and translate from one representation to another.	(Mathematics, Level: 1)	MSC1 Module: Algebraic Thinking Unit: Patterns and Displays Session: Shapes	Levels: K-1
1			MSC1 Module: Algebraic Thinking Unit: Patterns and Displays Session: Number Patterns	Levels: K-1
2	Skip-count on a hundreds chart to identify, describe, and predict number patterns.		MSC1 Module: Number Sense Unit: Numbers to 100 Session: Counting from 50 to 100	Levels: K-1
2			MSC1 Module: Number Sense Unit: Numbers to 100 Session: Skip-Counting by Tens and Fives	Levels: K-1
2			MSC1 Module: Number Sense Unit: Numbers to 100 Session: Skip-Counting by Twos	Levels: K-1
2			MSC1 Module: Algebraic Thinking Unit: Patterns and Displays Session: Number Patterns	Levels: K-1

3	Identify number patterns on the hundreds chart.		MSC1 Module: Number Sense Unit: Numbers to 100 Session: Counting from 50 to 100	Levels: K-1
3			MSC1 Module: Algebraic Thinking Unit: Patterns and Displays Session: Number Patterns	Levels: K-1
1	Recognize, reproduce, describe, extend, and create repeating and growing patterns, and translate from one representation to another.	(Mathematics, Level: 2)	MSC1 Module: Algebraic Thinking Unit: Patterns and Displays Session: Shapes	Levels: K-1
2	Skip-count using calculators or a hundreds chart to identify, describe, predict, and make generalizations about number patterns to differentiate rote counting versus the meaning of the numbers.			
3	Construct and solve open sentences that have variables.		MSC2 Module: Algebraic Thinking Unit: Properties and Relationships Session: Number Patterns and Properties	Levels: 2-3
4	Relate everyday problem situations to number sentences involving addition and subtraction.			
1	Represent relationships of quantities in the form of mathematical expressions, equations, or inequalities.	(Mathematics, Level: 3)		
2	Solve problems involving numeric equations.			
3	Select appropriate operational and relational symbols to make an expression true.		MSC1 Module: Algebraic Thinking Unit: Patterns and Displays Session: Number Patterns	Levels: K-1
3			MSC2 Module: Algebraic Thinking Unit: Properties and Relationships Session: Number Patterns and Properties	Levels: 2-3
4	Use models of feet and inches to express simple unit conversions in symbolic form that develop conceptual understanding versus procedural skills.		MSC2 Module: Algebraic Thinking Unit: Properties and Relationships Session: Number Patterns and Properties	Levels: 2-3
5	Recognize and use the commutative property of multiplication.		MSC2 Module: Operations with Numbers Unit: Multiplication Session: Repeated Addition and Arrays	Levels: 2-3
5			MSC2 Module: Algebraic Thinking Unit: Properties and Relationships Session: Number Patterns and Properties	Levels: 2-3
6	Create, describe, and extend numeric and geometric patterns including multiplication patterns.			
7	Represent simple functional relationships:			
7	solve simple problems involving a functional relationship between two quantities			

7	extend and recognize a linear pattern by its rules			
1	Represent and analyze patterns and simple functions using words, tables, and graphs.	(Mathematics, Level: 4)		
2	Create and describe numeric and geometric patterns including multiplication and division patterns.			
3	Express mathematical relationships using equations.			
4	Use and interpret variables, mathematical symbols, and properties to write and simplify expressions and sentences:			
4	use letters, boxes, or other symbols to stand for any number in simple expressions or equations			
4	interpret and evaluate mathematical expressions using parentheses			
4	use and interpret formulas to answer questions about quantities and their relationships			
	Represent and analyze mathematical situations and structures using algebraic symbols.	(Mathematics, Level: K - 4)		
1	Use concrete, pictorial, and verbal representation to develop an understanding of invented and conventional symbols.	(Mathematics, Level: K)	MSC1 Module: Number Sense Unit: Numbers from 1 to 5 Session: Creating Representations of the Numbers from 1 to 5	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: Creating Representations of the Numbers from 5 to 10	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: One Fewer Than and Zero	Levels: K-1
1			MSC1 Module: Number Sense Unit: Comparing and Ordering Session: Comparing Numbers within 100	Levels: K-1
1			MSC1 Module: Addition and Subtraction Unit: Addition Session: Combining and Joining within 10	Levels: K-1
1			MSC1 Module: Addition and Subtraction Unit: Addition Session: Sums within 20, with 10 as One Addend	Levels: K-1
1			MSC1 Module: Addition and Subtraction Unit: Subtraction Session: Differences within 20	Levels: K-1
1			MSC1 Module: Geometry and Measurement Unit: Measurement Session: Weight	Levels: K-1
1			MSC1 Module: Geometry and Measurement Unit: Measurement Session: Money	Levels: K-1

1			MSC1 Module: Algebraic Thinking Unit: Patterns and Displays Session: Shapes	Levels: K-1
1			MSC1 Module: Algebraic Thinking Unit: Patterns and Displays Session: Tables and Graphs	Levels: K-1
1	Write number sentences that use concrete objects, pictorial, and verbal representations to express mathematical situations using invented and conventional symbols.	(Mathematics, Level: 1)	MSC1 Module: Number Sense Unit: Comparing and Ordering Session: Comparing Numbers within 100	Levels: K-1
1			MSC1 Module: Addition and Subtraction Unit: Addition Session: Combining and Joining within 10	Levels: K-1
1			MSC1 Module: Addition and Subtraction Unit: Addition Session: Comparing within 10	Levels: K-1
1			MSC1 Module: Addition and Subtraction Unit: Subtraction Session: Differences within 10	Levels: K-1
2	Demonstrate and describe the concept of equal		MSC1 Module: Number Sense Unit: Comparing and Ordering Session: More Than, Less Than, or The Same	Levels: K-1
3	Solve open number sentences that have variables representing numbers up to 10.		MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: One Fewer Than and Zero	Levels: K-1
3			MSC1 Module: Addition and Subtraction Unit: Addition Session: Combining and Joining within 10	Levels: K-1
3			MSC1 Module: Addition and Subtraction Unit: Addition Session: Comparing within 10	Levels: K-1
3			MSC1 Module: Addition and Subtraction Unit: Subtraction Session: Differences within 10	Levels: K-1
3			MSC1 Module: Addition and Subtraction Unit: Subtraction Session: Differences within 20	Levels: K-1
1	Use mathematical language to describe a variety of representations and mathematical ideas and situations.	(Mathematics, Level: 2)	MSC2 Module: Number Sense Unit: Numbers to 999 Session: Place Value: Tens and Ones	Levels: 2-3
1			MSC2 Module: Number Sense Unit: Numbers to 999 Session: Place Value: Hundreds, Tens, and Ones	Levels: 2-3
1			MSC2 Module: Number Sense Unit: Numbers to 999 Session: Expanded Form and Equivalent Representations of a Number	Levels: 2-3
1			MSC2 Module: Operations with Numbers Unit: Addition and Subtraction Session: Sums Less than 100	Levels: 2-3
1			MSC2 Module: Operations with Numbers Unit: Addition and Subtraction Session: Estimating and Finding Sums less than 1,000	Levels: 2-3
1			MSC2 Module: Operations with Numbers Unit: Addition and Subtraction Session: Differences within 100	Levels: 2-3

1			MSC2 Module: Operations with Numbers Unit: Addition and Subtraction Session: Estimating and Finding Differences within 1,000	Levels: 2-3
1			MSC2 Module: Operations with Numbers Unit: Addition and Subtraction Session: Estimating and Finding Differences within 9,999	Levels: 2-3
1			MSC2 Module: Operations with Numbers Unit: Multiplication Session: Repeated Addition and Arrays	Levels: 2-3
1			MSC2 Module: Operations with Numbers Unit: Multiplication Session: Skip Counting to Show Multiplication	Levels: 2-3
1			MSC2 Module: Operations with Numbers Unit: Multiplication Session: Finding Products Less than 100	Levels: 2-3
1			MSC2 Module: Operations with Numbers Unit: Division Session: Meaning of Division	Levels: 2-3
1			MSC2 Module: Operations with Numbers Unit: Division Session: Dividing by a 1-digit Number	Levels: 2-3
1			MSC2 Module: Operations with Numbers Unit: Division Session: Fractional Parts	Levels: 2-3
1			MSC2 Module: Algebraic Thinking Unit: Properties and Relationships Session: Number Patterns and Properties	Levels: 2-3
2	Explain the concept of equal by using objects or giving examples.			
3	Construct and solve open number sentences that have variables representing numbers up to 20.			
4	Use objects, words, and symbols to explain the concept of addition.		MSC2 Module: Geometry and Measurement Unit: Measurement Session: Money	Levels: 2-3
4			MSC2 Module: Algebraic Thinking Unit: Properties and Relationships Session: Number Patterns and Properties	Levels: 2-3
1	Determine the value of variables in missing part problems.	(Mathematics, Level: 3)	MSC1 Module: Algebraic Thinking Unit: Patterns and Displays Session: Number Patterns	Levels: K-1
2	Recognize and use the commutative and associative properties of multiplication.		MSC2 Module: Operations with Numbers Unit: Multiplication Session: Repeated Addition and Arrays	Levels: 2-3
2			MSC2 Module: Algebraic Thinking Unit: Properties and Relationships Session: Number Patterns and Properties	Levels: 2-3
3	Explore the ways that commutative, distributive, identity, and zero properties are useful in computing with numbers.		MSC2 Module: Algebraic Thinking Unit: Properties and Relationships Session: Number Patterns and Properties	Levels: 2-3

1	Identify symbols and letters that represent the concept of a variable as an unknown quantity.	(Mathematics, Level: 4)		
2	Explore the uses of properties (commutative, distributive, associative) in the computation of whole numbers.		MSC3 Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Multipliers	Levels: 4-6
2			MSC3 Module: Operations with Numbers Unit: Addition and Subtraction of Whole Numbers Session: Whole Number Sums	Levels: 4-6
3	Express mathematical relationships using equations.			
4	Determine the value of variables in simple equations.			
5	Develop simple formulas in exploring quantities and their relationships.			
	Use mathematical models to represent and understand quantitative relationships.	(Mathematics, Level: K - 4)		
1	Model situations that involve whole numbers using objects or pictures.	(Mathematics, Level: K)	MSC1 Module: Number Sense Unit: Numbers from 1 to 5 Session: Counting from 1 to 5	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 5 Session: Creating Sets of 1 to 5	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 5 Session: Creating Representations of the Numbers from 1 to 5	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: Counting from 5 to 10	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: Creating Sets of 5 to 10	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: Creating Representations of the Numbers from 5 to 10	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: One More Than	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: One Fewer Than and Zero	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers to 100 Session: Counting from 10 to 20	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers to 100 Session: Counting from 20 to 50	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers to 100 Session: Skip-Counting by Tens and Fives	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers to 100 Session: Skip-Counting by Twos	Levels: K-1

1			MSC1 Module: Number Sense Unit: Comparing and Ordering Session: More Than, Less Than, or The Same	Levels: K-1
1			MSC1 Module: Number Sense Unit: Comparing and Ordering Session: Comparing Numbers within 100	Levels: K-1
1			MSC1 Module: Addition and Subtraction Unit: Addition Session: Combining and Joining within 10	Levels: K-1
1			MSC1 Module: Addition and Subtraction Unit: Subtraction Session: Differences within 10	Levels: K-1
1			MSC1 Module: Addition and Subtraction Unit: Subtraction Session: Differences within 20	Levels: K-1
1			MSC1 Module: Algebraic Thinking Unit: Patterns and Displays Session: Tables and Graphs	Levels: K-1
1	Represent equivalent forms of the same number through the use of physical models, diagrams, and number expressions to 20.	(Mathematics, Level: 1)	MSC1 Module: Number Sense Unit: Numbers from 1 to 5 Session: Counting from 1 to 5	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 5 Session: Creating Sets of 1 to 5	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 5 Session: Creating Representations of the Numbers from 1 to 5	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: Counting from 5 to 10	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: Creating Sets of 5 to 10	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers from 1 to 10 Session: Creating Representations of the Numbers from 5 to 10	Levels: K-1
1			MSC1 Module: Number Sense Unit: Numbers to 100 Session: Counting from 10 to 20	Levels: K-1
1			MSC1 Module: Number Sense Unit: Comparing and Ordering Session: More Than, Less Than, or The Same	Levels: K-1
1			MSC1 Module: Addition and Subtraction Unit: Addition Session: Sums within 20	Levels: K-1
2	Describe situations that involve addition and subtraction of whole numbers including objects, pictures, and symbols.		MSC1 Module: Addition and Subtraction Unit: Addition Session: Combining and Joining within 10	Levels: K-1
2			MSC1 Module: Addition and Subtraction Unit: Addition Session: Comparing within 10	Levels: K-1
2			MSC1 Module: Addition and Subtraction Unit: Addition Session: Sums within 20, with 10 as One Addend	Levels: K-1

2			MSC1 Module: Addition and Subtraction Unit: Addition Session: Sums within 20	Levels: K-1
2			MSC1 Module: Addition and Subtraction Unit: Subtraction Session: Differences within 10	Levels: K-1
2			MSC1 Module: Addition and Subtraction Unit: Subtraction Session: Differences within 20	Levels: K-1
1	Model situations of addition and subtraction of whole numbers using objects, pictures, and symbols.	(Mathematics, Level: 2)	MSC2 Module: Operations with Numbers Unit: Addition and Subtraction Session: Differences within 100	Levels: 2-3
1			MSC2 Module: Operations with Numbers Unit: Addition and Subtraction Session: Estimating and Finding Differences within 1,000	Levels: 2-3
1			MSC2 Module: Operations with Numbers Unit: Addition and Subtraction Session: Estimating and Finding Differences within 9,999	Levels: 2-3
1			MSC2 Module: Operations with Numbers Unit: Multiplication Session: Repeated Addition and Arrays	Levels: 2-3
1			MSC2 Module: Algebraic Thinking Unit: Properties and Relationships Session: Number Patterns and Properties	Levels: 2-3
2	Solve problems related to trading.			
3	Solve addition and subtraction problems by using data from simple charts, picture graphs, and number sentences.		MSC2 Module: Operations with Numbers Unit: Addition and Subtraction Session: Differences within 100	Levels: 2-3
3			MSC2 Module: Operations with Numbers Unit: Addition and Subtraction Session: Estimating and Finding Differences within 9,999	Levels: 2-3
1	Model problem situations with objects and use representations such as pictures, graphs, tables, and equations to draw conclusions.	(Mathematics, Level: 3)		
2	Solve problems involving proportional relationships including unit pricing.			
3	Describe relationships of quantities in the form of mathematical expressions, equations, or inequalities.			
4	Select appropriate operational and relational symbols to make an expression true.		MSC2 Module: Algebraic Thinking Unit: Properties and Relationships Session: Number Patterns and Properties	Levels: 2-3
1	Solve problems involving proportional relationships (including unit pricing and map interpretations; e.g., one inch = five miles; therefore, five inches = ? miles).	(Mathematics, Level: 4)		

2	Model problem situations and use graphs, tables, pictures, and equations to draw conclusions.			
3	Use and interpret formulas to answer questions about quantities and their relationships.			
	Analyze changes in various contexts.	(Mathematics, Level: K - 4)		
1	Verbally describe changes in various contexts.	(Mathematics, Level: K)		
1	Describe qualitative change.	(Mathematics, Level: 1)		
1	Describe quantitative change.	(Mathematics, Level: 2)		
1	Demonstrate how change in one variable can relate to a change in a second variable.	(Mathematics, Level: 3)		
1	Identify and describe situations with constant or varying rates of change and compare them.	(Mathematics, Level: 4)		
2	Determine how a change in one variable relates to a change in a second variable.			
3	Find and analyze patterns using data tables.			
4	Demonstrate and describe varying rates of change in relation to real-world situations.			
	Understand geometric concepts and applications.	(Mathematics, Level: K - 4)		
	Analyze characteristics and properties of two- and three-dimensional geometric shapes and develop mathematical arguments about geometric relationships.			
1	Identify common objects in their environments and describe their geometric features:	(Mathematics, Level: K)		
1	describe, identify, model, and draw common geometric objects		MSC1 Module: Geometry and Measurement Unit: Geometry Session: Triangles and Rectangles	Levels: K-1
1			MSC1 Module: Geometry and Measurement Unit: Geometry Session: Three-Dimensional Shapes	Levels: K-1
1			MSC1 Module: Algebraic Thinking Unit: Patterns and Displays Session: Shapes	Levels: K-1
1	compare familiar plane and solid objects by common attributes		MSC1 Module: Geometry and Measurement Unit: Measurement Session: Length	Levels: K-1
1			MSC1 Module: Geometry and Measurement Unit: Measurement Session: Weight	Levels: K-1
1			MSC1 Module: Geometry and Measurement Unit: Geometry Session: Triangles and Rectangles	Levels: K-1

1			MSC1 Module: Geometry and Measurement Unit: Geometry Session: Three-Dimensional Shapes	Levels: K-1
1			MSC1 Module: Algebraic Thinking Unit: Patterns and Displays Session: Shapes	Levels: K-1
1	Identify common geometric figures and classify them by common attributes:	(Mathematics, Level: 1)		
1	recognize, name, build, and draw both polygonal (up to six sides) and curved shapes		MSC1 Module: Geometry and Measurement Unit: Geometry Session: Triangles and Rectangles	Levels: K-1
1			MSC1 Module: Geometry and Measurement Unit: Geometry Session: Three-Dimensional Shapes	Levels: K-1
1			MSC1 Module: Algebraic Thinking Unit: Patterns and Displays Session: Shapes	Levels: K-1
1	sort two- and three-dimensional shapes into categories based on common attributes		MSC1 Module: Geometry and Measurement Unit: Geometry Session: Triangles and Rectangles	Levels: K-1
1			MSC1 Module: Geometry and Measurement Unit: Geometry Session: Three-Dimensional Shapes	Levels: K-1
1			MSC1 Module: Algebraic Thinking Unit: Patterns and Displays Session: Shapes	Levels: K-1
1	use the attributes of shapes to analyze and identify examples and non-examples of geometric shapes		MSC1 Module: Geometry and Measurement Unit: Geometry Session: Triangles and Rectangles	Levels: K-1
1			MSC1 Module: Geometry and Measurement Unit: Geometry Session: Three-Dimensional Shapes	Levels: K-1
1			MSC1 Module: Algebraic Thinking Unit: Patterns and Displays Session: Shapes	Levels: K-1
1	participate in discussions comparing, identifying, and analyzing attributes to develop the vocabulary needed to describe two- and three-dimensional geometric shapes and their attributes		MSC1 Module: Geometry and Measurement Unit: Measurement Session: Length	Levels: K-1
1			MSC1 Module: Geometry and Measurement Unit: Geometry Session: Triangles and Rectangles	Levels: K-1
1			MSC1 Module: Geometry and Measurement Unit: Geometry Session: Three-Dimensional Shapes	Levels: K-1
1			MSC1 Module: Algebraic Thinking Unit: Patterns and Displays Session: Shapes	Levels: K-1
1	Identify and describe the attributes of common figures in a plane and common objects in space:	(Mathematics, Level: 2)		
1	sort, describe, and analyze plane and solid geometric shapes based on various attributes		MSC2 Module: Geometry and Measurement Unit: Geometry Session: Area	Levels: 2-3

1			MSC2 Module: Geometry and Measurement Unit: Geometry Session: Volume	Levels: 2-3
1	put shapes together and take them apart to form other shapes			
1	explore lines of symmetry in two-dimensional shapes		MSC1 Module: Geometry and Measurement Unit: Geometry Session: Triangles and Rectangles	Levels: K-1
1	Describe and compare the attributes of plane and solid geometric figures to show relationships and solve problems:	(Mathematics, Level: 3)		
1	identify, describe, and classify polygons			
1	identify lines of symmetry in two-dimensional shapes			
1	explore attributes of quadrilaterals			
1	identify right angles			
1	identify, describe, and classify common three-dimensional geometric objects		MSC2 Module: Geometry and Measurement Unit: Geometry Session: Volume	Levels: 2-3
1	Identify, compare, and analyze attributes of two- and three-dimensional shapes and develop vocabulary to describe the attributes:	(Mathematics, Level: 4)		
1	build, draw, create, and describe geometric objects			
1	identify lines that are parallel or perpendicular		MSC3 Module: Geometry Unit: Measurement Session: Rectangles and Squares	Levels: 4-6
1	identify and compare congruent and similar figures			
2	Classify two- and three-dimensional shapes according to their properties and develop definitions of classes like triangles and pyramids-			
2	visualize, describe, and make models of geometric solids in terms of the number of faces, edges, and vertices			
2	interpret two-dimensional representations of three-dimensional objects			
3	Make and test conjectures about geometric properties and relationships and develop logical arguments to justify conclusions.			
	Specify locations and describe spatial relationships using coordinate geometry and other representational systems.	(Mathematics, Level: K - 4)		
1	Follow simple directions to find a specific location in space.	(Mathematics, Level: K)	MSC1 Module: Geometry and Measurement Unit: Geometry Session: Triangles and Rectangles	Levels: K-1

2	Use spatial vocabulary to describe relative position.		MSC1 Module: Geometry and Measurement Unit: Geometry Session: Triangles and Rectangles	Levels: K-1
1	Participate in group and individual activities based on the concepts of space and location:	(Mathematics, Level: 1)		
1	describe direction, location, space, and shape		MSC1 Module: Geometry and Measurement Unit: Geometry Session: Triangles and Rectangles	Levels: K-1
1			MSC1 Module: Geometry and Measurement Unit: Geometry Session: Three-Dimensional Shapes	Levels: K-1
1			MSC1 Module: Algebraic Thinking Unit: Patterns and Displays Session: Shapes	Levels: K-1
1	visualize, describe, and record directions for navigating from one location to another to develop the vocabulary needed to describe direction, distance, location, and representation		MSC1 Module: Geometry and Measurement Unit: Geometry Session: Triangles and Rectangles	Levels: K-1
1	use materials to create representations of the surrounding environment		MSC1 Module: Geometry and Measurement Unit: Geometry Session: Triangles and Rectangles	Levels: K-1
1	develop estimates and measure distances using nonstandard measurements		MSC1 Module: Geometry and Measurement Unit: Measurement Session: Length	Levels: K-1
1			MSC1 Module: Geometry and Measurement Unit: Geometry Session: Triangles and Rectangles	Levels: K-1
1	Find and name locations with simple relationships like 'near to' and apply ideas about relative position.	(Mathematics, Level: 2)		
2	Describe, name, and interpret direction in navigating space and apply ideas about direction and distance.			
3	Use maps to locate points and navigate through mazes or maps.			
4	Visualize, justify, and create paths using landmarks, space, shapes, and descriptive language.			
5	Make and draw rectangular arrays of squares.			
1	Describe location and movement using common language and geometric vocabulary.	(Mathematics, Level: 3)		
2	Use ordered pairs to graph, locate specific points, create paths, and measure distances within a coordinate grid system.			
3	Use a two-dimensional grid system to locate positions representing actual places.			

1	Describe location and movement using common language and geometric vocabulary.	(Mathematics, Level: 4)	MSC3 Module: Geometry Unit: Coordinate Geometry and Algebra Session: The Coordinate Plane	Levels: 4-6
2	Use ordered pairs to graph, locate, identify points, and describe paths in the first quadrant of the coordinate plane.		MSC3 Module: Geometry Unit: Coordinate Geometry and Algebra Session: The Coordinate Plane	Levels: 4-6
2			MSC3 Module: Geometry Unit: Coordinate Geometry and Algebra Session: Symmetry and Transformations	Levels: 4-6
3	Use a variety of methods for measuring distances between locations on a grid.		MSC3 Module: Geometry Unit: Coordinate Geometry and Algebra Session: The Coordinate Plane	Levels: 4-6
	Apply transformations and use symmetry to analyze mathematical situations.	(Mathematics, Level: K - 4)		
1	Use manipulatives to demonstrate rotation, translations, and reflection.	(Mathematics, Level: K)		
2	Investigate the symmetry of two-dimensional shapes.		MSC1 Module: Geometry and Measurement Unit: Geometry Session: Triangles and Rectangles	Levels: K-1
1	Predict the results of changing a shape's position or orientation by using rotation, reflection, and translations.	(Mathematics, Level: 1)	MSC1 Module: Geometry and Measurement Unit: Geometry Session: Triangles and Rectangles	Levels: K-1
1			MSC1 Module: Geometry and Measurement Unit: Geometry Session: Three-Dimensional Shapes	Levels: K-1
1			MSC1 Module: Algebraic Thinking Unit: Patterns and Displays Session: Shapes	Levels: K-1
2	Create simple symmetrical shapes and pictures.			
3	Recognize and describe the symmetric characteristics of designs.			
1	Use systematic thinking to solve geometric puzzles.	(Mathematics, Level: 2)		
2	Use materials to investigate rotational and line symmetry and create shapes that have symmetry.			
1	Predict and describe the results of sliding, flipping, and turning two-dimensional shapes.	(Mathematics, Level: 3)		
2	Identify and describe the line of symmetry in two- and three-dimensional shapes.			
1	Create and describe rotational designs using language of transformational symmetry.	(Mathematics, Level: 4)	MSC3 Module: Geometry Unit: Coordinate Geometry and Algebra Session: Symmetry and Transformations	Levels: 4-6
2	Describe a motion or set of motions that will show that two shapes are congruent.			
	Use visualization, spatial reasoning, and geometric modeling to solve problems.	(Mathematics, Level: K - 4)		

1	Describe how to get from one location to another.	(Mathematics, Level: K)	MSC1 Module: Geometry and Measurement Unit: Geometry Session: Triangles and Rectangles	Levels: K-1
2	Find and describe geometric shapes in nature or architecture.		MSC1 Module: Geometry and Measurement Unit: Geometry Session: Triangles and Rectangles	Levels: K-1
1	Use combinations of shapes to make a new shape to demonstrate relationships between shapes.	(Mathematics, Level: 1)	MSC1 Module: Algebraic Thinking Unit: Patterns and Displays Session: Shapes	Levels: K-1
2	Create three-dimensional shapes based on two-dimensional representations.			
3	Participate in activities to develop mental visualization and spatial memory.			
4	Describe how to get from one location to another by visualizing the landmarks along the route.		MSC1 Module: Geometry and Measurement Unit: Geometry Session: Triangles and Rectangles	Levels: K-1
5	Identify structures from different views or match views of the same structure portrayed from different perspectives.		MSC1 Module: Geometry and Measurement Unit: Geometry Session: Triangles and Rectangles	Levels: K-1
1	Demonstrate relationships of different attributes with concrete while preserving others such as increasing number of sides while perimeter stays the same).	(Mathematics, Level: 2)		
2	Select and use visualization skills to create mental images of geometric shapes.			
3	Describe geometric shapes and structures from different perspectives.		MSC2 Module: Geometry and Measurement Unit: Geometry Session: Area	Levels: 2-3
4	Relate geometric ideas to numbers.		MSC2 Module: Geometry and Measurement Unit: Geometry Session: Area	Levels: 2-3
4			MSC2 Module: Geometry and Measurement Unit: Geometry Session: Volume	Levels: 2-3
5	Recognize geometric shapes and structures in the environment and specify their location.			
1	Visualize, build, and draw geometric objects.	(Mathematics, Level: 3)		
2	Create and describe mental images of objects, patterns, and paths.			
3	Recognize geometric shapes and structures.			
4	Use geometric models to solve problems in other areas of mathematics.			
5	Identify and build three-dimensional objects from two-dimensional representations of that object.			
6	Investigate two-dimensional representations of three-dimensional shapes.			

7	Explore geometric ideas and relationships as they apply to other disciplines and to problems that arise in the classroom or in everyday life.			
1	Develop and use mental images of geometric shapes to solve problems.	(Mathematics, Level: 4)		
2	Use geometric models such as number lines, arrays, and computer simulations to investigate number relationships.		MSC3 Module: Fractions Unit: Proper and Improper Fractions Session: Proper Fractions	Levels: 4-6
3	Explore relationships involving perimeter and area:			
3	measure area of rectangular shapes and use appropriate units		MSC3 Module: Geometry Unit: Measurement Session: Rectangles and Squares	Levels: 4-6
3			MSC3 Module: Geometry Unit: Measurement Session: Parallelograms and Trapezoids	Levels: 4-6
3	recognize that area can have the same perimeter but different areas and vice versa		MSC3 Module: Geometry Unit: Measurement Session: Rectangles and Squares	Levels: 4-6
3	use models and formulas to solve problems involving perimeter and area of rectangles and squares		MSC3 Module: Geometry Unit: Measurement Session: Rectangles and Squares	Levels: 4-6
3			MSC3 Module: Geometry Unit: Measurement Session: Parallelograms and Trapezoids	Levels: 4-6
	Understand measurement systems and applications.	(Mathematics, Level: K - 4)		
	Understand measurable attributes of objects and the units, systems, and process of measurement.			
1	Describe and compare, using appropriate concepts and vocabulary, the measurable properties of length, volume, weight, and time.	(Mathematics, Level: K)	MSC1 Module: Geometry and Measurement Unit: Measurement Session: Length	Levels: K-1
1			MSC1 Module: Geometry and Measurement Unit: Measurement Session: Weight	Levels: K-1
1			MSC1 Module: Geometry and Measurement Unit: Measurement Session: Clock and Calendar Time	Levels: K-1
2	Use tools to make predictions			
3	Measure using non-standard units of measurement.		MSC1 Module: Geometry and Measurement Unit: Measurement Session: Length	Levels: K-1
3			MSC1 Module: Geometry and Measurement Unit: Measurement Session: Weight	Levels: K-1
4	Use digital and analog (face) clocks to tell time to the hour.		MSC1 Module: Geometry and Measurement Unit: Measurement Session: Clock and Calendar Time	Levels: K-1

1	Develop an understanding of measurable properties using appropriate concepts and vocabulary:	(Mathematics, Level: 1)		
1	length by measuring and estimating		MSC1 Module: Geometry and Measurement Unit: Measurement Session: Length	Levels: K-1
1	weight by measuring, estimating, and weighing		MSC1 Module: Geometry and Measurement Unit: Measurement Session: Weight	Levels: K-1
1	volume by measuring, estimating, and weighing		MSC2 Module: Geometry and Measurement Unit: Geometry Session: Volume	Levels: 2-3
1	area by measuring and estimating			
1	time by estimating		MSC1 Module: Geometry and Measurement Unit: Measurement Session: Clock and Calendar Time	Levels: K-1
2	Use digital and analog (face) clocks to tell time to the half hour.		MSC1 Module: Geometry and Measurement Unit: Measurement Session: Clock and Calendar Time	Levels: K-1
1	Identify a unit of measure and repeat that unit comparing it to the item being measured.	(Mathematics, Level: 2)		
2	Use direct comparison to compare and order objects according to length, mass, and area.		MSC2 Module: Geometry and Measurement Unit: Geometry Session: Area	Levels: 2-3
3	Measure and compare common objects using standard and non-standard units of length.		MSC1 Module: Geometry and Measurement Unit: Measurement Session: Length	Levels: K-1
3			MSC2 Module: Geometry and Measurement Unit: Geometry Session: Volume	Levels: 2-3
4	Find and represent the value of a collection of coins and dollars up to 5 dollars, using appropriate notation.		MSC2 Module: Geometry and Measurement Unit: Measurement Session: Money	Levels: 2-3
5	Identify and use time intervals.		MSC2 Module: Geometry and Measurement Unit: Measurement Session: Time	Levels: 2-3
6	Select and use appropriate measurement tools.			
7	Tell time to the nearest quarter hour.		MSC2 Module: Geometry and Measurement Unit: Measurement Session: Time	Levels: 2-3
1	Demonstrate understanding of the need for measuring with standard units and become familiar with standard units in the U.S. customary system.	(Mathematics, Level: 3)	MSC2 Module: Geometry and Measurement Unit: Geometry Session: Area	Levels: 2-3
2	Choose and use the appropriate units and measurement tools to quantify the properties of objects.			
3	Identify time to the nearest minute (elapsed time) and relate time to everyday events.		MSC2 Module: Geometry and Measurement Unit: Measurement Session: Time	Levels: 2-3
4	Identify and use time intervals			

5	Identify properties and select the appropriate type of unit for measuring each property.			
6	Demonstrate understanding that measurements are approximations, investigate differences in units and their effect on precision, and consider the degree of accuracy for different situations.			
1	Select the appropriate type of unit for measuring perimeter and size of an angle.	(Mathematics, Level: 4)	MSC3 Module: Geometry Unit: Measurement Session: Lines, Angles, and Circles	Levels: 4-6
1			MSC3 Module: Geometry Unit: Measurement Session: Rectangles and Squares	Levels: 4-6
1			MSC3 Module: Geometry Unit: Measurement Session: Triangles	Levels: 4-6
1			MSC3 Module: Geometry Unit: Measurement Session: Parallelograms and Trapezoids	Levels: 4-6
2	Understand the need for measuring with standard units and become familiar with the standard units in customary and metric system.			
3	Identify the inverse relationship between the size of the units and the number of units.			
4	Develop formulas to determine the surface areas of rectangular solids.			
5	Develop, understand, and use formulas to find the area of rectangles and related triangles and parallelograms.		MSC3 Module: Geometry Unit: Measurement Session: Rectangles and Squares	Levels: 4-6
5			MSC3 Module: Geometry Unit: Measurement Session: Parallelograms and Trapezoids	Levels: 4-6
6	Carry out simple conversions within a system of measurement.			
	Apply appropriate techniques, tools, and formulas to determine measurements.	(Mathematics, Level: K - 4)		
1	Explore measuring objects using a repeating non-standard unit of measurement	(Mathematics, Level: K)		
1	Measure with multiple copies of units the same size.	(Mathematics, Level: 1)	MSC1 Module: Geometry and Measurement Unit: Measurement Session: Length	Levels: K-1
2	Use repetition of a single unit to measure something larger than the unit.		MSC1 Module: Geometry and Measurement Unit: Measurement Session: Length	Levels: K-1
1	Develop common referents to make comparisons and estimates of length, volume, weight, area, and time.	(Mathematics, Level: 2)	MSC2 Module: Geometry and Measurement Unit: Geometry Session: Area	Levels: 2-3
1			MSC2 Module: Geometry and Measurement Unit: Geometry Session: Volume	Levels: 2-3

1			MSC2 Module: Geometry and Measurement Unit: Measurement Session: Time	Levels: 2-3
2	Develop an understanding that different measuring tools will yield different numerical measurements of the same object.			
3	Estimate measurements and develop precision in measuring objects.			
1	Find the area of rectangles using appropriate tools	(Mathematics, Level: 3)	MSC2 Module: Geometry and Measurement Unit: Geometry Session: Area	Levels: 2-3
2	Estimate measurements.			
3	Use appropriate standard units and tools to estimate, measure, and solve problems.		MSC2 Module: Geometry and Measurement Unit: Measurement Session: Temperature	Levels: 2-3
4	Recognize a 90-degree angle and use it as a strategy to estimate the size of other angles.			
1	Estimate perimeters, areas of rectangles, triangles, and irregular shapes.	(Mathematics, Level: 4)	MSC3 Module: Geometry Unit: Measurement Session: Rectangles and Squares	Levels: 4-6
1			MSC3 Module: Geometry Unit: Measurement Session: Triangles	Levels: 4-6
2	Find the area of rectangles, related triangles, and parallelograms.		MSC3 Module: Geometry Unit: Measurement Session: Rectangles and Squares	Levels: 4-6
2			MSC3 Module: Geometry Unit: Measurement Session: Parallelograms and Trapezoids	Levels: 4-6
3	Estimate, measure, and solve problems involving length, area, mass, time, and temperature using appropriate standard units and tools.		MSC3 Module: Geometry Unit: Measurement Session: Rectangles and Squares	Levels: 4-6
3			MSC3 Module: Geometry Unit: Measurement Session: Parallelograms and Trapezoids	Levels: 4-6
4	Identify common measurements of turns.			
5	Compute elapsed time and make and interpret schedules.			
6	Use tools to measure angles		MSC3 Module: Geometry Unit: Measurement Session: Lines, Angles, and Circles	Levels: 4-6
	Understand how to formulate questions, analyze data, and determine probabilities.	(Mathematics, Level: K - 4)		
	Formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them.			
1	Collect data about objects and events in the environment to answer simple questions	(Mathematics, Level: K)		
1	Collect, organize, represent, and compare data by category on graphs and charts to answer simple questions:	(Mathematics, Level: 1)		

1	answer questions about 'how' data can be gathered		MSC1 Module: Algebraic Thinking Unit: Patterns and Displays Session: Tables and Graphs	Levels: K-1
1	gather data by interviewing, surveying, and making observations		MSC1 Module: Algebraic Thinking Unit: Patterns and Displays Session: Tables and Graphs	Levels: K-1
1	organize data into appropriate categories by sorting based on shared properties		MSC1 Module: Algebraic Thinking Unit: Patterns and Displays Session: Tables and Graphs	Levels: K-1
1	participate in discussions about selecting an appropriate way to display the data		MSC1 Module: Algebraic Thinking Unit: Patterns and Displays Session: Tables and Graphs	Levels: K-1
1	represent data using objects, pictures, tables, and simple bar graphs		MSC1 Module: Algebraic Thinking Unit: Patterns and Displays Session: Tables and Graphs	Levels: K-1
1	Collect numerical data systematically.	(Mathematics, Level: 2)		
2	Represent data by using concrete objects, pictures, tables, numbers, tallies, and graphs.			
3	Pose questions about students' selves and their surroundings and gather data by interviewing, surveying, and making observations to answer the questions posed.			
4	Identify patterns and explain the relationships of the units in the pattern.			
1	Collect and organize data using observations, measurements, surveys, or experiments.	(Mathematics, Level: 3)		
2	Represent data using tables and graphs.			
3	Conduct simple experiments by determining the number of possible outcomes and make simple predictions:			
3	identify whether events are certain, likely, unlikely, or impossible			
3	record the outcomes for a simple event and keep track of repetitions			
3	summarize and record the results in a clear and organized way			
3	use the results to predict future events			
1	Organize, represent, and interpret numerical and categorical data and clearly communicate findings:	(Mathematics, Level: 4)		
1	choose and construct representations that are appropriate for the data set		MSC3 Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Looking at Chance	Levels: 4-6
1	recognize the differences in representing categorical and numerical data			

2	Design investigations and represent data using tables and graphs.			
	Select and use appropriate statistical methods to analyze data.	(Mathematics, Level: K - 4)		
1	Describe simple data and pose questions about the data.	(Mathematics, Level: K)		
1	Analyze simple data:	(Mathematics, Level: 1)		
1	interpret what the graph or other representation shows		MSC1 Module: Algebraic Thinking Unit: Patterns and Displays Session: Tables and Graphs	Levels: K-1
1	determine whether or not the data gathered helps answer the specific question that was posed			
1	compare parts of the data to make statements about the data as a whole		MSC1 Module: Algebraic Thinking Unit: Patterns and Displays Session: Tables and Graphs	Levels: K-1
1	Describe and interpret data by drawing conclusions and making conjectures based on the data collected.	(Mathematics, Level: 2)		
2	Display data in a variety of formats.			
1	Apply and explain the uses of sampling techniques for gathering data.	(Mathematics, Level: 3)		
1	Compare and describe related data sets.	(Mathematics, Level: 4)	MSC3 Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Displaying and Analyzing Data	Levels: 4-6
2	Use the concepts of median, mode, maximum, minimum, and range and draw conclusions about a data set.		MSC3 Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Displaying and Analyzing Data	Levels: 4-6
3	Use data analysis to make reasonable inferences/predictions and to develop convincing arguments from data described in a variety of formats.			
	Develop and evaluate inferences and predictions that are based on data.	(Mathematics, Level: K - 4)		
1	Make simple predictions.	(Mathematics, Level: K)		
1	Make conclusions based on data.	(Mathematics, Level: 1)	MSC1 Module: Algebraic Thinking Unit: Patterns and Displays Session: Tables and Graphs	Levels: K-1
1	Discuss events related to students' experiences as 'likely' or 'unlikely' and 'possible' or 'certain.'	(Mathematics, Level: 2)		
2	Recognize appropriate conclusions generated from the data collected.			
3	Recognize inappropriate descriptions of the data set.			

1	Analyze data displayed in a variety of formats to make reasonable inferences and predictions, answer questions, and make decisions.	(Mathematics, Level: 3)		
1	Propose and justify conclusions and predictions based on data.	(Mathematics, Level: 4)		
2	Develop convincing arguments from data displayed in a variety of formats.			
	Understand and apply basic concepts of probability.	(Mathematics, Level: K - 4)		
1	Answer questions that relate to the possibility of familiar events happening or not.	(Mathematics, Level: K)		
1	Discuss the likelihood of events (based on student experiences or from books) using terminology such as 'more likely,' 'less likely,' 'possible,' or 'certain.'	(Mathematics, Level: 1)		
2	Observe, explore, and discuss whether some events occur more often than others.			
1	Investigate concepts of chance.	(Mathematics, Level: 2)		
2	Investigate whether outcomes of a simple event are equally likely to occur.			
1	Discuss the degree of likelihood of events and use terminology such as 'certain,' 'likely,' or 'unlikely.'	(Mathematics, Level: 3)		
2	Predict the outcomes of simple experiments and test the predictions using concrete objects.			
3	Record the probability of a specific outcome for a simple probability situation.			
1	Describe events as 'likely,' 'unlikely,' or 'impossible' and quantify simple probability situations:	(Mathematics, Level: 4)		
1	represent all possible outcomes for a simple probability situation in an organized way		MSC3 Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Looking at Chance	Levels: 4-6
1	express outcomes of experimental probability situations verbally and numerically		MSC3 Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Looking at Chance	Levels: 4-6
2	List all the possible combinations of objects from three sets.		MSC3 Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Looking at Chance	Levels: 4-6
	Understand numerical concepts and mathematical operations.	(Mathematics, Level: 5 - 8)		

	Understand numbers, ways of representing numbers, relationships among numbers, and number systems.			
1	Compare and order using concrete or illustrated models:	(Mathematics, Level: 5)		
1	whole numbers (to millions)		MSC3 Module: Numbers and Number Sense Unit: Large and Small Numbers Session: Ordering and Rounding Whole Numbers	Levels: 4-6
1			MSC3 Module: Numbers and Number Sense Unit: Large and Small Numbers Session: Whole Numbers to One Million	Levels: 4-6
1	common fractions (halves, thirds, fourths, eighths)		MSC3 Module: Fractions Unit: Proper and Improper Fractions Session: Proper Fractions	Levels: 4-6
1	decimals (thousandths)		MSC3 Module: Decimals Unit: Introduction Session: Tenths, Hundredths, and Thousandths	Levels: 4-6
1			MSC3 Module: Decimals Unit: Introduction Session: Ordering and Rounding	Levels: 4-6
1			MSC3 Module: Decimals Unit: Introduction Session: Ratios, Decimals, and Percents	Levels: 4-6
1			MSC3 Module: Decimals Unit: Addition and Subtraction Session: Subtracting Decimals	Levels: 4-6
1			MSC4 Module: Decimals Unit: Essentials of Decimals Session: Rounding Decimals	Levels: 6-8
2	Demonstrate understanding of the magnitude of the value of numbers from thousandths to millions, including common fractions.		MSC3 Module: Decimals Unit: Introduction Session: Tenths, Hundredths, and Thousandths	Levels: 4-6
2			MSC3 Module: Numbers and Number Sense Unit: Large and Small Numbers Session: Whole Numbers to One Million	Levels: 4-6
3	Represent place value using concrete or illustrated models up to one billion (1,000,000,000).		MSC3 Module: Numbers and Number Sense Unit: Large and Small Numbers Session: Ordering and Rounding Whole Numbers	Levels: 4-6
4	Interpret percents as part of a hundred (i.e., find decimal and percent equivalents for common fractions, explain how they represent the same value, and compute a given percent of a whole number).		MSC3 Module: Decimals Unit: Introduction Session: Ratios, Decimals, and Percents	Levels: 4-6
5	Identify and represent on a number line decimals, fractions, and mixed numbers.		MSC3 Module: Fractions Unit: Proper and Improper Fractions Session: Improper Fractions	Levels: 4-6
5			MSC4 Module: Decimals Unit: Essentials of Decimals Session: Investigating Decimal Place Values	Levels: 6-8

6	Identify prime and composite numbers to 50.		MSC3 Module: Numbers and Number Sense Unit: Numbers as Factors Session: Prime and Composite Numbers	Levels: 4-6
1	Compare and order rational numbers.	(Mathematics, Level: 6)	MSC4 Module: Decimals Unit: Essentials of Decimals Session: Investigating Decimal Place Values	Levels: 6-8
2	Use equivalent representations for rational numbers.			
3	Use appropriate representations of positive rational numbers in the context of real-life applications.			
4	Identify greatest common factor and least common multiples for a set of whole numbers.		MSC3 Module: Numbers and Number Sense Unit: Numbers as Factors Session: Finding Factors	Levels: 4-6
4			MSC4 Module: Fractions Unit: Multiplying Fractions Session: Using the GCF in Finding Products	Levels: 6-8
4			MSC3 Module: Numbers and Number Sense Unit: Numbers as Factors Session: Identifying Common Factors	Levels: 4-6
5	Identify and represent on a number line decimals, fractions, mixed numbers, and positive and negative integers.		MSC3 Module: Operations with Numbers Unit: The Integers Session: Integer Sums	Levels: 4-6
5			MSC3 Module: Fractions Unit: Proper and Improper Fractions Session: Improper Fractions	Levels: 4-6
5			MSC3 Module: Numbers and Number Sense Unit: Large and Small Numbers Session: Negative Whole Numbers	Levels: 4-6
5			MSC4 Module: Fractions Unit: Essentials of Fractions Session: Exploring Proper and Improper Fractions	Levels: 6-8
5			MSC4 Module: Fractions Unit: Multiplying Fractions Session: Finding Products of Fractions, Whole Numbers, and Mixed Numbers	Levels: 6-8
5			MSC4 Module: Fractions Unit: Dividing Fractions Session: Estimating Quotients of Fractions	Levels: 6-8
5			MSC4 Module: Fractions Unit: Adding Fractions Session: Adding with Like Denominators	Levels: 6-8
5			MSC4 Module: Fractions Unit: Subtracting Fractions Session: Solving Missing Value Problems when Subtracting Fractions	Levels: 6-8
5			MSC4 Module: Decimals Unit: Essentials of Decimals Session: Investigating Decimal Place Values	Levels: 6-8
5			MSC4 Module: Decimals Unit: Essentials of Decimals Session: Rounding Decimals	Levels: 6-8

5			MSC4 Module: Decimals Unit: Essentials of Decimals Session: Exploring Repeating and Terminating Decimals	Levels: 6-8
5			MSC4 Module: Integers and Order of Operations Unit: Adding and Subtracting Signed Numbers Session: Exploring the Number Line and Absolute Value	Levels: 6-8
1	Determine the absolute value of rational numbers.	(Mathematics, Level: 7)	MSC4 Module: Integers and Order of Operations Unit: Adding and Subtracting Signed Numbers Session: Exploring the Number Line and Absolute Value	Levels: 6-8
2	Illustrate the relationships among natural (i.e., counting) numbers, whole numbers, integers, rational and irrational numbers.		MSC5 Module: Radicals & Exponents Unit: Introduction to Radicals & Pythagorean Theorem Session: Defining Irrational Numbers	Levels: 6-8
3	Use properties of the real-number system to explain reasoning and to formulate and solve real-world problems.			
4	Read, write, and compare rational numbers in scientific notation with approximate numbers using scientific notation.		MSC5 Module: Radicals & Exponents Unit: Introduction to Scientific Notation Session: Writing Numbers Using Scientific Notation	Levels: 6-8
4			MSC5 Module: Radicals & Exponents Unit: Introduction to Scientific Notation Session: Comparing Numbers in Scientific Notation	Levels: 6-8
4			MSC5 Module: Radicals & Exponents Unit: Introduction to Scientific Notation Session: Writing Numbers between 0 & 1 in Scientific Notation	Levels: 6-8
5	Simplify numerical expressions using order of operations.		MSC4 Module: Integers and Order of Operations Unit: Order of Operations Session: Simplifying Expressions	Levels: 6-8
5			MSC4 Module: Integers and Order of Operations Unit: Order of Operations Session: Introducing the Distributive Property	Levels: 6-8
5			MSC4 Module: Integers and Order of Operations Unit: Order of Operations Session: Using Grouping Symbols	Levels: 6-8
5			MSC5 Module: Essentials of Algebra Unit: Evaluating an Algebraic Expression Session: Combining Like Terms	Levels: 6-8
1	Sort numbers by their properties.	(Mathematics, Level: 8)		
2	Demonstrate the magnitude of rational numbers.		MSC ALG.2 Module: The Real Number System Unit: Rational & Irrational Numbers Session: Defining the Real Numbers	Levels: 9-12
2			MSC4 Module: Fractions Unit: Essentials of Fractions Session: Exploring Proper and Improper Fractions	Levels: 6-8
	Understand the meaning of operations and how they relate to one another.	(Mathematics, Level: 5 - 8)		

1	Explain and perform whole number division and express remainders as a whole number or a fractional part as appropriate to the context of real-life problems.	(Mathematics, Level: 5)	MSC3 Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Introduction to Long Division	Levels: 4-6
1			MSC3 Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Divisors	Levels: 4-6
2	Add and subtract decimals.		MSC3 Module: Decimals Unit: Addition and Subtraction Session: Adding Decimals	Levels: 4-6
2			MSC3 Module: Decimals Unit: Addition and Subtraction Session: Subtracting Decimals	Levels: 4-6
3	Add and subtract fractions and mixed numbers without regrouping and express answers in simplest form.		MSC3 Module: Fractions Unit: Addition and Subtraction Session: Sums involving Like Denominators	Levels: 4-6
3			MSC3 Module: Fractions Unit: Addition and Subtraction Session: Differences involving Like Denominators	Levels: 4-6
3			MSC3 Module: Fractions Unit: Addition and Subtraction Session: Working with Unlike Denominators	Levels: 4-6
4	Find the factors and multiples of whole numbers.		MSC3 Module: Numbers and Number Sense Unit: Numbers as Factors Session: Finding Factors	Levels: 4-6
4			MSC3 Module: Numbers and Number Sense Unit: Numbers as Factors Session: Identifying Common Factors	Levels: 4-6
5	Use arithmetic operations and inverse relationships to represent and solve real-world problems.			
6	Identify and represent on a number line decimals, fractions, and mixed numbers.		MSC3 Module: Decimals Unit: Introduction Session: Tenths, Hundredths, and Thousandths	Levels: 4-6
7	Demonstrate proficiency with division, including one- and two-digit divisors.		MSC3 Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Introduction to Long Division	Levels: 4-6
8	Solve simple problems involving the addition and subtraction of fractions and mixed numbers.		MSC4 Module: Integers and Order of Operations Unit: Adding and Subtracting Signed Numbers Session: Subtracting with Absolute Value	Levels: 6-8
8			MSC3 Module: Fractions Unit: Addition and Subtraction Session: Sums involving Like Denominators	Levels: 4-6
8			MSC3 Module: Fractions Unit: Addition and Subtraction Session: Differences involving Like Denominators	Levels: 4-6
8			MSC3 Module: Fractions Unit: Addition and Subtraction Session: Working with Unlike Denominators	Levels: 4-6
8			MSC4 Module: Fractions Unit: Adding Fractions Session: Solving Missing Value Problems when Adding Fractions	Levels: 6-8

9	Represent and use fractions and decimals in equivalent forms.		MSC3 Module: Decimals Unit: Introduction Session: Tenths, Hundredths, and Thousandths	Levels: 4-6
1	Calculate multiplication and division problems using contextual situations.	(Mathematics, Level: 6)	MSC3 Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Multipliers	Levels: 4-6
1			MSC3 Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Introduction to Long Division	Levels: 4-6
1			MSC3 Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Divisors	Levels: 4-6
1			MSC3 Module: Fractions Unit: Multiplication and Division Session: Finding Products	Levels: 4-6
1			MSC4 Module: Fractions Unit: Multiplying Fractions Session: Representing Multiplication	Levels: 6-8
2	Factor a whole number into a product of its primes.			
3	Demonstrate the relationship and equivalency among ratios and percents.		MSC4 Module: Percents Unit: Essentials of Percents Session: Investigating the Meaning of Percent	Levels: 6-8
3			MSC4 Module: Percents Unit: Essentials of Percents Session: Expressing Percents as Proper Fractions	Levels: 6-8
3			MSC4 Module: Percents Unit: Essentials of Percents Session: Expressing Percents greater than 100% as Improper Fractions	Levels: 6-8
4	Use proportions to solve problems.		MSC5 Module: Ratio & Proportion Unit: Proportion Session: Solving for a Variable in a Proportion	Levels: 6-8
4			MSC5 Module: Ratio & Proportion Unit: Direct & Inverse Variation Session: Exploring & Solving Direct Variation Problems	Levels: 6-8
4			MSC5 Module: Ratio & Proportion Unit: Direct & Inverse Variation Session: Solving Inverse Variation Problems	Levels: 6-8
4			MSC5 Module: Ratio & Proportion Unit: Similar Polygons Session: Defining Similarity	Levels: 6-8
5	Explain and perform:			
5	whole number division and express remainders as decimals or appropriately in the context of the problem		MSC3 Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Introduction to Long Division	Levels: 4-6
5			MSC3 Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Divisors	Levels: 4-6

5			MSC3 Module: Decimals Unit: Multiplication and Division Session: Dividing Decimals by Whole Numbers	Levels: 4-6
5	addition, subtraction, multiplication, and division with decimals		MSC3 Module: Decimals Unit: Addition and Subtraction Session: Adding Decimals	Levels: 4-6
5			MSC3 Module: Decimals Unit: Addition and Subtraction Session: Subtracting Decimals	Levels: 4-6
5			MSC3 Module: Decimals Unit: Multiplication and Division Session: Multiplying Decimals	Levels: 4-6
5			MSC3 Module: Decimals Unit: Multiplication and Division Session: Dividing Decimals by Whole Numbers	Levels: 4-6
5			MSC4 Module: Decimals Unit: Adding and Subtracting Decimals Session: Using Place Value Grids	Levels: 6-8
5			MSC4 Module: Decimals Unit: Adding and Subtracting Decimals Session: Regrouping with Whole Numbers	Levels: 6-8
5			MSC4 Module: Decimals Unit: Adding and Subtracting Decimals Session: Regrouping to Hundredths	Levels: 6-8
5			MSC4 Module: Decimals Unit: Multiplying Decimals Session: Calculating Products	Levels: 6-8
5			MSC4 Module: Decimals Unit: Multiplying Decimals Session: Finding the Volume of a Prism	Levels: 6-8
5			MSC4 Module: Decimals Unit: Dividing Decimals Session: Dividing Decimals by Whole Numbers	Levels: 6-8
5			MSC4 Module: Decimals Unit: Dividing Decimals Session: Estimating and Finding Quotients	Levels: 6-8
5			MSC4 Module: Decimals Unit: Dividing Decimals Session: Dividing by Powers of 10	Levels: 6-8
5	addition and subtraction with integers		MSC4 Module: Integers and Order of Operations Unit: Adding and Subtracting Signed Numbers Session: Subtracting with Absolute Value	Levels: 6-8
5			MSC4 Module: Integers and Order of Operations Unit: Order of Operations Session: Simplifying Expressions	Levels: 6-8
5			MSC3 Module: Operations with Numbers Unit: The Integers Session: Differences Between Integers	Levels: 4-6
5	addition, subtraction, and multiplication with fractions and mixed numerals		MSC3 Module: Fractions Unit: Addition and Subtraction Session: Sums involving Like Denominators	Levels: 4-6
5			MSC3 Module: Fractions Unit: Addition and Subtraction Session: Differences involving Like Denominators	Levels: 4-6
5			MSC3 Module: Fractions Unit: Addition and Subtraction Session: Working with Unlike Denominators	Levels: 4-6
5			MSC3 Module: Fractions Unit: Multiplication and Division Session: Finding Products	Levels: 4-6

5			MSC4 Module: Fractions Unit: Essentials of Fractions Session: Exploring Proper and Improper Fractions	Levels: 6-8
5			MSC4 Module: Fractions Unit: Multiplying Fractions Session: Finding Products of Fractions, Whole Numbers, and Mixed Numbers	Levels: 6-8
5			MSC4 Module: Fractions Unit: Multiplying Fractions Session: Using the GCF in Finding Products	Levels: 6-8
5			MSC4 Module: Fractions Unit: Multiplying Fractions Session: Representing Multiplication	Levels: 6-8
5			MSC4 Module: Fractions Unit: Dividing Fractions Session: Estimating Quotients of Fractions	Levels: 6-8
5			MSC4 Module: Fractions Unit: Adding Fractions Session: Adding with Like Denominators	Levels: 6-8
5			MSC4 Module: Fractions Unit: Adding Fractions Session: Adding with Unlike Denominators	Levels: 6-8
5			MSC4 Module: Fractions Unit: Adding Fractions Session: Solving Missing Value Problems when Adding Fractions	Levels: 6-8
5			MSC4 Module: Fractions Unit: Subtracting Fractions Session: Subtracting with Like Denominators	Levels: 6-8
5			MSC4 Module: Fractions Unit: Subtracting Fractions Session: Subtracting with Unlike Denominators	Levels: 6-8
5			MSC4 Module: Fractions Unit: Subtracting Fractions Session: Solving Missing Value Problems when Subtracting Fractions	Levels: 6-8
6	Determine the least common multiple and the greatest common divisor of whole numbers and use them to solve problems with fractions.		MSC4 Module: Fractions Unit: Multiplying Fractions Session: Using the GCF in Finding Products	Levels: 6-8
6			MSC4 Module: Fractions Unit: Multiplying Fractions Session: Representing Multiplication	Levels: 6-8
6			MSC4 Module: Fractions Unit: Dividing Fractions Session: Using Multiplicative Inverses	Levels: 6-8
6			MSC4 Module: Fractions Unit: Dividing Fractions Session: Solving Missing Value Problems when Dividing Fractions	Levels: 6-8
6			MSC4 Module: Fractions Unit: Adding Fractions Session: Adding with Unlike Denominators	Levels: 6-8
6			MSC4 Module: Fractions Unit: Adding Fractions Session: Solving Missing Value Problems when Adding Fractions	Levels: 6-8

1	Add, subtract, multiply, and divide rational numbers and take positive rational numbers to whole-number powers.	(Mathematics, Level: 7)	MSC4 Module: Fractions Unit: Multiplying Fractions Session: Finding Products of Fractions, Whole Numbers, and Mixed Numbers	Levels: 6-8
1			MSC4 Module: Fractions Unit: Multiplying Fractions Session: Using the GCF in Finding Products	Levels: 6-8
1			MSC4 Module: Fractions Unit: Dividing Fractions Session: Solving Missing Value Problems when Dividing Fractions	Levels: 6-8
1			MSC4 Module: Fractions Unit: Subtracting Fractions Session: Subtracting with Like Denominators	Levels: 6-8
1			MSC4 Module: Fractions Unit: Subtracting Fractions Session: Subtracting with Unlike Denominators	Levels: 6-8
1			MSC4 Module: Fractions Unit: Subtracting Fractions Session: Solving Missing Value Problems when Subtracting Fractions	Levels: 6-8
1			MSC4 Module: Decimals Unit: Multiplying Decimals Session: Multiplying Decimals by Powers of 10	Levels: 6-8
1			MSC4 Module: Decimals Unit: Multiplying Decimals Session: Calculating Products	Levels: 6-8
1			MSC4 Module: Decimals Unit: Dividing Decimals Session: Dividing Decimals by Whole Numbers	Levels: 6-8
1			MSC4 Module: Decimals Unit: Dividing Decimals Session: Estimating and Finding Quotients	Levels: 6-8
1			MSC4 Module: Decimals Unit: Dividing Decimals Session: Dividing by Powers of 10	Levels: 6-8
2	Convert terminating decimals into reduced fractions.		MSC4 Module: Decimals Unit: Multiplying Decimals Session: Finding the Volume of a Prism	Levels: 6-8
3	Calculate given percentages of quantities and use them to solve problems.		MSC4 Module: Percents Unit: Finding Percents of Quantities Session: Finding Percents of a Whole	Levels: 6-8
4	Add and subtract fractions with unlike denominators.		MSC4 Module: Fractions Unit: Adding Fractions Session: Adding with Unlike Denominators	Levels: 6-8
4			MSC4 Module: Fractions Unit: Adding Fractions Session: Solving Missing Value Problems when Adding Fractions	Levels: 6-8
4			MSC4 Module: Fractions Unit: Subtracting Fractions Session: Subtracting with Unlike Denominators	Levels: 6-8
4			MSC4 Module: Fractions Unit: Subtracting Fractions Session: Solving Missing Value Problems when Subtracting Fractions	Levels: 6-8
5	Multiply, divide, and simplify rational numbers by using exponent rules.		MSC4 Module: Integers and Order of Operations Unit: Order of Operations Session: Simplifying Expressions	Levels: 6-8
5			MSC4 Module: Decimals Unit: Dividing Decimals Session: Dividing Decimals by Whole Numbers	Levels: 6-8

5			MSC4 Module: Decimals Unit: Dividing Decimals Session: Dividing by Powers of 10	Levels: 6-8
6	Understand the meaning of the absolute value of a number:			
6	interpret the absolute value as the distance of the number from zero on a number line		MSC4 Module: Integers and Order of Operations Unit: Adding and Subtracting Signed Numbers Session: Subtracting with Absolute Value	Levels: 6-8
6			MSC4 Module: Integers and Order of Operations Unit: Adding and Subtracting Signed Numbers Session: Exploring the Number Line and Absolute Value	Levels: 6-8
6			MSC4 Module: Integers and Order of Operations Unit: Adding and Subtracting Signed Numbers Session: Adding with Absolute Value	Levels: 6-8
6	determine the absolute value of real numbers		MSC4 Module: Integers and Order of Operations Unit: Adding and Subtracting Signed Numbers Session: Exploring the Number Line and Absolute Value	Levels: 6-8
6			MSC4 Module: Integers and Order of Operations Unit: Adding and Subtracting Signed Numbers Session: Adding with Absolute Value	Levels: 6-8
7	Find square roots of perfect whole-number squares.		MSC5 Module: Radicals & Exponents Unit: Introduction to Radicals & Pythagorean Theorem Session: Investigating Squares & Square Roots	Levels: 6-8
8	Simplify and evaluate positive rational numbers raised to positive whole number powers.			
9	Solve addition, subtraction, multiplication, and division problems that use positive and negative integers and combinations of these operations.		MSC4 Module: Integers and Order of Operations Unit: Adding and Subtracting Signed Numbers Session: Subtracting with Absolute Value	Levels: 6-8
9			MSC4 Module: Integers and Order of Operations Unit: Multiplying and Dividing Signed Numbers Session: Finding Products of Signed Numbers	Levels: 6-8
9			MSC4 Module: Integers and Order of Operations Unit: Multiplying and Dividing Signed Numbers Session: Representing the Multiplication of Signed Numbers	Levels: 6-8
9			MSC4 Module: Integers and Order of Operations Unit: Multiplying and Dividing Signed Numbers Session: Finding Quotients Using Reciprocals	Levels: 6-8
9			MSC4 Module: Integers and Order of Operations Unit: Order of Operations Session: Simplifying Expressions	Levels: 6-8
9			MSC3 Module: Operations with Numbers Unit: The Integers Session: Differences Between Integers	Levels: 4-6

1	Use real number properties to perform various computational procedures.	(Mathematics, Level: 8)		
2	Perform arithmetic operations and their inverses on real numbers.		MSC4 Module: Integers and Order of Operations Unit: Multiplying and Dividing Signed Numbers Session: Representing the Multiplication of Signed Numbers	Levels: 6-8
3	Find roots of real numbers using calculators.			
	Compute fluently and make reasonable estimates.	(Mathematics, Level: 5 - 8)		
1	Add, subtract, multiply, and divide whole numbers.	(Mathematics, Level: 5)	MSC3 Module: Operations with Numbers Unit: The Integers Session: Integer Sums	Levels: 4-6
1			MSC4 Module: Integers and Order of Operations Unit: Adding and Subtracting Signed Numbers Session: Subtracting with Absolute Value	Levels: 6-8
1			MSC4 Module: Integers and Order of Operations Unit: Multiplying and Dividing Signed Numbers Session: Finding Products of Signed Numbers	Levels: 6-8
1			MSC3 Module: Operations with Numbers Unit: The Integers Session: Differences Between Integers	Levels: 4-6
1			MSC3 Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Multipliers	Levels: 4-6
2	Add and subtract decimals.		MSC3 Module: Decimals Unit: Addition and Subtraction Session: Adding Decimals	Levels: 4-6
2			MSC3 Module: Decimals Unit: Addition and Subtraction Session: Subtracting Decimals	Levels: 4-6
3	Use estimation strategies to verify the reasonableness of calculated results.			
4	Explain how the estimation strategy impacts the result.			
5	Relate the basic arithmetic operations to one another.			
6	Simplify numerical expressions using order of operations.		MSC4 Module: Integers and Order of Operations Unit: Order of Operations Session: Simplifying Expressions	Levels: 6-8
6			MSC5 Module: Essentials of Algebra Unit: Simple Equations Session: Simplifying Algebraic Expressions	Levels: 6-8
7	Recognize and explain the differences between exact and approximate values.			
1	Estimate quantities involving rational numbers using various estimations.	(Mathematics, Level: 6)	MSC4 Module: Fractions Unit: Dividing Fractions Session: Estimating Quotients of Fractions	Levels: 6-8
2	Use estimates to check reasonableness of results and make predictions in situations involving rational numbers.			

3	Determine if a problem situation calls for an exact or approximate answer and perform the appropriate computation.			
4	Compare and order positive and negative fractions, decimals, and mixed numbers and place them on a number line.		MSC3 Module: Fractions Unit: Proper and Improper Fractions Session: Proper Fractions	Levels: 4-6
4			MSC3 Module: Decimals Unit: Introduction Session: Ordering and Rounding	Levels: 4-6
4			MSC4 Module: Fractions Unit: Essentials of Fractions Session: Exploring Proper and Improper Fractions	Levels: 6-8
4			MSC4 Module: Fractions Unit: Multiplying Fractions Session: Finding Products of Fractions, Whole Numbers, and Mixed Numbers	Levels: 6-8
4			MSC4 Module: Fractions Unit: Dividing Fractions Session: Estimating Quotients of Fractions	Levels: 6-8
4			MSC4 Module: Fractions Unit: Adding Fractions Session: Adding with Like Denominators	Levels: 6-8
4			MSC4 Module: Decimals Unit: Essentials of Decimals Session: Investigating Decimal Place Values	Levels: 6-8
4			MSC4 Module: Decimals Unit: Essentials of Decimals Session: Rounding Decimals	Levels: 6-8
4			MSC4 Module: Decimals Unit: Essentials of Decimals Session: Exploring Repeating and Terminating Decimals	Levels: 6-8
4			MSC4 Module: Decimals Unit: Dividing Decimals Session: Estimating and Finding Quotients	Levels: 6-8
5	Convert fractions to decimals and percents and use these representations in estimations, computations, and applications.		MSC3 Module: Decimals Unit: Introduction Session: Ratios, Decimals, and Percents	Levels: 4-6
5			MSC4 Module: Decimals Unit: Essentials of Decimals Session: Investigating Decimal Place Values	Levels: 6-8
5			MSC4 Module: Percents Unit: Essentials of Percents Session: Investigating the Meaning of Percent	Levels: 6-8
6	Interpret and use ratios in different contexts.		MSC5 Module: Ratio & Proportion Unit: Ratio Session: Defining Ratio	Levels: 6-8
6			MSC5 Module: Ratio & Proportion Unit: Ratio Session: Expressing Ratios as Equivalent Fractions & Decimals	Levels: 6-8
6			MSC3 Module: Decimals Unit: Introduction Session: Ratios, Decimals, and Percents	Levels: 4-6
7	Compute and perform multiplication and division of fractions and decimals and apply these procedures to solving problems.		MSC3 Module: Fractions Unit: Multiplication and Division Session: Finding Products	Levels: 4-6

7			MSC3 Module: Fractions Unit: Multiplication and Division Session: Quotients and Remainders	Levels: 4-6
7			MSC3 Module: Decimals Unit: Multiplication and Division Session: Multiplying Decimals	Levels: 4-6
7			MSC3 Module: Decimals Unit: Multiplication and Division Session: Dividing Decimals by Whole Numbers	Levels: 4-6
7			MSC4 Module: Fractions Unit: Multiplying Fractions Session: Finding Products of Fractions, Whole Numbers, and Mixed Numbers	Levels: 6-8
7			MSC4 Module: Fractions Unit: Multiplying Fractions Session: Using the GCF in Finding Products	Levels: 6-8
7			MSC4 Module: Fractions Unit: Multiplying Fractions Session: Representing Multiplication	Levels: 6-8
7			MSC4 Module: Fractions Unit: Dividing Fractions Session: Estimating Quotients of Fractions	Levels: 6-8
7			MSC4 Module: Fractions Unit: Dividing Fractions Session: Using Multiplicative Inverses	Levels: 6-8
7			MSC4 Module: Decimals Unit: Multiplying Decimals Session: Multiplying Decimals by Powers of 10	Levels: 6-8
7			MSC4 Module: Decimals Unit: Multiplying Decimals Session: Calculating Products	Levels: 6-8
7			MSC4 Module: Decimals Unit: Multiplying Decimals Session: Finding the Volume of a Prism	Levels: 6-8
7			MSC4 Module: Decimals Unit: Dividing Decimals Session: Dividing Decimals by Whole Numbers	Levels: 6-8
7			MSC4 Module: Decimals Unit: Dividing Decimals Session: Estimating and Finding Quotients	Levels: 6-8
7			MSC4 Module: Decimals Unit: Dividing Decimals Session: Dividing by Powers of 10	Levels: 6-8
1	Use estimation to check reasonableness of results, and use this information to make predictions in situations involving rational numbers, pi, and simple algebraic equations.	(Mathematics, Level: 7)		
2	Convert fractions to decimals and percents and use these representations in estimations, computations, and applications.		MSC4 Module: Decimals Unit: Essentials of Decimals Session: Investigating Decimal Place Values	Levels: 6-8
2			MSC4 Module: Decimals Unit: Multiplying Decimals Session: Finding the Volume of a Prism	Levels: 6-8
2			MSC4 Module: Percents Unit: Essentials of Percents Session: Investigating the Meaning of Percent	Levels: 6-8

3	Read, write, and compare rational numbers in scientific notation with approximate numbers using scientific notation.		MSC5 Module: Radicals & Exponents Unit: Introduction to Scientific Notation Session: Writing Numbers Using Scientific Notation	Levels: 6-8
3			MSC5 Module: Radicals & Exponents Unit: Introduction to Scientific Notation Session: Comparing Numbers in Scientific Notation	Levels: 6-8
3			MSC5 Module: Radicals & Exponents Unit: Introduction to Scientific Notation Session: Writing Numbers between 0 & 1 in Scientific Notation	Levels: 6-8
4	Calculate the percentage of increases and decreases of a quantity.		MSC4 Module: Percents Unit: Increasing and Decreasing Percents Session: Calculating Percent Increases	Levels: 6-8
4			MSC4 Module: Percents Unit: Increasing and Decreasing Percents Session: Calculating Percent Decreases	Levels: 6-8
4			MSC4 Module: Percents Unit: Increasing and Decreasing Percents Session: Calculating Simple Interest	Levels: 6-8
5	Add and subtract fractions with unlike denominators.		MSC4 Module: Fractions Unit: Adding Fractions Session: Adding with Unlike Denominators	Levels: 6-8
5			MSC4 Module: Fractions Unit: Adding Fractions Session: Solving Missing Value Problems when Adding Fractions	Levels: 6-8
5			MSC4 Module: Fractions Unit: Subtracting Fractions Session: Subtracting with Unlike Denominators	Levels: 6-8
5			MSC4 Module: Fractions Unit: Subtracting Fractions Session: Solving Missing Value Problems when Subtracting Fractions	Levels: 6-8
6	Use the inverse relationship between raising to a power and extracting the root of a perfect square integer.		MSC5 Module: Ratio & Proportion Unit: Direct & Inverse Variation Session: Exploring Inverse Variation	Levels: 6-8
1	Formulate algebraic expressions that include real numbers to describe and solve real-world problems.	(Mathematics, Level: 8)		
2	Use a variety of computational methods to estimate quantities involving real numbers.			
3	Differentiate between rational and irrational numbers.		MSC5 Module: Radicals & Exponents Unit: Introduction to Radicals & Pythagorean Theorem Session: Defining Irrational Numbers	Levels: 6-8
3			MSC ALG.2 Module: The Real Number System Unit: Rational & Irrational Numbers Session: Defining the Real Numbers	Levels: 9-12

4	Use real number properties to perform various computational procedures and explain how they were used.			
5	Perform and explain computations with rational numbers, pi, and first-degree algebraic expressions in one variable in a variety of situations.			
6	Select and use appropriate forms of rational numbers to solve real-world problems including those involving proportional relationships.		MSC5 Module: Ratio & Proportion Unit: Direct & Inverse Variation Session: Exploring Inverse Variation	Levels: 6-8
7	Approximate, mentally and with calculators, the value of irrational numbers as they arise from problem situations.			
8	Express numbers in scientific notation (including negative exponents) in appropriate problem situations using a calculator.		MSC4 Module: Integers and Order of Operations Unit: Order of Operations Session: Simplifying Expressions	Levels: 6-8
8			MSC5 Module: Radicals & Exponents Unit: Introduction to Scientific Notation Session: Writing Numbers Using Scientific Notation	Levels: 6-8
8			MSC5 Module: Radicals & Exponents Unit: Introduction to Scientific Notation Session: Comparing Numbers in Scientific Notation	Levels: 6-8
8			MSC5 Module: Radicals & Exponents Unit: Introduction to Scientific Notation Session: Writing Numbers between 0 & 1 in Scientific Notation	Levels: 6-8
9	Estimate answers and use formulas to solve application problems involving surface area and volume.		MSC5 Module: Fundamentals of Geometry Unit: Volume and Surface Area Session: Calculating the Volume of a Right Triangular Prism	Levels: 6-8
9			MSC5 Module: Fundamentals of Geometry Unit: Volume and Surface Area Session: Calculating the Surface Area of a Right Triangular Prism	Levels: 6-8
9			MSC5 Module: Fundamentals of Geometry Unit: Volume and Surface Area Session: Calculating the Volume & Surface Area of a Right Cylinder	Levels: 6-8
	Understand algebraic concepts and applications.	(Mathematics, Level: 5 - 8)		
	Understand patterns, relations, and functions.			
1	Identify and graph ordered pairs in the first quadrant of the coordinate plane.	(Mathematics, Level: 5)	MSC3 Module: Geometry Unit: Coordinate Geometry and Algebra Session: The Coordinate Plane	Levels: 4-6
2	Describe, represent, and analyze patterns and relationships.			

3	Identify, describe, and continue patterns presented in a variety of formats.			
4	Generate a pattern using a written description.			
1	Solve problems involving proportional relationships.	(Mathematics, Level: 6)	MSC5 Module: Ratio & Proportion Unit: Proportion Session: Solving for a Variable in a Proportion	Levels: 6-8
1			MSC5 Module: Ratio & Proportion Unit: Proportion Session: Applying the Means/Extremes Property	Levels: 6-8
1			MSC5 Module: Ratio & Proportion Unit: Direct & Inverse Variation Session: Solving Inverse Variation Problems	Levels: 6-8
2	Graph ordered pairs in the coordinate plane.		MSC3 Module: Geometry Unit: Coordinate Geometry and Algebra Session: The Coordinate Plane	Levels: 4-6
3	Explain and use symbols to represent unknown quantities and variable relationships.		MSC5 Module: Essentials of Algebra Unit: Simple Equations Session: Using Variables to Express Relationships	Levels: 6-8
3			MSC5 Module: Essentials of Algebra Unit: Variable on Both Sides of the Equation Session: Writing Equations	Levels: 6-8
4	Explain and use the relationships among ratios, proportions, and percents.		MSC5 Module: Ratio & Proportion Unit: Ratio Session: Expressing Ratios as Equivalent Fractions & Decimals	Levels: 6-8
4			MSC5 Module: Ratio & Proportion Unit: Ratio Session: Forming Ratios between Unlike Quantities	Levels: 6-8
4			MSC5 Module: Ratio & Proportion Unit: Proportion Session: Defining a Proportion	Levels: 6-8
4			MSC5 Module: Ratio & Proportion Unit: Proportion Session: Solving for a Variable in a Proportion	Levels: 6-8
4			MSC5 Module: Ratio & Proportion Unit: Proportion Session: Applying the Means/Extremes Property	Levels: 6-8
4			MSC5 Module: Ratio & Proportion Unit: Direct & Inverse Variation Session: Exploring Inverse Variation	Levels: 6-8
4			MSC4 Module: Percents Unit: Essentials of Percents Session: Investigating the Meaning of Percent	Levels: 6-8
4			MSC4 Module: Percents Unit: Essentials of Percents Session: Expressing Percents as Proper Fractions	Levels: 6-8
4			MSC4 Module: Percents Unit: Essentials of Percents Session: Expressing Percents greater than 100% as Improper Fractions	Levels: 6-8
5	Make generalizations based on observed patterns and relationships.			
1	Identify and continue patterns presented in a variety of formats.	(Mathematics, Level: 7)		

2	Represent a variety of relationships using tables, graphs, verbal rules, and possible symbolic notation, and recognize the same general pattern presented in different representations.			
3	Simplify numerical expressions by applying properties of rational numbers, and justify the process used.		MSC4 Module: Integers and Order of Operations Unit: Order of Operations Session: Simplifying Expressions	Levels: 6-8
3			MSC5 Module: Essentials of Algebra Unit: Evaluating an Algebraic Expression Session: Combining Like Terms	Levels: 6-8
3			MSC5 Module: Essentials of Algebra Unit: Simple Equations Session: Simplifying Algebraic Expressions	Levels: 6-8
4	Interpret and evaluate expressions involving integer powers and simple roots.			
5	Graph and interpret linear functions.			
6	Solve problems involving rate, average speed, distance, and time.			
1	Move between numerical, tabular, and graphical representations of linear relationships.	(Mathematics, Level: 8)		
2	Use variables to generalize patterns and information presented in tables, charts, and graphs:			
2	graph linear functions noting that the vertical change per unit of horizontal change (the slope of the graph) is always the same			
2	plot the values of quantities whose ratios are always the same, fit a line to the plot, and understand that the slope of the line equals the quantities		MSC ALG.2 Module: Describing Data Unit: Graphical Displays Session: Scatter Plots & Linear Best-Fit Graphs	Levels: 9-12
	Represent and analyze mathematical situations and structures using algebraic symbols.	(Mathematics, Level: 5 - 8)		
1	Compute the value of the expression for specific numerical values of the variable.	(Mathematics, Level: 5)		
2	Use a letter to represent an unknown number.			
3	Understand the differences between the symbols for 'less than,' 'less than or equal to,' 'greater than,' and 'greater than or equal to.'			
1	Solve problems involving proportional relationships.	(Mathematics, Level: 6)	MSC5 Module: Ratio & Proportion Unit: Proportion Session: Solving for a Variable in a Proportion	Levels: 6-8

1			MSC5 Module: Ratio & Proportion Unit: Proportion Session: Applying the Means/Extremes Property	Levels: 6-8
1			MSC5 Module: Ratio & Proportion Unit: Direct & Inverse Variation Session: Exploring & Solving Direct Variation Problems	Levels: 6-8
1			MSC5 Module: Ratio & Proportion Unit: Direct & Inverse Variation Session: Exploring Inverse Variation	Levels: 6-8
1			MSC5 Module: Ratio & Proportion Unit: Direct & Inverse Variation Session: Solving Inverse Variation Problems	Levels: 6-8
1			MSC5 Module: Ratio & Proportion Unit: Similar Polygons Session: Defining Similarity	Levels: 6-8
2	Use letters to represent an unknown in an equation.		MSC5 Module: Essentials of Algebra Unit: Evaluating an Algebraic Expression Session: Representing the Dimensions & Area of a Rectangle	Levels: 6-8
2			MSC5 Module: Essentials of Algebra Unit: Variable on Both Sides of the Equation Session: Writing Equations	Levels: 6-8
3	Solve one-step linear equations and inequalities in one variable with positive whole-number solutions.		MSC5 Module: Essentials of Algebra Unit: Simple Equations Session: Using Variables to Express Relationships	Levels: 6-8
3			MSC5 Module: Essentials of Algebra Unit: Variable on Both Sides of the Equation Session: Writing Equations	Levels: 6-8
3			MSC5 Module: Essentials of Algebra Unit: Variable on Both Sides of the Equation Session: Simplifying Both Sides of an Equation	Levels: 6-8
3			MSC5 Module: Essentials of Algebra Unit: Variable on Both Sides of the Equation Session: Checking the Solution to an Equation	Levels: 6-8
4	Demonstrate that a variable can represent a single quantity that changes.			
5	Demonstrate how changes in one variable affect other variables.		MSC5 Module: Essentials of Algebra Unit: Simple Equations Session: Using Variables to Express Relationships	Levels: 6-8
5			MSC5 Module: Essentials of Algebra Unit: Solving Literal Equations Session: Rewriting a Formula in Terms of a Different Variable	Levels: 6-8
5			MSC5 Module: Ratio & Proportion Unit: Proportion Session: Solving for a Variable in a Proportion	Levels: 6-8
1	Write verbal expressions and sentences as algebraic expressions and equations:	(Mathematics, Level: 7)		
1	evaluate algebraic expressions		MSC5 Module: Essentials of Algebra Unit: Algebra Fundamentals Session: Identifying Components of Algebraic Expressions	Levels: 6-8

1			MSC5 Module: Essentials of Algebra Unit: Algebra Fundamentals Session: Replacing Variables in a Formula	Levels: 6-8
1			MSC5 Module: Essentials of Algebra Unit: Evaluating an Algebraic Expression Session: Representing the Dimensions & Area of a Rectangle	Levels: 6-8
1			MSC5 Module: Essentials of Algebra Unit: Evaluating an Algebraic Expression Session: Combining Like Terms	Levels: 6-8
1			MSC5 Module: Essentials of Algebra Unit: Evaluating an Algebraic Expression Session: Evaluating Expressions Using Substitution	Levels: 6-8
1			MSC5 Module: Essentials of Algebra Unit: Simple Equations Session: Simplifying Algebraic Expressions	Levels: 6-8
1			MSC5 Module: Essentials of Algebra Unit: Simple Equations Session: Solving Simple Equations	Levels: 6-8
1			MSC5 Module: Essentials of Algebra Unit: Variable on Both Sides of the Equation Session: Writing Equations	Levels: 6-8
1			MSC5 Module: Essentials of Algebra Unit: Variable on Both Sides of the Equation Session: Simplifying Both Sides of an Equation	Levels: 6-8
1			MSC5 Module: Essentials of Algebra Unit: Variable on Both Sides of the Equation Session: Checking the Solution to an Equation	Levels: 6-8
1			MSC5 Module: Essentials of Algebra Unit: Solving Literal Equations Session: Identifying the Variables in a Given Formula	Levels: 6-8
1			MSC5 Module: Essentials of Algebra Unit: Solving Literal Equations Session: Rewriting a Formula in Terms of a Different Variable	Levels: 6-8
1			MSC5 Module: Essentials of Algebra Unit: Solving Literal Equations Session: Substituting Values & Solving an Equation	Levels: 6-8
1	solve simple linear equations		MSC5 Module: Essentials of Algebra Unit: Evaluating an Algebraic Expression Session: Combining Like Terms	Levels: 6-8
1			MSC5 Module: Essentials of Algebra Unit: Simple Equations Session: Simplifying Algebraic Expressions	Levels: 6-8
1			MSC5 Module: Essentials of Algebra Unit: Simple Equations Session: Solving Simple Equations	Levels: 6-8
1			MSC5 Module: Essentials of Algebra Unit: Variable on Both Sides of the Equation Session: Writing Equations	Levels: 6-8

1			MSC5 Module: Essentials of Algebra Unit: Variable on Both Sides of the Equation Session: Simplifying Both Sides of an Equation	Levels: 6-8
1			MSC5 Module: Essentials of Algebra Unit: Variable on Both Sides of the Equation Session: Checking the Solution to an Equation	Levels: 6-8
1			MSC5 Module: Essentials of Algebra Unit: Solving Literal Equations Session: Identifying the Variables in a Given Formula	Levels: 6-8
1			MSC5 Module: Essentials of Algebra Unit: Solving Literal Equations Session: Rewriting a Formula in Terms of a Different Variable	Levels: 6-8
1			MSC5 Module: Essentials of Algebra Unit: Solving Literal Equations Session: Substituting Values & Solving an Equation	Levels: 6-8
1	graph and interpret results		MSC5 Module: Fundamentals of Statistics Unit: Interpreting and Constructing Graphs Session: Exploring Line Graphs	Levels: 6-8
1			MSC5 Module: Fundamentals of Statistics Unit: Frequency Distribution and Histograms Session: Exploring Cumulative Frequency Graphs	Levels: 6-8
1			MSC4 Module: Percents Unit: Essentials of Percents Session: Expressing Percents greater than 100% as Improper Fractions	Levels: 6-8
2	Use variables and appropriate operations to write an expression, an equation, or an inequality that represents a verbal description.		MSC5 Module: Essentials of Algebra Unit: Algebra Fundamentals Session: Introducing Variables	Levels: 6-8
2			MSC5 Module: Essentials of Algebra Unit: Evaluating an Algebraic Expression Session: Representing the Dimensions & Area of a Rectangle	Levels: 6-8
2			MSC5 Module: Essentials of Algebra Unit: Simple Equations Session: Using Variables to Express Relationships	Levels: 6-8
2			MSC5 Module: Essentials of Algebra Unit: Simple Equations Session: Solving Simple Equations	Levels: 6-8
2			MSC5 Module: Essentials of Algebra Unit: Variable on Both Sides of the Equation Session: Writing Equations	Levels: 6-8
2			MSC5 Module: Essentials of Algebra Unit: Solving Literal Equations Session: Identifying the Variables in a Given Formula	Levels: 6-8

2			MSC5 Module: Essentials of Algebra Unit: Solving Literal Equations Session: Rewriting a Formula in Terms of a Different Variable	Levels: 6-8
2			MSC5 Module: Essentials of Algebra Unit: Solving Literal Equations Session: Substituting Values & Solving an Equation	Levels: 6-8
3	Use the order of operations to evaluate algebraic expressions.		MSC4 Module: Integers and Order of Operations Unit: Order of Operations Session: Introducing the Distributive Property	Levels: 6-8
3			MSC5 Module: Essentials of Algebra Unit: Evaluating an Algebraic Expression Session: Combining Like Terms	Levels: 6-8
3			MSC5 Module: Essentials of Algebra Unit: Simple Equations Session: Simplifying Algebraic Expressions	Levels: 6-8
4	Simplify numerical expressions by applying properties of rational numbers.			
5	Graph linear functions and identify slope as positive or negative.			
6	Use letters as variables in mathematical expressions to describe how one quantity changes when a related quantity changes.		MSC5 Module: Essentials of Algebra Unit: Algebra Fundamentals Session: Replacing Variables in a Formula	Levels: 6-8
6			MSC5 Module: Essentials of Algebra Unit: Evaluating an Algebraic Expression Session: Evaluating Expressions Using Substitution	Levels: 6-8
6			MSC5 Module: Essentials of Algebra Unit: Simple Equations Session: Using Variables to Express Relationships	Levels: 6-8
6			MSC5 Module: Essentials of Algebra Unit: Variable on Both Sides of the Equation Session: Writing Equations	Levels: 6-8
1	Demonstrate the difference between an equation and an expression.	(Mathematics, Level: 8)		
2	Solve two-step linear equations and inequalities in one variable with rational solutions.		MSC ALG.1 Module: Linear Inequalities Unit: Inequalities in One Variable Session: Applying Inverse Operations	Levels: 9-12
3	Evaluate formulas using substitution.		MSC5 Module: Essentials of Algebra Unit: Algebra Fundamentals Session: Introducing Variables	Levels: 6-8
3			MSC5 Module: Essentials of Algebra Unit: Algebra Fundamentals Session: Replacing Variables in a Formula	Levels: 6-8
3			MSC5 Module: Essentials of Algebra Unit: Evaluating an Algebraic Expression Session: Representing the Dimensions & Area of a Rectangle	Levels: 6-8

3			MSC5 Module: Essentials of Algebra Unit: Evaluating an Algebraic Expression Session: Evaluating Expressions Using Substitution	Levels: 6-8
3			MSC5 Module: Essentials of Algebra Unit: Solving Literal Equations Session: Substituting Values & Solving an Equation	Levels: 6-8
4	Demonstrate understanding of the relationships between ratios, proportions, and percents and solve for a missing term in a proportion.		MSC5 Module: Ratio & Proportion Unit: Ratio Session: Defining Ratio	Levels: 6-8
4			MSC5 Module: Ratio & Proportion Unit: Ratio Session: Expressing Ratios as Equivalent Fractions & Decimals	Levels: 6-8
4			MSC5 Module: Ratio & Proportion Unit: Ratio Session: Forming Ratios between Unlike Quantities	Levels: 6-8
4			MSC5 Module: Ratio & Proportion Unit: Proportion Session: Defining a Proportion	Levels: 6-8
4			MSC5 Module: Ratio & Proportion Unit: Proportion Session: Solving for a Variable in a Proportion	Levels: 6-8
4			MSC5 Module: Ratio & Proportion Unit: Proportion Session: Applying the Means/Extremes Property	Levels: 6-8
4			MSC5 Module: Ratio & Proportion Unit: Direct & Inverse Variation Session: Exploring & Solving Direct Variation Problems	Levels: 6-8
4			MSC5 Module: Ratio & Proportion Unit: Direct & Inverse Variation Session: Exploring Inverse Variation	Levels: 6-8
4			MSC5 Module: Ratio & Proportion Unit: Direct & Inverse Variation Session: Solving Inverse Variation Problems	Levels: 6-8
4			MSC5 Module: Ratio & Proportion Unit: Similar Polygons Session: Defining Similarity	Levels: 6-8
4			MSC5 Module: Ratio & Proportion Unit: Similar Polygons Session: Identifying Equivalent Ratios	Levels: 6-8
4			MSC4 Module: Percents Unit: Essentials of Percents Session: Expressing Percents as Proper Fractions	Levels: 6-8
4			MSC4 Module: Percents Unit: Essentials of Percents Session: Expressing Percents greater than 100% as Improper Fractions	Levels: 6-8
4			MSC4 Module: Percents Unit: Finding Percents of Quantities Session: Expressing Ratios as Percents	Levels: 6-8
5	Graph solution sets of linear equations in two variables on the coordinate plane.		MSC ALG.1 Module: Linear Inequalities Unit: Inequalities in Two Variables Session: Graphing Solutions on a Rectangular Coordinate Plane	Levels: 9-12

6	Formulate and solve problems involving simple linear relationships, find percents of a given number, variable		MSC5 Module: Fundamentals of Statistics Unit: Interpreting and Constructing Graphs Session: Interpreting Pie Charts	Levels: 6-8
6			MSC4 Module: Percents Unit: Finding Percents of Quantities Session: Finding Percents of a Whole	Levels: 6-8
6			MSC4 Module: Percents Unit: Finding Percents of Quantities Session: Calculating the Whole from a Part and a Percent	Levels: 6-8
6			MSC4 Module: Percents Unit: Increasing and Decreasing Percents Session: Calculating Simple Interest	Levels: 6-8
	Use mathematical models to represent and understand quantitative relationships.	(Mathematics, Level: 5 - 8)		
1	Use mathematical models to represent and explain mathematical concepts and procedures.	(Mathematics, Level: 5)		
2	Understand and use mathematical models such as:			
2	the number line to model the relationship between rational numbers and rational number operations			
2	pictorial representation of addition and subtraction of rational numbers with regrouping			
2	manipulatives or pictures to model computational procedures		MSC3 Module: Fractions Unit: Proper and Improper Fractions Session: Equivalent Fractions	Levels: 4-6
2	graphs, tables, and charts to describe data			
2	diagrams or pictures to model problem situations		MSC3 Module: Fractions Unit: Proper and Improper Fractions Session: Equivalent Fractions	Levels: 4-6
3	Demonstrate how a situation can be represented in more than one way.			
1	Develop and use mathematical models to represent and justify mathematical relationships found in a variety of situations.	(Mathematics, Level: 6)		
2	Create, explain, and use mathematical models such as:			
2	Venn diagrams to show the relationships between the characteristics of two or more sets			
2	equations and inequalities to model numerical relationships			
2	three-dimensional geometric models			

2	graphs, tables, and charts to interpret and analyze data		MSC5 Module: Fundamentals of Statistics Unit: Interpreting and Constructing Graphs Session: Exploring Line Graphs	Levels: 6-8
2			MSC5 Module: Fundamentals of Statistics Unit: Interpreting and Constructing Graphs Session: Exploring Bar Graphs	Levels: 6-8
2			MSC5 Module: Fundamentals of Statistics Unit: Interpreting and Constructing Graphs Session: Interpreting Pie Charts	Levels: 6-8
2			MSC5 Module: Fundamentals of Statistics Unit: Frequency Distribution & Histograms Session: Creating and Interpreting a Frequency Table	Levels: 6-8
2			MSC5 Module: Fundamentals of Statistics Unit: Frequency Distribution and Histograms Session: Defining a Histogram	Levels: 6-8
2			MSC5 Module: Fundamentals of Statistics Unit: Frequency Distribution and Histograms Session: Exploring Cumulative Frequency Graphs	Levels: 6-8
2			MSC4 Module: Percents Unit: Essentials of Percents Session: Expressing Percents greater than 100% as Improper Fractions	Levels: 6-8
1	Create scale models and use them for dimensional drawings.	(Mathematics, Level: 7)		
2	Understand and use the coordinate plane to graph ordered pairs and linear equations.		MSC ALG.1 Module: Linear Functions and Equations Unit: The Rectangular Coordinate Plane Session: Graphing Ordered Pairs	Levels: 9-12
2			MSC ALG.1 Module: Linear Functions and Equations Unit: The Rectangular Coordinate Plane Session: Finding x- and y-Intercepts	Levels: 9-12
2			MSC ALG.1 Module: Linear Functions and Equations Unit: Introduction to Functions Session: Exploring the Slope-Intercept Equation of a Line	Levels: 9-12
2			MSC ALG.1 Module: Systems of Linear Equations Unit: Graphic Solutions of Linear Systems Session: Finding the Point of Intersection	Levels: 9-12
2			MSC ALG.1 Module: Linear Inequalities Unit: Inequalities in Two Variables Session: Graphing Solutions on a Rectangular Coordinate Plane	Levels: 9-12
3	Select and use an appropriate model for a particular situation.			
1	Generate different representations to model a specific numerical relationship given one representation of data.	(Mathematics, Level: 8)	MSC4 Module: Fractions Unit: Essentials of Fractions Session: Recognizing a Fraction	Levels: 6-8

	Analyze changes in various contexts.	(Mathematics, Level: 5 - 8)		
1	Recognize and create patterns of change from everyday life using numerical or pictorial representations.	(Mathematics, Level: 5)		
2	Generalize patterns of change and recognize the same general patterns presented in different representations.			
1	Represent and explain changes using one-step equations with one variable.	(Mathematics, Level: 6)	MSC5 Module: Essentials of Algebra Unit: Variable on Both Sides of the Equation Session: Simplifying Both Sides of an Equation	Levels: 6-8
2	Solve problems that involve change using proportional relationships.		MSC5 Module: Ratio & Proportion Unit: Proportion Session: Solving for a Variable in a Proportion	Levels: 6-8
2			MSC5 Module: Ratio & Proportion Unit: Proportion Session: Applying the Means/Extremes Property	Levels: 6-8
2			MSC5 Module: Ratio & Proportion Unit: Direct & Inverse Variation Session: Solving Inverse Variation Problems	Levels: 6-8
2			MSC5 Module: Ratio & Proportion Unit: Similar Polygons Session: Defining Similarity	Levels: 6-8
3	Use ratios to predict changes in proportional situations.		MSC5 Module: Ratio & Proportion Unit: Ratio Session: Defining Ratio	Levels: 6-8
3			MSC5 Module: Ratio & Proportion Unit: Proportion Session: Defining a Proportion	Levels: 6-8
4	Use tables and symbols to represent and describe proportional and other relationships involving conversions, sequences, and perimeter.			
5	Generate formulas to represent relationships involving changes in perimeter.			
1	Use variables and appropriate operations to write an expression, an equation, and / or an inequality that represents a verbal description involving change.	(Mathematics, Level: 7)	MSC5 Module: Essentials of Algebra Unit: Simple Equations Session: Using Variables to Express Relationships	Levels: 6-8
1			MSC5 Module: Essentials of Algebra Unit: Variable on Both Sides of the Equation Session: Writing Equations	Levels: 6-8
2	Interpret and evaluate expressions involving integer powers and simple roots as they relate to change.			
3	Graph and interpret linear functions as they are used to solve problems.			

4	Solve two-step equations and inequalities with one variable over the rational numbers, interpret the solution or solutions in the context from which they arose, and verify the reasonableness of the results.			
1	Use graphs, tables, and algebraic representations to make predictions and solve problems that involve change.	(Mathematics, Level: 8)		
2	Estimate, find, and justify solutions to problems that involve change using tables, graphs, and algebraic expressions.			
3	Use appropriate problem-solving strategies to solve problems that involve change.			
4	Solve multi-step problems that involve changes in rate, average speed, distance, and time.			
5	Analyze problems that involve change by identifying relationships, distinguishing relevant from irrelevant information, identifying missing information, sequencing, and observing patterns.			
6	Generalize a pattern of change using algebra and show the relationship among the equation, graph, and table of values.			
7	Recognize the same general pattern of change presented in different representations.			
	Understand geometric concepts and applications.	(Mathematics, Level: 5 - 8)		
	Analyze characteristics and properties of two- and three-dimensional geometric shapes and develop mathematics arguments about geometric relationships.			
1	Identify, describe, and classify two-dimensional shapes and three-dimensional figures by their properties.	(Mathematics, Level: 5)		
2	Recognize and describe properties of regular polygons having up to ten sides.		MSC3 Module: Geometry Unit: Measurement Session: Rectangles and Squares	Levels: 4-6
2			MSC3 Module: Geometry Unit: Measurement Session: Parallelograms and Trapezoids	Levels: 4-6
3	Identify faces, edges, and bases on three-dimensional objects.			

1	Identify, describe, and classify the properties of, and the relationship between plane and solid geometric figures.	(Mathematics, Level: 6)		
1	measure, identify, and draw angles, perpendicular and parallel lines, rectangles, and triangles by using appropriate tools		MSC5 Module: Fundamentals of Geometry Unit: Geometry Fundamentals Session: Naming and Measuring Angles	Levels: 6-8
1			MSC5 Module: Fundamentals of Geometry Unit: Triangles Session: Classifying Triangles by Angles	Levels: 6-8
1			MSC3 Module: Geometry Unit: Measurement Session: Lines, Angles, and Circles	Levels: 4-6
1			MSC3 Module: Geometry Unit: Measurement Session: Rectangles and Squares	Levels: 4-6
1	understand that the sum of angles of any triangle is 180 degrees and the sum of the angles of any quadrilateral is 360 degrees and use this information to solve problems		MSC5 Module: Fundamentals of Geometry Unit: Triangles Session: Classifying Triangles by Angles	Levels: 6-8
1			MSC3 Module: Geometry Unit: Measurement Session: Triangles	Levels: 4-6
1			MSC3 Module: Geometry Unit: Measurement Session: Parallelograms and Trapezoids	Levels: 4-6
1	visualize and draw two-dimensional views of three-dimensional objects made from rectangular solids			
2	Classify angles as right, obtuse, or straight.		MSC5 Module: Fundamentals of Geometry Unit: Geometry Fundamentals Session: Naming and Measuring Angles	Levels: 6-8
2			MSC3 Module: Geometry Unit: Measurement Session: Lines, Angles, and Circles	Levels: 4-6
3	Describe the properties of geometric figures that include regular polygons, circles, ellipses, cylinders, cones, spheres, and cubes.		MSC3 Module: Geometry Unit: Measurement Session: Parallelograms and Trapezoids	Levels: 4-6
4	Classify polygons as regular or irregular.			
5	Classify triangles as scalene, isosceles, or equilateral and by angles		MSC5 Module: Fundamentals of Geometry Unit: Triangles Session: Classifying Triangles by Sides	Levels: 6-8
5			MSC3 Module: Geometry Unit: Measurement Session: Lines, Angles, and Circles	Levels: 4-6
5			MSC3 Module: Geometry Unit: Measurement Session: Triangles	Levels: 4-6
6	Identify angle, line, segment, and ray and use the symbols for each		MSC3 Module: Geometry Unit: Measurement Session: Lines, Angles, and Circles	Levels: 4-6
7	Describe the relationship between radius, diameter, and circumference of a circle.		MSC4 Module: Decimals Unit: Essentials of Decimals Session: Rounding Decimals	Levels: 6-8

1	Classify geometric figures as similar or congruent.	(Mathematics, Level: 7)		
2	Understand the concept of a constant (e.g., pi) and use the formulas for the circumference and area of a circle		MSC5 Module: Fundamentals of Geometry Unit: Volume and Surface Area Session: Calculating the Volume & Surface Area of a Right Cylinder	Levels: 6-8
2			MSC4 Module: Decimals Unit: Essentials of Decimals Session: Rounding Decimals	Levels: 6-8
3	Explain and use the Pythagorean theorem.		MSC5 Module: Radicals & Exponents Unit: Introduction to Radicals & Pythagorean Theorem Session: Exploring the Pythagorean Theorem	Levels: 6-8
4	Determine the radius, diameter, and circumference of a circle and explain their relationship.		MSC4 Module: Decimals Unit: Essentials of Decimals Session: Rounding Decimals	Levels: 6-8
5	Use properties to classify solids including pyramids, cones, prisms, and cylinders.			
1	Recognize, classify, and discuss properties of all geometric figures including point, line, and plane.	(Mathematics, Level: 8)		
2	Identify arc, chord, and semicircle and explain their attributes.			
3	Use the Pythagorean theorem and its converse to find the missing side of a right triangle and the lengths of the other line segments.		MSC5 Module: Radicals & Exponents Unit: Introduction to Radicals & Pythagorean Theorem Session: Exploring the Pythagorean Theorem	Levels: 6-8
3			MSC5 Module: Radicals & Exponents Unit: Introduction to Radicals & Pythagorean Theorem Session: Defining Irrational Numbers	Levels: 6-8
3			MSC5 Module: Ratio & Proportion Unit: Similar Polygons Session: Setting up & Solving Proportions in Similar Polygons	Levels: 6-8
	Specify locations and describe spatial relationships using coordinate geometry and other representational systems.	(Mathematics, Level: 5 - 8)		
1	Recognize perpendicular and parallel lines.	(Mathematics, Level: 5)	MSC3 Module: Geometry Unit: Measurement Session: Lines, Angles, and Circles	Levels: 4-6
1			MSC3 Module: Geometry Unit: Measurement Session: Rectangles and Squares	Levels: 4-6
1	Use coordinate geometry to describe location on a plane.	(Mathematics, Level: 6)	MSC3 Module: Geometry Unit: Coordinate Geometry and Algebra Session: The Coordinate Plane	Levels: 4-6
1			MSC3 Module: Geometry Unit: Coordinate Geometry and Algebra Session: Symmetry and Transformations	Levels: 4-6
2	Recognize skewed lines in space.			

1	Construct and use coordinate graphs to plot simple figures, determine lengths and areas related to them, and determine the image under translations and reflections.	(Mathematics, Level: 7)		
1	Represent, formulate, and solve distance and geometry problems using the language and symbols of algebra and the coordinate plane and space.	(Mathematics, Level: 8)		
	Apply transformations and use symmetry to analyze mathematical situations.	(Mathematics, Level: 5 - 8)		
1	Identify line of symmetry in simple geometric figures.	(Mathematics, Level: 5)	MSC3 Module: Geometry Unit: Coordinate Geometry and Algebra Session: Symmetry and Transformations	Levels: 4-6
1	Identify line of symmetry with rotation and scaling.	(Mathematics, Level: 6)	MSC3 Module: Geometry Unit: Coordinate Geometry and Algebra Session: Symmetry and Transformations	Levels: 4-6
1	Determine how perimeter and area are affected by changes of scale.	(Mathematics, Level: 7)		
1	Describe the symmetry of three-dimensional figures.	(Mathematics, Level: 8)		
2	Describe and perform single and multiple transformations that include rotation, reflection, translation, and dilation to two-dimensional figures.			
	Use visualization, spatial reasoning, and geometric modeling to solve problems.	(Mathematics, Level: 5 - 8)		
1	Understand and compute the perimeter of regular polygons.	(Mathematics, Level: 5)	MSC3 Module: Geometry Unit: Measurement Session: Rectangles and Squares	Levels: 4-6
2	Identify and explain circumference, radius, and diameter.			
1	Use appropriate technology, manipulatives, constructions, or drawings to recognize or compare geometric figures.	(Mathematics, Level: 6)		
1	Compute the perimeter and area of common geometric shapes and use the results to find measures of less common objects.	(Mathematics, Level: 7)	MSC5 Module: Fundamentals of Geometry Unit: Volume and Surface Area Session: Calculating the Surface Area of a Right Triangular Prism	Levels: 6-8
2	Identify and describe the properties of two-dimensional figures:			
2	identify angles as vertical, adjacent, complementary, or supplementary and provide descriptions of these terms		MSC5 Module: Fundamentals of Geometry Unit: Geometry Fundamentals Session: Naming and Measuring Angles	Levels: 6-8
2			MSC5 Module: Fundamentals of Geometry Unit: Geometry Fundamentals Session: Defining Complementary & Supplementary Angles	Levels: 6-8

2			MSC5 Module: Fundamentals of Geometry Unit: Geometry Fundamentals Session: Recognizing Congruent Angles	Levels: 6-8
2	use the properties of complementary and supplementary angles and the sum of the angles of a triangle to solve problems involving an unknown angle		MSC5 Module: Fundamentals of Geometry Unit: Geometry Fundamentals Session: Naming and Measuring Angles	Levels: 6-8
2			MSC5 Module: Fundamentals of Geometry Unit: Geometry Fundamentals Session: Defining Complementary & Supplementary Angles	Levels: 6-8
2			MSC5 Module: Fundamentals of Geometry Unit: Geometry Fundamentals Session: Recognizing Congruent Angles	Levels: 6-8
2	draw quadrilaterals and triangles from given information			
1	Understand angle relationships formed by parallel lines cut by a transversal.	(Mathematics, Level: 8)	MSC5 Module: Fundamentals of Geometry Unit: Geometry Fundamentals Session: Defining Complementary & Supplementary Angles	Levels: 6-8
1			MSC5 Module: Fundamentals of Geometry Unit: Geometry Fundamentals Session: Recognizing Congruent Angles	Levels: 6-8
2	Recognize and apply properties of corresponding parts of similar and congruent triangles and quadrilaterals.		MSC5 Module: Ratio & Proportion Unit: Similar Polygons Session: Defining Similarity	Levels: 6-8
2			MSC5 Module: Ratio & Proportion Unit: Similar Polygons Session: Identifying Equivalent Ratios	Levels: 6-8
2			MSC5 Module: Ratio & Proportion Unit: Similar Polygons Session: Setting up & Solving Proportions in Similar Polygons	Levels: 6-8
3	Represent and solve problems relating to size, shape, area, and volume using geometric models.		MSC5 Module: Essentials of Algebra Unit: Evaluating an Algebraic Expression Session: Representing the Dimensions & Area of a Rectangle	Levels: 6-8
3			MSC5 Module: Essentials of Algebra Unit: Solving Literal Equations Session: Identifying the Variables in a Given Formula	Levels: 6-8
3			MSC5 Module: Fundamentals of Geometry Unit: Volume and Surface Area Session: Calculating the Volume of a Right Triangular Prism	Levels: 6-8
3			MSC5 Module: Fundamentals of Geometry Unit: Volume and Surface Area Session: Calculating the Surface Area of a Right Triangular Prism	Levels: 6-8

3			MSC5 Module: Fundamentals of Geometry Unit: Volume and Surface Area Session: Calculating the Volume & Surface Area of a Right Cylinder	Levels: 6-8
4	Develop and use formulas for area, perimeter, circumference, and volume.		MSC5 Module: Essentials of Algebra Unit: Solving Literal Equations Session: Identifying the Variables in a Given Formula	Levels: 6-8
4			MSC5 Module: Fundamentals of Geometry Unit: Volume and Surface Area Session: Calculating the Volume of a Right Triangular Prism	Levels: 6-8
4			MSC5 Module: Fundamentals of Geometry Unit: Volume and Surface Area Session: Calculating the Surface Area of a Right Triangular Prism	Levels: 6-8
4			MSC5 Module: Fundamentals of Geometry Unit: Volume and Surface Area Session: Calculating the Volume & Surface Area of a Right Cylinder	Levels: 6-8
4			MSC4 Module: Fractions Unit: Subtracting Fractions Session: Subtracting with Like Denominators	Levels: 6-8
4			MSC4 Module: Decimals Unit: Multiplying Decimals Session: Calculating Products	Levels: 6-8
4			MSC4 Module: Decimals Unit: Multiplying Decimals Session: Finding the Volume of a Prism	Levels: 6-8
5	Construct two-dimensional patterns for three-dimensional models.			
	Understand measurement systems and applications.	(Mathematics, Level: 5 - 8)		
	Understand measurable attributes of objects and the units, systems, and processes of measurement.			
1	Understand properties and select the appropriate type of unit for measuring each using both U.S. customary and metric systems.	(Mathematics, Level: 5)		
2	Select and use appropriate units and tools to measure according to the degree of accuracy required in a particular problem-solving situation.			
3	Solve problems involving linear measurement, weight, and capacity to the appropriate degree of accuracy.			
4	Perform one-step conversions within a system of measurement.			

1	Perform multi-step conversions of measurement units to equivalent units within a given system.	(Mathematics, Level: 6)		
2	Estimate measurement in both U.S. customary and metric units.			
3	Select and use units of appropriate size and type to measure angles , perimeter, area, and capacity in both U.S. customary and metric systems.		MSC5 Module: Fundamentals of Geometry Unit: Geometry Fundamentals Session: Naming and Measuring Angles	Levels: 6-8
3			MSC3 Module: Geometry Unit: Measurement Session: Lines, Angles, and Circles	Levels: 4-6
3			MSC3 Module: Geometry Unit: Measurement Session: Triangles	Levels: 4-6
4	Use standard units of linear measurement to the nearest sixteenth of an inch; metric measurements to the nearest millimeter.			
1	Choose appropriate units of measure and ratios to recognize new equivalences to solve problems.	(Mathematics, Level: 7)	MSC5 Module: Ratio & Proportion Unit: Proportion Session: Applying the Means/Extremes Property	Levels: 6-8
2	Select and use the appropriate size and type of unit for a given measurement situation.			
3	Compare masses, weights, capacities, geometric measures, times, and temperatures within measurement systems.			
4	Approximate the relationship between standard and metric measurement systems.		MSC5 Module: Ratio & Proportion Unit: Proportion Session: Applying the Means/Extremes Property	Levels: 6-8
5	Use measures expressed as rates and measures expressed as products to solve problems, check the units of the solutions, and analyze the reasonableness of the answer.			
1	Understand the concept of volume and use the appropriate units in common measuring systems to compute the volume of rectangular solids.	(Mathematics, Level: 8)	MSC5 Module: Essentials of Algebra Unit: Algebra Fundamentals Session: Replacing Variables in a Formula	Levels: 6-8
1			MSC4 Module: Decimals Unit: Multiplying Decimals Session: Calculating Products	Levels: 6-8
1			MSC4 Module: Decimals Unit: Multiplying Decimals Session: Finding the Volume of a Prism	Levels: 6-8
2	Use changes in measurement units to perform conversions from one-, two-, and three-dimensional shapes.			

	Apply appropriate techniques, tools, and formulas to determine measurements.	(Mathematics, Level: 5 - 8)		
1	Solve measurement problems using appropriate tools involving length, perimeter, weight, capacity, time, and temperature.	(Mathematics, Level: 5)	MSC3 Module: Geometry Unit: Measurement Session: Rectangles and Squares	Levels: 4-6
1			MSC3 Module: Geometry Unit: Measurement Session: Triangles	Levels: 4-6
2	Select and use strategies to estimate measurements including length, distance, capacity, and time.			
3	Apply strategies and use tools for estimating and measuring the perimeter of regular and irregular shapes.		MSC3 Module: Geometry Unit: Measurement Session: Rectangles and Squares	Levels: 4-6
1	Apply various measurement techniques and tools, units of measure, and degrees of accuracy to find accurate rational number representations for length, liquid, weight, perimeter, temperature, and time.	(Mathematics, Level: 6)	MSC3 Module: Geometry Unit: Measurement Session: Rectangles and Squares	Levels: 4-6
1			MSC3 Module: Geometry Unit: Measurement Session: Triangles	Levels: 4-6
1			MSC4 Module: Decimals Unit: Multiplying Decimals Session: Calculating Products	Levels: 6-8
2	Select and use formulas for perimeters of squares and rectangles.		MSC3 Module: Geometry Unit: Measurement Session: Rectangles and Squares	Levels: 4-6
3	Select and use strategies to estimate measurements including angle measure and capacity.			
4	Select and justify the selection of measurement tools, units of measure, and degrees of accuracy appropriate to the given situation.			
1	Apply strategies and formulas to find missing angle measurements in triangles and quadrilaterals.	(Mathematics, Level: 7)	MSC5 Module: Fundamentals of Geometry Unit: Geometry Fundamentals Session: Naming and Measuring Angles	Levels: 6-8
1			MSC5 Module: Fundamentals of Geometry Unit: Triangles Session: Classifying Triangles by Angles	Levels: 6-8
2	Select and use formulas to determine the circumference of circles and the area of triangles, parallelograms, trapezoids, and circles.		MSC5 Module: Fundamentals of Geometry Unit: Triangles Session: Exploring the Area of a Triangle	Levels: 6-8
2			MSC5 Module: Fundamentals of Geometry Unit: Volume and Surface Area Session: Calculating the Volume & Surface Area of a Right Cylinder	Levels: 6-8

3	Solve problems involving scale factors, ratios, and proportions.		MSC5 Module: Ratio & Proportion Unit: Ratio Session: Defining Ratio	Levels: 6-8
3			MSC5 Module: Ratio & Proportion Unit: Proportion Session: Defining a Proportion	Levels: 6-8
3			MSC5 Module: Ratio & Proportion Unit: Proportion Session: Solving for a Variable in a Proportion	Levels: 6-8
3			MSC5 Module: Ratio & Proportion Unit: Proportion Session: Applying the Means/Extremes Property	Levels: 6-8
3			MSC5 Module: Ratio & Proportion Unit: Direct & Inverse Variation Session: Exploring & Solving Direct Variation Problems	Levels: 6-8
3			MSC5 Module: Ratio & Proportion Unit: Direct & Inverse Variation Session: Exploring Inverse Variation	Levels: 6-8
3			MSC5 Module: Ratio & Proportion Unit: Direct & Inverse Variation Session: Solving Inverse Variation Problems	Levels: 6-8
3			MSC5 Module: Ratio & Proportion Unit: Similar Polygons Session: Defining Similarity	Levels: 6-8
3			MSC5 Module: Ratio & Proportion Unit: Similar Polygons Session: Identifying Equivalent Ratios	Levels: 6-8
3			MSC5 Module: Ratio & Proportion Unit: Similar Polygons Session: Setting up & Solving Proportions in Similar Polygons	Levels: 6-8
1	Use ratios and proportions to measure hard-to-measure objects.	(Mathematics, Level: 8)	MSC5 Module: Ratio & Proportion Unit: Proportion Session: Applying the Means/Extremes Property	Levels: 6-8
1			MSC5 Module: Ratio & Proportion Unit: Similar Polygons Session: Identifying Equivalent Ratios	Levels: 6-8
2	Use estimation to solve problems.			
3	Use proportional relationships in similar shapes to find missing measurements.		MSC5 Module: Ratio & Proportion Unit: Similar Polygons Session: Defining Similarity	Levels: 6-8
3			MSC5 Module: Ratio & Proportion Unit: Similar Polygons Session: Identifying Equivalent Ratios	Levels: 6-8
4	Apply strategies to determine the surface area and volume of prisms, pyramids, and cylinders.		MSC5 Module: Essentials of Algebra Unit: Algebra Fundamentals Session: Introducing Variables	Levels: 6-8
4			MSC5 Module: Essentials of Algebra Unit: Algebra Fundamentals Session: Replacing Variables in a Formula	Levels: 6-8
4			MSC5 Module: Fundamentals of Geometry Unit: Volume and Surface Area Session: Calculating the Volume of a Right Triangular Prism	Levels: 6-8

4			MSC5 Module: Fundamentals of Geometry Unit: Volume and Surface Area Session: Calculating the Surface Area of a Right Triangular Prism	Levels: 6-8
4			MSC5 Module: Fundamentals of Geometry Unit: Volume and Surface Area Session: Calculating the Volume & Surface Area of a Right Cylinder	Levels: 6-8
4			MSC4 Module: Decimals Unit: Multiplying Decimals Session: Calculating Products	Levels: 6-8
4			MSC4 Module: Decimals Unit: Multiplying Decimals Session: Finding the Volume of a Prism	Levels: 6-8
5	Perform conversions with multiple terms between metric and U.S. standard measurement systems.			
6	Estimate volume in cubic units.			
7	Solve simple problems involving rates and derived measurements for such properties as velocity and density.			
	Understand how to formulate questions, analyze data, and determine probabilities.	(Mathematics, Level: 5 - 8)		
	Formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them.			
1	Construct, read, analyze, and interpret tables, charts, graphs, and data plots.	(Mathematics, Level: 5)	MSC3 Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Displaying and Analyzing Data	Levels: 4-6
2	Construct, interpret, and analyze data from graphical representations and draw simple conclusions using bar graphs, line graphs, circle graphs, frequency tables, and Venn diagrams.		MSC5 Module: Fundamentals of Statistics Unit: Interpreting and Constructing Graphs Session: Exploring Bar Graphs	Levels: 6-8
2			MSC3 Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Displaying and Analyzing Data	Levels: 4-6
3	Display, analyze, compare, and interpret different data sets, including data sets of different sizes.		MSC3 Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Displaying and Analyzing Data	Levels: 4-6
4	Organize and display single-variable data in appropriate graphs and representations.		MSC3 Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Displaying and Analyzing Data	Levels: 4-6
4			MSC3 Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Looking at Chance	Levels: 4-6

5	Organize, read, and display numerical (quantitative) and non-numerical (qualitative) data in a clear, organized, and accurate manner including correct titles, labels, and intervals or categories including:			
5	frequency tables			
5	stem and leaf plots			
5	bar, line, and circle graphs			
5	Venn diagrams			
5	pictorial displays		MSC3 Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Displaying and Analyzing Data	Levels: 4-6
5	charts and tables			
6	Formulate questions and identify data to be collected to correctly answer a question.			
1	Use statistical representations to analyze data.	(Mathematics, Level: 6)	MSC5 Module: Fundamentals of Statistics Unit: Frequency Distribution & Histograms Session: Creating and Interpreting a Frequency Table	Levels: 6-8
2	Draw and compare different graphical representations of the same data.			
3	Use mean, median, mode, and range to describe data.		MSC5 Module: Fundamentals of Statistics Unit: The Mean, Median, & Mode Session: Defining the Mean & Median	Levels: 6-8
3			MSC5 Module: Fundamentals of Statistics Unit: The Mean, Median, & Mode Session: Defining the Mode	Levels: 6-8
3			MSC5 Module: Fundamentals of Statistics Unit: The Mean, Median, & Mode Session: Calculating the Mean, Median, & Mode	Levels: 6-8
3			MSC3 Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Displaying and Analyzing Data	Levels: 4-6
4	Sketch circle graphs to display data.			
5	Solve problems by collecting, organizing, displaying and interpreting data.			
6	Compare different samples of a population with the entire population and determine the appropriateness of using a sample.		MSC5 Module: Fundamentals of Probability Unit: Probability of Combined Events Session: Determining the Sample Space of an Experiment	Levels: 6-8
7	Conduct and explain sampling techniques such as observations, surveys, and random sampling for gathering data.		MSC5 Module: Fundamentals of Probability Unit: Probability of Combined Events Session: Determining the Sample Space of an Experiment	Levels: 6-8
8	Determine the median for a rational number data set containing an odd number of data points.		MSC3 Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Displaying and Analyzing Data	Levels: 4-6

9	Calculate and explain the median for a whole number data set containing an even number of data points.		MSC5 Module: Fundamentals of Statistics Unit: The Mean, Median, & Mode Session: Defining the Mode	Levels: 6-8
9			MSC5 Module: Fundamentals of Statistics Unit: The Mean, Median, & Mode Session: Calculating the Mean, Median, & Mode	Levels: 6-8
9			MSC3 Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Displaying and Analyzing Data	Levels: 4-6
10	Explain advantages and disadvantages of using various display formats for a specific data set.		MSC3 Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Displaying and Analyzing Data	Levels: 4-6
10			MSC3 Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Looking at Chance	Levels: 4-6
11	Formulate and solve problems by collecting, organizing, displaying, and interpreting data.			
1	Describe how data representations influences interpretation.	(Mathematics, Level: 7)		
2	Select and use appropriate representation for presenting collected data and justify the selection.			
3	Use measures of central tendency and spread to describe a set of data.		MSC5 Module: Fundamentals of Statistics Unit: The Mean, Median, & Mode Session: Defining the Mean & Median	Levels: 6-8
3			MSC5 Module: Fundamentals of Statistics Unit: The Mean, Median, & Mode Session: Defining the Mode	Levels: 6-8
4	Choose between median and mode to describe a set of data and justify the choice for a particular situation.		MSC5 Module: Fundamentals of Statistics Unit: The Mean, Median, & Mode Session: Defining the Mean & Median	Levels: 6-8
4			MSC5 Module: Fundamentals of Statistics Unit: The Mean, Median, & Mode Session: Defining the Mode	Levels: 6-8
4			MSC5 Module: Fundamentals of Statistics Unit: The Mean, Median, & Mode Session: Calculating the Mean, Median, & Mode	Levels: 6-8
5	Determine the quartiles of a data set.			
6	Identify ordered pairs of data from a graph and interpret the data in terms of the situation depicted by the graph.		MSC5 Module: Fundamentals of Statistics Unit: Interpreting and Constructing Graphs Session: Exploring Line Graphs	Levels: 6-8
7	Use various scales and formats to display the same data set.			
8	Identify and explain the misleading representations of data.			

9	Collect, organize, and represent data sets that have one or more variables and identify relationships among variables within a data set.			
10	Compute the minimum, lower quartile, median, upper quartile, and maximum of a data set.		MSC5 Module: Fundamentals of Statistics Unit: The Mean, Median, & Mode Session: Defining the Mode	Levels: 6-8
10			MSC5 Module: Fundamentals of Statistics Unit: The Mean, Median, & Mode Session: Calculating the Mean, Median, & Mode	Levels: 6-8
11	Identify and explain the effects of scale and / or interval changes on graphs of whole number data sets.		MSC5 Module: Fundamentals of Statistics Unit: Interpreting and Constructing Graphs Session: Exploring Bar Graphs	Levels: 6-8
11			MSC5 Module: Fundamentals of Statistics Unit: Frequency Distribution and Histograms Session: Defining a Histogram	Levels: 6-8
12	Use and explain sampling techniques for gathering data.			
13	Analyze problems by identifying relationships, distinguishing relevant from irrelevant information, identifying missing information, and selecting, collecting, and displaying appropriate data to address the problem.			
1	Represent two numerical variables on a plot, describe how the data points are distributed, and identify relationships that exist between the two variables.	(Mathematics, Level: 8)		
2	Generate, organize, and interpret real numbers in a variety of situations.			
3	Organize, analyze, and display appropriate quantitative and qualitative data to address specific questions including:			
3	frequency distributions		MSC5 Module: Fundamentals of Statistics Unit: Frequency Distribution & Histograms Session: Creating and Interpreting a Frequency Table	Levels: 6-8
3			MSC5 Module: Fundamentals of Statistics Unit: Frequency Distribution and Histograms Session: Defining a Histogram	Levels: 6-8
3			MSC5 Module: Fundamentals of Statistics Unit: Frequency Distribution and Histograms Session: Exploring Cumulative Frequency Graphs	Levels: 6-8
3	plots			

3	histograms		MSC5 Module: Fundamentals of Statistics Unit: Frequency Distribution & Histograms Session: Creating and Interpreting a Frequency Table	Levels: 6-8
3			MSC5 Module: Fundamentals of Statistics Unit: Frequency Distribution and Histograms Session: Defining a Histogram	Levels: 6-8
3	bar, line, and pie graphs		MSC5 Module: Fundamentals of Statistics Unit: Interpreting and Constructing Graphs Session: Exploring Line Graphs	Levels: 6-8
3			MSC5 Module: Fundamentals of Statistics Unit: Interpreting and Constructing Graphs Session: Exploring Bar Graphs	Levels: 6-8
3			MSC5 Module: Fundamentals of Statistics Unit: Interpreting and Constructing Graphs Session: Interpreting Pie Charts	Levels: 6-8
3	diagram and pictorial displays			
3	charts and tables		MSC5 Module: Fundamentals of Statistics Unit: Frequency Distribution & Histograms Session: Creating and Interpreting a Frequency Table	Levels: 6-8
4	Select the appropriate measure of central tendency to describe a set of data for a particular problem situation.		MSC5 Module: Fundamentals of Statistics Unit: The Mean, Median, & Mode Session: Defining the Mean & Median	Levels: 6-8
4			MSC5 Module: Fundamentals of Statistics Unit: The Mean, Median, & Mode Session: Defining the Mode	Levels: 6-8
5	Simulate an event selecting and using different models.			
6	Develop an appropriate strategy using a variety of data from surveys, samplings, estimations, and inferences to address a specific problem.			
	Select and use appropriate statistical methods to analyze data.	(Mathematics, Level: 5 - 8)		
1	Organize and display single-variable data in appropriate graphs and representations and determine which types of	(Mathematics, Level: 5)		
2	Use fractions and percentages to compare data sets of different sizes.			
3	Correctly rank the values of a numerical data set containing simple fractions and decimals, identify maximum and minimum data values, and calculate the range for a data set.		MSC3 Module: Decimals Unit: Introduction Session: Ordering and Rounding	Levels: 4-6

1	Choose an appropriate graphical format to organize and represent data.	(Mathematics, Level: 6)	MSC3 Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Looking at Chance	Levels: 4-6
2	Describe the effects of missing or incorrect data.			
3	Compute and analyze statistical measurements for data sets:			
3	understand how additional data added to data sets may affect the computations of central tendency		MSC5 Module: Fundamentals of Statistics Unit: The Mean, Median, & Mode Session: Defining the Mean & Median	Levels: 6-8
3			MSC5 Module: Fundamentals of Statistics Unit: The Mean, Median, & Mode Session: Defining the Mode	Levels: 6-8
3	understand how the inclusion or exclusion of outliers affects measures of central tendency		MSC5 Module: Fundamentals of Statistics Unit: The Mean, Median, & Mode Session: Defining the Mean & Median	Levels: 6-8
3			MSC5 Module: Fundamentals of Statistics Unit: The Mean, Median, & Mode Session: Defining the Mode	Levels: 6-8
3			MSC5 Module: Fundamentals of Statistics Unit: The Mean, Median, & Mode Session: Calculating the Mean, Median, & Mode	Levels: 6-8
3	know why a specific measure of central tendency provides the most useful information in a given context		MSC5 Module: Fundamentals of Statistics Unit: The Mean, Median, & Mode Session: Defining the Mean & Median	Levels: 6-8
3			MSC5 Module: Fundamentals of Statistics Unit: The Mean, Median, & Mode Session: Defining the Mode	Levels: 6-8
3			MSC5 Module: Fundamentals of Statistics Unit: The Mean, Median, & Mode Session: Calculating the Mean, Median, & Mode	Levels: 6-8
3			MSC3 Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Displaying and Analyzing Data	Levels: 4-6
4	Use data samples of a population and describe the characteristics and limitations of the sample.		MSC5 Module: Fundamentals of Probability Unit: Probability of Combined Events Session: Determining the Sample Space of an Experiment	Levels: 6-8
5	and which method makes a sample more representative for a population.			
6	Explain how the way a question is asked in a survey might influence the results obtained.			
7	Identify data that represent sampling errors and explain why the sample and the display might be biased.		MSC5 Module: Fundamentals of Probability Unit: Probability of Combined Events Session: Determining the Sample Space of an Experiment	Levels: 6-8

8	Identify claims based on statistical data and, in sample cases, evaluate the validity and usefulness of the claims.			
1	Choose and justify appropriate measures of central tendencies to describe given or derived data.	(Mathematics, Level: 7)	MSC5 Module: Fundamentals of Statistics Unit: The Mean, Median, & Mode Session: Defining the Mean & Median	Levels: 6-8
1			MSC5 Module: Fundamentals of Statistics Unit: The Mean, Median, & Mode Session: Defining the Mode	Levels: 6-8
2	Know various ways to display data sets and use these forms to display a single set of data or to compare two sets of data.		MSC5 Module: Fundamentals of Statistics Unit: Interpreting and Constructing Graphs Session: Exploring Bar Graphs	Levels: 6-8
2			MSC5 Module: Fundamentals of Statistics Unit: Frequency Distribution & Histograms Session: Creating and Interpreting a Frequency Table	Levels: 6-8
2			MSC5 Module: Fundamentals of Statistics Unit: Frequency Distribution and Histograms Session: Defining a Histogram	Levels: 6-8
3	Use the analysis of data to make convincing arguments.			
4	Use appropriate technology to gather and display data sets and identify the relationships that exist among variables within the data set.		MSC5 Module: Fundamentals of Statistics Unit: Interpreting and Constructing Graphs Session: Exploring Bar Graphs	Levels: 6-8
5	Use data samples of a population and describe the characteristics and limitations of the sample.			
6	Identify data that represent sampling errors and explain why the sample and the display might be biased.			
7	Identify claims based on statistical data and evaluate the validity of the claims.			
1	Use changes in scales, intervals, or categories to help support a particular interpretation of data.	(Mathematics, Level: 8)	MSC5 Module: Fundamentals of Statistics Unit: Interpreting and Constructing Graphs Session: Exploring Bar Graphs	Levels: 6-8
1			MSC5 Module: Fundamentals of Statistics Unit: Frequency Distribution and Histograms Session: Defining a Histogram	Levels: 6-8
2	Generate, organize, and interpret real number and other data in a variety of situations.		MSC5 Module: Fundamentals of Statistics Unit: Frequency Distribution & Histograms Session: Creating and Interpreting a Frequency Table	Levels: 6-8
3	Analyze data to make decisions and to develop convincing arguments from data displayed in a variety of formats that include:			

3	plots			
3	distributions		MSC5 Module: Fundamentals of Statistics Unit: Frequency Distribution & Histograms Session: Creating and Interpreting a Frequency Table	Levels: 6-8
3			MSC5 Module: Fundamentals of Statistics Unit: Frequency Distribution and Histograms Session: Defining a Histogram	Levels: 6-8
3	graphs		MSC5 Module: Fundamentals of Statistics Unit: Interpreting and Constructing Graphs Session: Exploring Line Graphs	Levels: 6-8
3			MSC5 Module: Fundamentals of Statistics Unit: Interpreting and Constructing Graphs Session: Exploring Bar Graphs	Levels: 6-8
3			MSC5 Module: Fundamentals of Statistics Unit: Frequency Distribution and Histograms Session: Exploring Cumulative Frequency Graphs	Levels: 6-8
3	scatter plots			
3	diagrams		MSC5 Module: Fundamentals of Probability Unit: Probability of Combined Events Session: Calculating the Probability of Mutually Exclusive Events	Levels: 6-8
3	pictorial displays			
3	charts and tables		MSC5 Module: Fundamentals of Statistics Unit: Interpreting and Constructing Graphs Session: Interpreting Pie Charts	Levels: 6-8
3			MSC5 Module: Fundamentals of Statistics Unit: Frequency Distribution & Histograms Session: Creating and Interpreting a Frequency Table	Levels: 6-8
3			MSC5 Module: Fundamentals of Statistics Unit: Frequency Distribution and Histograms Session: Defining a Histogram	Levels: 6-8
3	Venn diagrams			
4	Interpret and analyze data from graphical representations and draw simple conclusions.		MSC5 Module: Fundamentals of Statistics Unit: Frequency Distribution & Histograms Session: Creating and Interpreting a Frequency Table	Levels: 6-8
5	Evaluate and defend the reasonableness of conclusions drawn from data analysis.			
6	Use appropriate central tendency and spread as a means for effective decision-making in analyzing data and outliers.		MSC5 Module: Fundamentals of Statistics Unit: The Mean, Median, & Mode Session: Defining the Mean & Median	Levels: 6-8
7	Identify simple graphic misrepresentations and distortions of sets of data.		MSC5 Module: Fundamentals of Statistics Unit: Interpreting and Constructing Graphs Session: Exploring Bar Graphs	Levels: 6-8

8	Use appropriate technology to display data as lists, tables, matrices, graphs, and plots and to analyze the relationships of variables in the data displayed.		MSC5 Module: Fundamentals of Statistics Unit: Interpreting and Constructing Graphs Session: Exploring Bar Graphs	Levels: 6-8
8			MSC5 Module: Fundamentals of Statistics Unit: Frequency Distribution & Histograms Session: Creating and Interpreting a Frequency Table	Levels: 6-8
8			MSC5 Module: Fundamentals of Statistics Unit: Frequency Distribution and Histograms Session: Defining a Histogram	Levels: 6-8
8			MSC5 Module: Fundamentals of Statistics Unit: Frequency Distribution and Histograms Session: Exploring Cumulative Frequency Graphs	Levels: 6-8
	Develop and evaluate inferences and predictions that are based on data.	(Mathematics, Level: 5 - 8)		
1	Make and justify valid inferences, predictions, and arguments based on statistical analysis.	(Mathematics, Level: 5)		
2	Compare a given prediction with the results of an investigation.			
3	Use counting strategies to determine all the possible outcomes of a particular familiar event.		MSC3 Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Looking at Chance	Levels: 4-6
4	Find all possible outcome sets involving four or more sets of objects.			
5	Evaluate the reasonableness of inferences that are based on data in the context of the original solution.			
6	Identify the method used to make an inference and/or a prediction on a given data set and solve similar problems.			
7	Determine the accuracy of a prediction or an inference based on the accuracy of the data in a given data set.			
8	List all possible outcomes of simple events.		MSC3 Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Looking at Chance	Levels: 4-6
1	Identify claims based on statistical data and evaluate the validity of the claim	(Mathematics, Level: 6)		
2	Conduct observations, surveys, experiments and/or simulations, record the results in charts, tables, or graphs, and use the results to draw conclusions and make predictions.		MSC5 Module: Fundamentals of Probability Unit: Probability of Combined Events Session: Calculating the Probability of Independent Events	Levels: 6-8

2			MSC5 Module: Fundamentals of Probability Unit: Probability of Combined Events Session: Determining the Sample Space of an Experiment	Levels: 6-8
3	Find all possible combinations in a given set.			
4	Compare expected results with actual results in a simple experiment.			
1	Formulate and justify mathematical conjectures based on data and a general description of the mathematical question or problem posed.	(Mathematics, Level: 7)		
2	Analyze data to make accurate inferences, predictions, and to develop convincing arguments from data displayed in a variety of forms.			
3	Approximate a line of best fit for a data set in a scatter plot form and make predictions using the simple equation of that line.			
1	Describe how changes in scale, intervals, or categories influence arguments for a particular interpretation of the data.	(Mathematics, Level: 8)	MSC5 Module: Fundamentals of Statistics Unit: Frequency Distribution and Histograms Session: Defining a Histogram	Levels: 6-8
2	Describe how reader bias, measurement errors, and display distortion can affect the interpretation of data, predictions, and inferences based on data.			
3	Conduct simple experiments and/or simulations, record results in charts, tables, or graphs, and use the results to draw conclusions and make predictions.		MSC5 Module: Fundamentals of Statistics Unit: Frequency Distribution & Histograms Session: Creating and Interpreting a Frequency Table	Levels: 6-8
3			MSC5 Module: Fundamentals of Probability Unit: Probability of Combined Events Session: Calculating the Probability of Independent Events	Levels: 6-8
3			MSC5 Module: Fundamentals of Probability Unit: Probability of Combined Events Session: Determining the Sample Space of an Experiment	Levels: 6-8
4	Compare expected results with experimental results and information used in predictions and inferences.			
	Understand and apply basic concepts of probability.	(Mathematics, Level: 5 - 8)		
1	Determine probabilities through experiments and/or simulations and compare the results with mathematical expressions.	(Mathematics, Level: 5)	MSC3 Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Looking at Chance	Levels: 4-6

2	Make predictions from the results of student-generated experiments of single events.			
3	Identify simple experiments where the probabilities of all outcomes are equal.		MSC5 Module: Fundamentals of Probability Unit: Simple Probability Session: Calculating Probabilities on a Color Wheel	Levels: 6-8
3			MSC3 Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Looking at Chance	Levels: 4-6
4	Describe and predict the results of a probability experiment.		MSC3 Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Looking at Chance	Levels: 4-6
5	Use fractions to describe the results of an experiment.		MSC3 Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Looking at Chance	Levels: 4-6
6	Use probability to generalize from a simple pattern or set of examples and justify why the generalization is reasonable.			
1	List all possible outcomes for a compound event composed of two independent events and recognize whether an outcome is certain, impossible, likely, or unlikely.	(Mathematics, Level: 6)	MSC5 Module: Fundamentals of Probability Unit: Simple Probability Session: Defining & Expressing Probability	Levels: 6-8
1			MSC5 Module: Fundamentals of Probability Unit: Simple Probability Session: Calculating Probabilities on a Color Wheel	Levels: 6-8
1			MSC5 Module: Fundamentals of Probability Unit: Probability of Combined Events Session: Calculating the Probability of Independent Events	Levels: 6-8
1			MSC5 Module: Fundamentals of Probability Unit: Probability of Combined Events Session: Determining the Sample Space of an Experiment	Levels: 6-8
1			MSC3 Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Looking at Chance	Levels: 4-6
2	Determine and compare experimental (empirical) and mathematical (theoretical) probabilities.		MSC5 Module: Fundamentals of Probability Unit: Probability of Combined Events Session: Determining the Sample Space of an Experiment	Levels: 6-8
3	Determine theoretical and experimental probabilities and use them to make predictions about events.		MSC5 Module: Fundamentals of Probability Unit: Simple Probability Session: Determining Probabilities of Complementary Events	Levels: 6-8
4	Represent all possible outcomes for compound events in an organized way and express the theoretical probability of each outcome.		MSC5 Module: Fundamentals of Probability Unit: Simple Probability Session: Defining & Expressing Probability	Levels: 6-8

4			MSC5 Module: Fundamentals of Probability Unit: Probability of Combined Events Session: Calculating the Probability of Independent Events	Levels: 6-8
4			MSC3 Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Looking at Chance	Levels: 4-6
5	Use data to estimate the probability of future events.			
6	Represent probabilities as ratios, proportions, decimals between 0 and 1, and percentages between 0 and 100 and verify that the probabilities computed are reasonable; know that if P is the probability of an event, 1- P is the probability of the event not occurring.		MSC5 Module: Fundamentals of Probability Unit: Simple Probability Session: Defining & Expressing Probability	Levels: 6-8
6			MSC5 Module: Fundamentals of Probability Unit: Simple Probability Session: Determining Probabilities of Complementary Events	Levels: 6-8
6			MSC5 Module: Fundamentals of Probability Unit: Probability of Combined Events Session: Calculating the Probability of Mutually Exclusive Events	Levels: 6-8
6			MSC3 Module: Decimals Unit: Introduction Session: Ratios, Decimals, and Percents	Levels: 4-6
7	Describe the difference between independent and dependent events and identify situations involving independent or dependent events.		MSC5 Module: Fundamentals of Probability Unit: Probability of Combined Events Session: Calculating the Probability of Independent Events	Levels: 6-8
7			MSC5 Module: Fundamentals of Probability Unit: Probability of Combined Events Session: Calculating the Probability of Mutually Exclusive Events	Levels: 6-8
1	Determine the probability of a compound event composed of two independent events.	(Mathematics, Level: 7)	MSC5 Module: Fundamentals of Probability Unit: Probability of Combined Events Session: Calculating the Probability of Independent Events	Levels: 6-8
1			MSC5 Module: Fundamentals of Probability Unit: Probability of Combined Events Session: Determining the Sample Space of an Experiment	Levels: 6-8
1			MSC5 Module: Fundamentals of Probability Unit: Probability of Combined Events Session: Calculating the Probability of Mutually Exclusive Events	Levels: 6-8
2	Identify examples of events having the probability of one or zero.			

3	Describe the probability of events using fractions, decimals, and percents.		MSC5 Module: Fundamentals of Probability Unit: Simple Probability Session: Defining & Expressing Probability	Levels: 6-8
3			MSC5 Module: Fundamentals of Probability Unit: Probability of Combined Events Session: Calculating the Probability of Independent Events	Levels: 6-8
4	Express probability as a fraction, zero, or one.		MSC5 Module: Fundamentals of Probability Unit: Simple Probability Session: Defining & Expressing Probability	Levels: 6-8
4			MSC5 Module: Fundamentals of Probability Unit: Probability of Combined Events Session: Calculating the Probability of Independent Events	Levels: 6-8
5	Use probability to generate convincing arguments, draw conclusions, and make decisions in a variety of situations.		MSC5 Module: Fundamentals of Probability Unit: Probability of Combined Events Session: Calculating the Probability of Independent Events	Levels: 6-8
6	Make predictions based on theoretical probabilities of compound events.		MSC5 Module: Fundamentals of Probability Unit: Probability of Combined Events Session: Calculating the Probability of Independent Events	Levels: 6-8
7	Determine the probability of a simple event or a compound event composed of a simple, independent events.		MSC5 Module: Fundamentals of Probability Unit: Simple Probability Session: Calculating Probabilities on a Color Wheel	Levels: 6-8
7			MSC5 Module: Fundamentals of Probability Unit: Probability of Combined Events Session: Calculating the Probability of Independent Events	Levels: 6-8
7			MSC5 Module: Fundamentals of Probability Unit: Probability of Combined Events Session: Determining the Sample Space of an Experiment	Levels: 6-8
7			MSC5 Module: Fundamentals of Probability Unit: Probability of Combined Events Session: Calculating the Probability of Mutually Exclusive Events	Levels: 6-8
1	Calculate the odds of a desired outcome in a simple experiment.	(Mathematics, Level: 8)	MSC5 Module: Fundamentals of Probability Unit: Simple Probability Session: Calculating Probabilities on a Color Wheel	Levels: 6-8
1			MSC5 Module: Fundamentals of Probability Unit: Simple Probability Session: Determining Probabilities of Complementary Events	Levels: 6-8
1			MSC5 Module: Fundamentals of Probability Unit: Probability of Combined Events Session: Calculating the Probability of Independent Events	Levels: 6-8
2	Design and use an appropriate simulation to estimate the probability of a real-world event.			

3	Explain the relationship between probability and odds and calculate the odds of a desired outcome in a simple experiment.		MSC5 Module: Fundamentals of Probability Unit: Simple Probability Session: Defining & Expressing Probability	Levels: 6-8
3			MSC5 Module: Fundamentals of Probability Unit: Simple Probability Session: Calculating Probabilities on a Color Wheel	Levels: 6-8
3			MSC5 Module: Fundamentals of Probability Unit: Simple Probability Session: Determining Probabilities of Complementary Events	Levels: 6-8
4	Use theoretical or experimental probability to make predictions about real-world events.		MSC5 Module: Fundamentals of Probability Unit: Probability of Combined Events Session: Calculating the Probability of Independent Events	Levels: 6-8
5	Use probability to generate convincing arguments, draw conclusions, and make decisions in a variety of situations.			
6	Understand that the probability of two unrelated events occurring is the sum of the two individual possibilities and that the probability of one event following another, in independent trials, is the product of the two probabilities.		MSC5 Module: Fundamentals of Probability Unit: Simple Probability Session: Defining & Expressing Probability	Levels: 6-8
6			MSC5 Module: Fundamentals of Probability Unit: Simple Probability Session: Determining Probabilities of Complementary Events	Levels: 6-8
6			MSC5 Module: Fundamentals of Probability Unit: Probability of Combined Events Session: Calculating the Probability of Independent Events	Levels: 6-8
6			MSC5 Module: Fundamentals of Probability Unit: Probability of Combined Events Session: Determining the Sample Space of an Experiment	Levels: 6-8
6			MSC5 Module: Fundamentals of Probability Unit: Probability of Combined Events Session: Calculating the Probability of Mutually Exclusive Events	Levels: 6-8
	Understand algebraic concepts and applications.	(Mathematics, Level: 9 - 12)		
	Represent and analyze mathematical situations and structures using algebraic symbols.			
1	Classify numbers and members of the following sets:			
1	natural			
1	whole			
1	integers			

1	rationals			
1	irrationals			
2	Simplify numerical expressions using the order of operations, including exponents.		MSC ALG.2 Module: Powers & Polynomials Unit: Polynomial Arithmetic Session: Working with Powers	Levels: 9-12
3	Evaluate the numerical value of expressions of one or more variables that are:			
3	polynomial		MSC ALG.1 Module: The Language of Algebra Unit: Variables, Expressions, and Equations Session: Evaluating and Simplifying Expressions	Levels: 9-12
3	rational		MSC ALG.2 Module: Algebraic Expressions & Functions Unit: Rational Expressions, Equations & Functions Session: Rational Operations	Levels: 9-12
3			MSC ALG.2 Module: Algebraic Expressions & Functions Unit: Rational Expressions, Equations & Functions Session: Rational Equations	Levels: 9-12
3	radical		MSC ALG.2 Module: The Real Number System Unit: Rational & Irrational Numbers Session: Working with Radicals	Levels: 9-12
3			MSC ALG.2 Module: Algebraic Expressions & Functions Unit: Radical Equations & Functions Session: Solving Radical Equations	Levels: 9-12
4	Simplify algebraic monomial expressions raised to a power and algebraic binomial expressions raised to a power.		MSC ALG.2 Module: Powers & Polynomials Unit: Polynomial Arithmetic Session: Working with Powers	Levels: 9-12
5	Compare and order polynomial expressions by degree.		MSC ALG.2 Module: Powers & Polynomials Unit: Polynomial Arithmetic Session: Adding and Subtracting Polynomial Expressions	Levels: 9-12
6	Represent and analyze relationships using written and verbal expressions, tables, equations, and graphs, and describe the connections among those representations:			
6	translate from verbal expression to algebraic formulae		MSC ALG.1 Module: The Language of Algebra Unit: Variables, Expressions, and Equations Session: Translating Words into Expressions	Levels: 9-12
6	given data in a table, construct a function that represents these data (linear only)			
6	given a graph, construct a function that represents the graph (linear only)		MSC ALG.1 Module: Systems of Linear Equations Unit: Graphic Solutions of Linear Systems Session: Finding the Point of Intersection	Levels: 9-12
6			MSC ALG.1 Module: Linear Inequalities Unit: Inequalities in One Variable Session: Graphing Solutions on a Number Line	Levels: 9-12

7	Know, explain, and use equivalent representations for the same real number including:			
7	integers			
7	decimals			
7	percents			
7	ratios			
7	scientific notation			
7	numbers with integer exponents			
7	inverses (reciprocal)			
7	prime factoring			
8	Simplify algebraic expressions using the distributive property.		MSC ALG.1 Module: The Language of Algebra Unit: Variables, Expressions, and Equations Session: Applying Properties of Real Numbers	Levels: 9-12
8			MSC ALG.2 Module: The Real Number System Unit: Rational & Irrational Numbers Session: Working with Radicals	Levels: 9-12
9	Explain and use the concept of absolute value.		MSC ALG.1 Module: The Language of Algebra Unit: Linear Equations in One Variable Session: Solving Absolute Value Equations	Levels: 9-12
9			MSC ALG.1 Module: Linear Inequalities Unit: Inequalities in One Variable Session: Solving Absolute Value Inequalities	Levels: 9-12
10	Know, explain, and use equivalent representations for algebraic expressions.		MSC ALG.1 Module: The Language of Algebra Unit: Variables, Expressions, and Equations Session: Translating Words into Expressions	Levels: 9-12
11	Simplify square roots and cube roots with monomial radicands that are perfect squares or perfect cubes.		MSC ALG.2 Module: The Real Number System Unit: Rational & Irrational Numbers Session: Working with Radicals	Levels: 9-12
12	Calculate powers and roots of real numbers, both rational and irrational.		MSC ALG.2 Module: The Real Number System Unit: Rational & Irrational Numbers Session: Working with Radicals	Levels: 9-12
12			MSC ALG.2 Module: Powers & Polynomials Unit: Polynomial Arithmetic Session: Working with Powers	Levels: 9-12
13	Solve:			
13	formulas for specified variables			
13	radical equations involving one radical		MSC ALG.2 Module: The Real Number System Unit: Rational & Irrational Numbers Session: Working with Radicals	Levels: 9-12
13			MSC ALG.2 Module: Algebraic Expressions & Functions Unit: Radical Equations & Functions Session: Solving Radical Equations	Levels: 9-12

14	Factor polynomials, difference of squares and perfect square trinomials, and the sum and difference of cubes.		MSC ALG.2 Module: Powers & Polynomials Unit: Polynomial Arithmetic Session: Adding and Subtracting Polynomial Expressions	Levels: 9-12
14			MSC ALG.2 Module: Powers & Polynomials Unit: Polynomial Arithmetic Session: Multiplying Polynomials	Levels: 9-12
14			MSC ALG.2 Module: Powers & Polynomials Unit: Factoring Polynomials Session: Factoring Quadratic Trinomials	Levels: 9-12
14			MSC ALG.2 Module: Powers & Polynomials Unit: Factoring Polynomials Session: Special Cases	Levels: 9-12
15	Simplify fractions with polynomials in the numerator and denominator by factoring both and reducing them to the lowest terms.		MSC ALG.2 Module: Powers & Polynomials Unit: Polynomial Arithmetic Session: Adding and Subtracting Polynomial Expressions	Levels: 9-12
15			MSC ALG.2 Module: Powers & Polynomials Unit: Factoring Polynomials Session: Finding Common Factors	Levels: 9-12
16	Manipulate simple expressions with + and - exponents.			
17	Use the four basic operations with:			
17	linear expressions		MSC ALG.1 Module: The Language of Algebra Unit: Variables, Expressions, and Equations Session: Evaluating and Simplifying Expressions	Levels: 9-12
17			MSC ALG.1 Module: Systems of Linear Equations Unit: Algebraic Solutions of Linear Systems Session: Using Substitution to Eliminate a Variable	Levels: 9-12
17	polynomial expressions		MSC ALG.2 Module: Powers & Polynomials Unit: Polynomial Arithmetic Session: Working with Powers	Levels: 9-12
17			MSC ALG.2 Module: Powers & Polynomials Unit: Polynomial Arithmetic Session: Adding and Subtracting Polynomial Expressions	Levels: 9-12
17	rational expressions		MSC ALG.2 Module: Algebraic Expressions & Functions Unit: Rational Expressions, Equations & Functions Session: Rational Operations	Levels: 9-12
17			MSC ALG.2 Module: Algebraic Expressions & Functions Unit: Rational Expressions, Equations & Functions Session: Rational Equations	Levels: 9-12
	Understand patterns, relations, functions, and graphs.			
1	Distinguish between the concept of a relation and a function.		MSC ALG.1 Module: Linear Functions and Equations Unit: Introduction to Functions Session: Relations and Functions	Levels: 9-12

2	Determine whether a relation defined by a graph, a set of ordered pairs, a table of values, an equation, or a rule is a function.		MSC ALG.1 Module: Linear Functions and Equations Unit: Introduction to Functions Session: Relations and Functions	Levels: 9-12
2			MSC ALG.2 Module: The Real Number System Unit: Rational & Irrational Numbers Session: The Square Root Function	Levels: 9-12
2			MSC ALG.2 Module: Quadratic Functions & Equations Unit: Graphing Quadratic Functions & Equations Session: Graphing Parabolas	Levels: 9-12
3	Describe the concept of a graph of a function.			
4	Translate among tabular, symbolic, and graphical representations of functions.			
5	Explain and use function notation.			
6	Determine the domain of independent variables and the range of dependent variables defined by a graph, a set of ordered pairs, or a symbolic expression.		MSC ALG.1 Module: Linear Functions and Equations Unit: The Rectangular Coordinate Plane Session: Graphing Ordered Pairs	Levels: 9-12
6			MSC ALG.1 Module: Linear Functions and Equations Unit: Introduction to Functions Session: Relations and Functions	Levels: 9-12
6			MSC ALG.2 Module: The Real Number System Unit: Rational & Irrational Numbers Session: The Square Root Function	Levels: 9-12
7	Identify the independent and dependent variables from an application problem.			
8	Describe the concept of a graph of an equation.			
9	Understand symmetry of graphs.			
10	Analyze and describe middle and end (asymptotic) behavior of linear, quadratic, and exponential functions, and sketch the graphs of functions.		MSC ALG.1 Module: Systems of Linear Equations Unit: Graphic Solutions of Linear Systems Session: Finding the Point of Intersection	Levels: 9-12
10			MSC ALG.2 Module: Quadratic Functions & Equations Unit: Graphing Quadratic Functions & Equations Session: Graphing Parabolas	Levels: 9-12
11	Work with composition of functions, and find the domain, range, intercepts, zeros, and local maxima or minima of the final function.		MSC ALG.1 Module: Linear Functions and Equations Unit: The Rectangular Coordinate Plane Session: Finding x- and y-Intercepts	Levels: 9-12
11			MSC ALG.1 Module: Linear Functions and Equations Unit: Introduction to Functions Session: Relations and Functions	Levels: 9-12

11			MSC ALG.2 Module: Algebraic Expressions & Functions Unit: Rational Expressions, Equations & Functions Session: Rational Functions	Levels: 9-12
12	Use the quadratic formula and factoring techniques to determine whether the graph of a quadratic function will intersect the x-axis in zero, one, or two points.		MSC ALG.2 Module: Quadratic Functions & Equations Unit: Graphing Quadratic Functions & Equations Session: Graphing Parabolas	Levels: 9-12
12			MSC ALG.2 Module: Quadratic Functions & Equations Unit: Graphing Quadratic Functions & Equations Session: Solving Quadratic Equations by Graphing	Levels: 9-12
12			MSC ALG.2 Module: Quadratic Functions & Equations Unit: Solving Quadratic Equations Using Algebra Session: Factoring & the Zero Product Theorem	Levels: 9-12
12			MSC ALG.2 Module: Quadratic Functions & Equations Unit: Solving Quadratic Equations Using Algebra Session: The Square Root Method & Completing the Square	Levels: 9-12
12			MSC ALG.2 Module: Quadratic Functions & Equations Unit: Solving Quadratic Equations Using Algebra Session: The Quadratic Formula	Levels: 9-12
13	Apply quadratic equations to physical phenomena.		MSC ALG.2 Module: Quadratic Functions & Equations Unit: Graphing Quadratic Functions & Equations Session: Analyzing Properties of Parabolas	Levels: 9-12
	Use mathematical models to represent and understand quantitative relationships.			
1	Model real-world phenomena using linear and quadratic equations and linear inequalities.		MSC ALG.1 Module: Linear Inequalities Unit: Inequalities in One Variable Session: Graphing Solutions on a Number Line	Levels: 9-12
2	Use a variety of computational methods.			
3	Express the relationship between two variables using a table with a finite set of values and graph the relationship.			
4	Express the relationship between two variables using an equation and a graph:			
4	graph a linear equation and linear inequality in two variables		MSC ALG.1 Module: Systems of Linear Equations Unit: Algebraic Solutions of Linear Systems Session: Using Substitution to Eliminate a Variable	Levels: 9-12
4			MSC ALG.1 Module: Linear Inequalities Unit: Inequalities in Two Variables Session: Graphing Solutions on a Rectangular Coordinate Plane	Levels: 9-12
4			MSC ALG.1 Module: Linear Inequalities Unit: Inequalities in Two Variables Session: Solving Systems by Graphing	Levels: 9-12

4	solve linear inequalities and equations in one variable		MSC ALG.1 Module: The Language of Algebra Unit: Variables, Expressions, and Equations Session: Evaluating and Simplifying Expressions	Levels: 9-12
4			MSC ALG.1 Module: The Language of Algebra Unit: Linear Equations in One Variable Session: Applying Inverse Operations	Levels: 9-12
4			MSC ALG.1 Module: The Language of Algebra Unit: Linear Equations in One Variable Session: Transforming Equations using Multiple Operations	Levels: 9-12
4			MSC ALG.1 Module: Linear Inequalities Unit: Inequalities in One Variable Session: Applying Inverse Operations	Levels: 9-12
4			MSC ALG.1 Module: Linear Inequalities Unit: Inequalities in One Variable Session: Graphing Solutions on a Number Line	Levels: 9-12
4	solve systems of linear equations in two variables and graph the solutions		MSC ALG.1 Module: Systems of Linear Equations Unit: Graphic Solutions of Linear Systems Session: Finding the Point of Intersection	Levels: 9-12
4			MSC ALG.1 Module: Systems of Linear Equations Unit: Graphic Solutions of Linear Systems Session: Graphing Parallel & Perpendicular Lines	Levels: 9-12
4			MSC ALG.1 Module: Systems of Linear Equations Unit: Algebraic Solutions of Linear Systems Session: Using Substitution to Eliminate a Variable	Levels: 9-12
4			MSC ALG.1 Module: Systems of Linear Equations Unit: Algebraic Solutions of Linear Systems Session: Using Addition or Subtraction to Eliminate a Variable	Levels: 9-12
4			MSC ALG.1 Module: Linear Inequalities Unit: Inequalities in Two Variables Session: Solving Systems by Graphing	Levels: 9-12
4			MSC ALG.2 Module: Algebraic Expressions & Functions Unit: Radical Equations & Functions Session: Solving Radical Equations	Levels: 9-12
4	use the graph of a system of equations in two variables to help determine the solution		MSC ALG.1 Module: Systems of Linear Equations Unit: Algebraic Solutions of Linear Systems Session: Using Substitution to Eliminate a Variable	Levels: 9-12
5	Solve applications involving systems of equations.			
6	Evaluate numerical and algebraic absolute value expressions.		MSC ALG.1 Module: The Language of Algebra Unit: Linear Equations in One Variable Session: Solving Absolute Value Equations	Levels: 9-12

6			MSC ALG.1 Module: Linear Inequalities Unit: Inequalities in One Variable Session: Solving Absolute Value Inequalities	Levels: 9-12
7	Create a linear equation from a table of values containing co-linear data.			
8	Determine the solution to a system of equations in two variables from a given graph.			
9	Generate an algebraic sentence to model real-life situations.			
10	Write an equation of the line that passes through two given points.		MSC ALG.1 Module: Linear Functions and Equations Unit: The Rectangular Coordinate Plane Session: Finding x- and y-Intercepts	Levels: 9-12
10			MSC ALG.1 Module: Linear Functions and Equations Unit: Introduction to Functions Session: Exploring the Slope-Intercept Equation of a Line	Levels: 9-12
10			MSC ALG.1 Module: Linear Functions and Equations Unit: Introduction to Functions Session: Exploring the Point-Slope Equation of a Line	Levels: 9-12
11	Understand and use:			
11	such operations as taking the inverse, finding the reciprocal, taking a root, and raising to a fractional power			
11	the rules of exponents		MSC ALG.2 Module: Powers & Polynomials Unit: Polynomial Arithmetic Session: Working with Powers	Levels: 9-12
12	Verify that a point lies on a line, given an equation of the line, and be able to derive linear equations by using the point-slope formula.		MSC ALG.1 Module: Linear Functions and Equations Unit: The Rectangular Coordinate Plane Session: Finding x- and y-Intercepts	Levels: 9-12
12			MSC ALG.1 Module: Linear Functions and Equations Unit: Introduction to Functions Session: Exploring the Slope-Intercept Equation of a Line	Levels: 9-12
12			MSC ALG.1 Module: Linear Functions and Equations Unit: Introduction to Functions Session: Exploring the Point-Slope Equation of a Line	Levels: 9-12
12			MSC ALG.1 Module: Systems of Linear Equations Unit: Graphic Solutions of Linear Systems Session: Finding the Point of Intersection	Levels: 9-12
12			MSC ALG.1 Module: Systems of Linear Equations Unit: Graphic Solutions of Linear Systems Session: Graphing Parallel & Perpendicular Lines	Levels: 9-12
	Analyze changes in various contexts.			

1	Analyze the effects of parameter changes on these functions:			
1	linear			
1	quadratic			
1	exponential			
1	polynomial			
2	Solve routine two- and three-step problems relating to change using concepts such as:			
2	exponents			
2	factoring			
2	ratio			
2	proportion			
2	average			
2	percent			
3	Calculate the percentage of increase and decrease of a quantity.		MSC4 Module: Percents Unit: Increasing and Decreasing Percents Session: Calculating Percent Increases	Levels: 6-8
3			MSC4 Module: Percents Unit: Increasing and Decreasing Percents Session: Calculating Percent Decreases	Levels: 6-8
4	Analyze the general shape of polynomial expressions and equations for different degree polynomials.			
5	Estimate the rate of change of a function or equation by finding the slope between two points on the graph.			
6	Evaluate the estimated rate of change in the context of the problem.			
7	Know Pascal's triangle and use it to expand binomial expressions that are raised to positive integer powers.			
	Solving equations, inequalities and systems			
	solve three-by-three linear systems			
	solve two-by-two linear quadratic and quadratic-quadratic systems		MSC ALG.1 Module: Linear Inequalities Unit: Inequalities in Two Variables Session: Solving Systems by Graphing	Levels: 9-12
			MSC ALG.2 Module: Quadratic Functions & Equations Unit: Graphing Quadratic Functions & Equations Session: Analyzing Properties of Parabolas	Levels: 9-12
			MSC ALG.2 Module: Quadratic Functions & Equations Unit: Graphing Quadratic Functions & Equations Session: Solving Quadratic Equations by Graphing	Levels: 9-12

			MSC ALG.2 Module: Quadratic Functions & Equations Unit: Solving Quadratic Equations Using Algebra Session: Factoring & the Zero Product Theorem	Levels: 9-12
			MSC ALG.2 Module: Quadratic Functions & Equations Unit: Solving Quadratic Equations Using Algebra Session: The Square Root Method & Completing the Square	Levels: 9-12
			MSC ALG.2 Module: Quadratic Functions & Equations Unit: Solving Quadratic Equations Using Algebra Session: The Quadratic Formula	Levels: 9-12
	solve and graph equations and inequalities involving absolute value		MSC ALG.1 Module: The Language of Algebra Unit: Linear Equations in One Variable Session: Solving Absolute Value Equations	Levels: 9-12
			MSC ALG.1 Module: Linear Inequalities Unit: Inequalities in One Variable Session: Solving Absolute Value Inequalities	Levels: 9-12
	solve quadratic inequalities by factoring		MSC ALG.2 Module: Quadratic Functions & Equations Unit: Solving Quadratic Equations Using Algebra Session: Factoring & the Zero Product Theorem	Levels: 9-12
	Polynomials			
	factor polynomials of degree higher than two using the fundamental theorem of algebra , integral and rational zero theorems, and factor and remainder theorems		MSC ALG.2 Module: Powers & Polynomials Unit: Polynomial Arithmetic Session: Adding and Subtracting Polynomial Expressions	Levels: 9-12
			MSC ALG.2 Module: Powers & Polynomials Unit: Factoring Polynomials Session: Finding Common Factors	Levels: 9-12
	perform the four basic operations on complex numbers			
	factor polynomials using complex numbers		MSC ALG.2 Module: Powers & Polynomials Unit: Factoring Polynomials Session: Finding Common Factors	Levels: 9-12
	graph polynomials using the intermediate value theorem			
	graph and interpret the conic sections			
	Functions			
	find and use inverse functions involving ordered pairs, graphs, and explicit statements of a function rule		MSC ALG.2 Module: Algebraic Expressions & Functions Unit: Radical Equations & Functions Session: The Inverse of the Square Root Function	Levels: 9-12
	examine and graph piece-wise defined functions, including the use of the properties of continuity and discontinuity			

	graph rational functions and locate zeros and horizontal and vertical asymptotes		MSC ALG.2 Module: Algebraic Expressions & Functions Unit: Rational Expressions, Equations & Functions Session: Rational Functions	Levels: 9-12
	Understand geometric concepts and applications.			
	Analyze characteristics and properties of two- and three-dimensional geometric shapes and develop mathematical arguments about geometric relationships.			
1	Interpret and draw two-dimensional objects and find the area and perimeter of basic figures.			
2	Find the area and perimeter of a geometric figure composed of a combination of two or more rectangles, triangles, and / or semicircles with just edges in common.			
3	Find and use measures of sides and interior and exterior angles of triangles and polygons to classify figures.		MSC5 Module: Ratio & Proportion Unit: Similar Polygons Session: Setting up & Solving Proportions in Similar Polygons	Levels: 6-8
4	Interpret and draw three-dimensional objects and find the surface area and volume of basic figures , and calculate the surface areas and volumes of these figures as well as figures constructed from unions of rectangular solids and prisms with faces in common, given the formulas for these figures.			
5	Demonstrate an understanding of simple aspects of a logical argument:			
5	identify the hypothesis and conclusion in logical deduction			
5	use counterexamples to show that an assertion is false and recognize that a single counterexample is sufficient to refute an assertion			
6	Demonstrate an understanding of inductive and deductive reasoning, explain the difference between inductive and deductive reasoning, and identify and provide examples of each:			

6	for inductive reasoning, demonstrate understanding that showing a statement is true for a finite number of examples does not show it is true for all cases unless the cases verified are all cases			
6	for deductive reasoning, prove simple theorems			
7	Write geometric proofs (including proofs by contradiction), including:			
7	theorems involving the properties of parallel lines cut by a transversal line and the properties of quadrilaterals			
7	theorems involving complementary, supplementary, and congruent angles			
7	theorems involving congruence and similarity			
	Specify locations and describe spatial relationships using coordinate geometry and other representational systems.			
1	Demonstrate understanding of the construction of the coordinate plane, know the names of the origin, coordinate axes and four quadrants, draw and label them correctly, find the coordinates of an indicated point, and plot a point with given coordinates.		MSC ALG.1 Module: Linear Functions and Equations Unit: The Rectangular Coordinate Plane Session: Graphing Ordered Pairs	Levels: 9-12
1			MSC ALG.1 Module: Linear Functions and Equations Unit: The Rectangular Coordinate Plane Session: Defining Slope	Levels: 9-12
2	Determine the midpoint and distance between two points within a coordinate system and relate these ideas to geometric figures in the plane.			
3	Given two linear equations, determine whether the lines are parallel, perpendicular, or coincide.		MSC ALG.1 Module: Systems of Linear Equations Unit: Graphic Solutions of Linear Systems Session: Graphing Parallel & Perpendicular Lines	Levels: 9-12
4	Use basic geometric ideas in the context of the Euclidean Plane, calculate the perimeter of a rectangle with integer coordinates and sides parallel to the coordinate axes and with sides not parallel.			
	Apply transformations and use symmetry to analyze mathematical situations.			

1	Describe the effect of rigid motions on figures in the coordinate plane and space that include rotations, translations, and reflections:			
1	determine whether a given pair of figures on a coordinate plane represents the effect of a translation, reflection, rotation, and / or dilation			
1	sketch the planar figure that is the result of a given transformation of this type			
2	Deduce properties of figures using transformations that include translations, rotations, reflections, and dilations in a coordinate system:			
2	identify congruency and similarity in terms of transformations			
2	determine the effects of the above transformations on linear and area measurements of the original planar figure			
	Use visualization, spatial reasoning, and geometric modeling to solve problems.			
1	Solve real-world problems using congruence and similarity relationships of triangles.			
2	Solve problems involving complementary, supplementary, and congruent angles.			
3	Solve problems involving the perimeter, circumference, area, volume, and surface area of common geometric figures.			
4	Solve problems using the Pythagorean theorem.		MSC ALG.2 Module: The Real Number System Unit: Rational & Irrational Numbers Session: Defining the Real Numbers	Levels: 9-12
5	Understand and use elementary relationships of basic trigonometric functions defined by the angles of a right triangle.			
6	Use trigonometric functions to solve for the length of the second leg of a right triangle given the angles and the length of the first leg..			
7	Know and use angle and side relationships in problems with special right triangles.			
	Understand how to formulate questions, analyze data, and determine probabilities.			

	Formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them.			
1	Understand the differences between the various methods of data collection.			
2	Know the characteristics of a well-designed and well-conducted survey:			
2	differentiate between sampling and census			
2	differentiate between a biased and an unbiased sample			
3	Know the characteristics of a well-designed and well-conducted experiment:			
3	differentiate between an experiment and an observational study			
3	recognize sources of bias in poorly designed experiments			
4	Understand the role of randomization in well-designed surveys and experiments.			
	Select and use appropriate statistical methods to analyze data.			
1	Understand the meaning of measurement data and categorical data, and of the term 'variable.'			
2	Understand the meaning of 'univariate' and 'bivariate' data.			
3	For univariate data, be able to display the distribution and describe its shape using appropriate summary statistics, and understand the distinction between a statistic and a parameter:			
3	construct and interpret frequency tables, histograms, stem and leaf plots, and box and whisker plots		MSC ALG.2 Module: Describing Data Unit: Graphical Displays Session: Stem-&-Leaf Plots & Box Plots	Levels: 9-12
3	calculate and apply measures of central tendency (mean, median, and mode) and measures of variability (range, quartiles, standard deviation)			
3	compare distributions of univariate data using back-to-back stem and leaf plots and parallel box and whisker plots		MSC ALG.2 Module: Describing Data Unit: Graphical Displays Session: Stem-&-Leaf Plots & Box Plots	Levels: 9-12
4	For bivariate data, be able to display a scatter plot and describe its shape:			

4	fit a linear model to a set of data using technological tools			
4	describe and interpret the relationship/correlation between two variables using technological tools		MSC ALG.2 Module: Describing Data Unit: Graphical Displays Session: Scatter Plots & Linear Best-Fit Graphs	Levels: 9-12
	Develop and evaluate inferences and predictions that are based on data.			
1	Compare and draw conclusions between two or more sets of univariate data using basic data analysis techniques and summary statistics.			
2	Draw conclusions concerning the relationships among bivariate data:			
2	make predictions from a linear pattern in data			
2	determine the strength of the relationship between two sets of data by examining the correlation			
2	understand that correlation does not imply a cause-and-effect relationship			
3	Use simulations to explore the variability of sample statistics from a known population and construct sampling distributions.			
4	Understand how sample statistics reflect the values of population parameters and use sampling distributions as the basis for informal inference.			
5	Evaluate published reports that are based on data by examining the design of the study, the appropriateness of the data analysis, and the validity of conclusions.			
	Understand and apply basic concepts of probability.			
1	Explain the concept of a random variable.			
2	Understand the concept of probability as relative frequency.			
3	Use simulations to compute the expected value and probabilities of random variables in simple cases.			
4	Distinguish between independent and dependent events.			
5	Understand how to compute the probability of an event using the basic rules of probability:			
5	complement rule			

5	addition rule (disjoint and joint events)			
5	multiplication rule (independent events)			
5	conditional probability			