

# Riverdeep Correlations



Correlation of Destination Math® Courseware  
to British Columbia Provincial Learning Outcomes  
October - 2006



[www.riverdeep.net](http://www.riverdeep.net)

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
Grades K-1							
NUMBER (NUMBER CONCEPTS)							
Recognize, describe, and use numbers from 0 to 100 in a variety of familiar settings							
count orally by ones, twos, fives, and tens to one hundred	Module: Number Sense Unit: Numbers from 1 to 5 Session: Counting from 1 to 5						
	Module: Number Sense Unit: Numbers from 1 to 10 Session: Counting from 5 to 10						
	Module: Number Sense Unit: Numbers to 100 Session: Counting from 10 to 20						
	Module: Number Sense Unit: Numbers to 100 Session: Counting from 20 to 50						

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
	Module: Number Sense Unit: Numbers to 100 Session: Counting from 50 to 100						
	Module: Number Sense Unit: Numbers to 100 Session: Skip- Counting by Tens and Fives						
	Module: Number Sense Unit: Numbers to 100 Session: Skip- Counting by Twos						
estimate and count objects in a set (0 to 50) and compare estimates to the actual number							
recognize, build, compare, and order sets of objects (0 to 50) using both comparative and numerical terms	Module: Number Sense Unit: Numbers from 1 to 5 Session: Creating Sets of 1 to 5						
	Module: Number Sense Unit: Numbers from 1 to 10 Session: Creating Sets of 5 to 10						
	Module: Number Sense Unit: Comparing and Ordering Session: More Than, Less Than, or The Same						

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
	Module: Number Sense Unit: Comparing and Ordering Session: Comparing Numbers within 100						
read number words up to 10							
explore, represent, and describe numbers up to 50 in a variety of ways	Module: Number Sense Unit: Numbers from 1 to 5 Session: Counting from 1 to 5						
	Module: Number Sense Unit: Numbers from 1 to 5 Session: Creating Sets of 1 to 5						
	Module: Number Sense Unit: Numbers from 1 to 5 Session: Creating Representations of the Numbers from 1 to 5						
	Module: Number Sense Unit: Numbers from 1 to 10 Session: Counting from 5 to 10						
	Module: Number Sense Unit: Numbers from 1 to 10 Session: Creating Sets of 5 to 10						

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	Module: Number Sense Unit: Numbers from 1 to 10 Session: Creating Representations of the Numbers from 5 to 10						
	Module: Number Sense Unit: Numbers to 100 Session: Counting from 10 to 20						
	Module: Number Sense Unit: Numbers to 100 Session: Counting from 20 to 50						
use a calculator or computer to explore and represent numbers up to 100	Module: Number Sense Unit: Numbers from 1 to 5 Session: Counting from 1 to 5						
	Module: Number Sense Unit: Numbers from 1 to 5 Session: Creating Sets of 1 to 5						
	Module: Number Sense Unit: Numbers from 1 to 5 Session: Creating Representations of the Numbers from 1 to 5						
	Module: Number Sense Unit: Numbers from 1 to 10 Session: Counting from 5 to 10						

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
	Module: Number Sense Unit: Numbers from 1 to 10 Session: Creating Sets of 5 to 10						
	Module: Number Sense Unit: Numbers from 1 to 10 Session: Creating Representations of the Numbers from 5 to 10						
	Module: Number Sense Unit: Numbers to 100 Session: Counting from 10 to 20						
	Module: Number Sense Unit: Numbers to 100 Session: Counting from 20 to 50						
	Module: Number Sense Unit: Numbers to 100 Session: Counting from 50 to 100						
demonstrate and explain orally an understanding of "half" as part of a whole		Module: Operations with Numbers Unit: Division Session: Fractional Parts					
NUMBER (NUMBER OPERATIONS)							

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Demonstrate and use a variety of methods to show the processes of addition and subtraction on one-digit whole numbers							
demonstrate and orally describe the process of addition and subtraction to 18 using role-play, manipulatives, and diagrams	Module: Addition and Subtraction Unit: Addition Session: Combining and Joining within 10						
	Module: Addition and Subtraction Unit: Addition Session: Comparing within 10						
	Module: Addition and Subtraction Unit: Addition Session: Sums within 20, with 10 as One Addend						
	Module: Addition and Subtraction Unit: Addition Session: Sums within 20						
	Module: Addition and Subtraction Unit: Subtraction Session: Differences within 10						
	Module: Addition and Subtraction Unit: Subtraction Session: Differences within 20						

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PATTERNS AND RELATIONS (PATTERNS)							
Identify, create, and compare patterns that arise from their daily experiences							
Identify, reproduce, extend, create, and compare patterns using actions, manipulatives, diagrams, and spoken terms	Module: Algebraic Thinking Unit: Patterns and Displays Session: Shapes						
	Module: Algebraic Thinking Unit: Patterns and Displays Session: Number Patterns						
recognize patterns in the environment	Module: Algebraic Thinking Unit: Patterns and Displays Session: Shapes						
	Module: Algebraic Thinking Unit: Patterns and Displays Session: Number Patterns						
SHAPE AND SPACE (MEASUREMENT)							

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Estimate, measure, and compare measures using whole numbers and non-standard units of measure							
classify, describe, and arrange objects using comparative language to compare length, size, area, weight, and volume	Module: Geometry and Measurement Unit: Measurement Session: Length						
	Module: Geometry and Measurement Unit: Measurement Session: Weight						
use comparative terms to describe time and temperature	Module: Geometry and Measurement Unit: Measurement Session: Clock and Calendar Time						
compare the relative sizes of non-standard units by measuring the same object using different units of measurement, and recognize that different objects may have the same mass	Module: Geometry and Measurement Unit: Measurement Session: Weight						
select an appropriate nonstandard unit to estimate, measure, record, compare, and order objects and containers	Module: Geometry and Measurement Unit: Measurement Session: Length						
	Module: Geometry and Measurement Unit: Measurement Session: Weight						

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estimate the number of uniform objects and irregular shapes that will cover a given area and verify their estimates by covering and counting							
compare and sequence events according to the duration of time (using non-standard units), time of day, days of the week, and the seasons	Module: Geometry and Measurement Unit: Measurement Session: Clock and Calendar Time						
recognize and name the value of pennies, nickels, and dimes	Module: Geometry and Measurement Unit: Measurement Session: Money						
use money as a form of exchange	Module: Geometry and Measurement Unit: Measurement Session: Money						
create equivalent sets of coins up to ten cents in value	Module: Geometry and Measurement Unit: Measurement Session: Money						
SHAPE AND SPACE (3-D OBJECTS AND 2-D SHAPES)							
Explore, sort, and classify real-world and three-dimensional objects according to their properties							

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explore and describe real-world and three-dimensional objects using descriptive attributes such as big, little, like a box, and like a can							
explore, identify, and classify three-dimensional objects in the environment according to their properties	Module: Geometry and Measurement Unit: Geometry Session: Three-Dimensional Shapes						
construct three-dimensional objects using materials such as plasticine, blocks, and boxes							
identify and describe specific two-dimensional shapes such as circles, squares, triangles, or rectangles	Module: Geometry and Measurement Unit: Geometry Session: Triangles and Rectangles						
	Module: Geometry and Measurement Unit: Geometry Session: Three-Dimensional Shapes						
construct and rearrange a design using a set of two-dimensional shapes							
compare, sort, classify, and pattern two-dimensional shapes	Module: Geometry and Measurement Unit: Geometry Session: Triangles and Rectangles						

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	Module: Algebraic Thinking Unit: Patterns and Displays Session: Shapes						
SHAPE AND SPACE (TRANSFORMATIONS)							
Describe verbally the relative position of both three-dimensional objects and two-dimensional shapes							
use directional terms such as over, under, beside, near, far, left, and right to describe the relative position of objects and shapes							
match the size and shape of figures by superimposing one on top of another							
identify and fit pieces of puzzles or shapes that go together (part to whole relationship)							
explore and describe reflection in mirrors							

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STATISTICS AND PROBABILITY (DATA ANALYSIS)							
Collect, organize, and analyse (with assistance) data based on first-hand information							
collect first-hand information by counting objects, conducting surveys, measuring, and performing simple experiments	Module: Algebraic Thinking Unit: Patterns and Displays Session: Tables and Graphs						
sort objects to one attribute chosen by themselves or the teacher	Module: Algebraic Thinking Unit: Patterns and Displays Session: Shapes						
	Module: Algebraic Thinking Unit: Patterns and Displays Session: Tables and Graphs						
construct a pictograph using one-to-one correspondence	Module: Algebraic Thinking Unit: Patterns and Displays Session: Tables and Graphs						
compare data using appropriate language, including quantitative terms	Module: Algebraic Thinking Unit: Patterns and Displays Session: Tables and Graphs						

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pose oral questions in relation to the data gathered	Module: Algebraic Thinking Unit: Patterns and Displays Session: Tables and Graphs						
STATISTICS AND PROBABILITY (CHANCE AND UNCERTAINTY)							
Describe concepts of chance and chance events using ordinary vocabulary							
predict the chance of an event happening using the terms never, sometimes, and always							
Grades 2-3							
NUMBER (NUMBER CONCEPTS)							
Develop a number sense for whole numbers from 0 to 1000 and common fractions to tenths							

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estimate and then count an increased number of objects in a set, and compare the estimate with the actual number							
skip count forward and backward by twos, fives, tens, twenty-fives and 100s to 1000, using starting points that are multiples; and skip count forward using random starting points	Module: Number Sense Unit: Numbers to 100 Session: Skip- Counting by Tens and Fives	Module: Number Sense Unit: Numbers to 999 Session: Counting by Grouping					
	Module: Number Sense Unit: Numbers to 100 Session: Skip- Counting by Twos						
recognize, build, compare, and order sets that contain 0 to 1000 elements							
round numbers to nearest 10 and 100							
read and write number words to 100 and numerals to 1000	Module: Number Sense Unit: Numbers from 1 to 5 Session: Counting from 1 to 5	Module: Number Sense Unit: Numbers to 999 Session: Place Value: Tens and Ones					
	Module: Number Sense Unit: Numbers from 1 to 10 Session: Counting from 5 to 10	Module: Number Sense Unit: Numbers to 999 Session: Place Value: Hundreds, Tens, and Ones					

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	Module: Number Sense Unit: Numbers to 100 Session: Counting from 10 to 20	Module: Number Sense Unit: Numbers to 9,999 Session: Place Value: Thousands, Hundreds, Tens, and Ones					
	Module: Number Sense Unit: Numbers to 100 Session: Counting from 20 to 50						
	Module: Number Sense Unit: Numbers to 100 Session: Counting from 50 to 100						
use ordinal numbers to 100							
explore, represent, and describe numbers to 1000 in a variety of ways, including the use of calculators and computers		Module: Number Sense Unit: Numbers to 999 Session: Place Value: Tens and Ones					
		Module: Number Sense Unit: Numbers to 999 Session: Place Value: Hundreds, Tens, and Ones					
		Module: Number Sense Unit: Numbers to 999 Session: Expanded Form and Equivalent Representations of a Number					

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		Module: Number Sense Unit: Numbers to 9,999 Session: Place Value: Thousands, Hundreds, Tens, and Ones					
demonstrate place-value concepts concretely and pictorially to give meaning to numbers 0 to 1000		Module: Number Sense Unit: Numbers to 999 Session: Place Value: Tens and Ones					
		Module: Number Sense Unit: Numbers to 999 Session: Place Value: Hundreds, Tens, and Ones					
		Module: Number Sense Unit: Numbers to 999 Session: Expanded Form and Equivalent Representations of a Number					
		Module: Number Sense Unit: Numbers to 9,999 Session: Place Value: Thousands, Hundreds, Tens, and Ones					
demonstrate whether a number is even or odd	Module: Number Sense Unit: Numbers to 100 Session: Skip- Counting by Twos						
recognize and explain whether a number is divisible by 2, 5, or 10	Module: Number Sense Unit: Numbers to 100 Session: Skip- Counting by Tens and Fives	Module: Operations with Numbers Unit: Multiplication Session: Skip Counting to Show Multiplication					

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	Module: Number Sense Unit: Numbers to 100 Session: Skip- Counting by Twos	Module: Operations with Numbers Unit: Division Session: Meaning of Division					
demonstrate and explain in a variety of ways an understanding of halves, thirds, fourths, fifths, and tenths as part of a region or a set		Module: Operations with Numbers Unit: Division Session: Fractional Parts					
NUMBER (NUMBER OPERATIONS)							
Use a variety of strategies to apply a basic operation to whole numbers and use these operations in solving problems							
demonstrate and describe the processes of addition and subtraction of whole numbers up to 1000 with and without regrouping, using manipulatives, diagrams, and symbols		Module: Operations with Numbers Unit: Addition and Subtraction Session: Sums Less than 100					
		Module: Operations with Numbers Unit: Addition and Subtraction Session: Estimating and Finding Sums less than 1,000					
		Module: Operations with Numbers Unit: Addition and Subtraction Session: Differences within 100					

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		Module: Operations with Numbers Unit: Addition and Subtraction Session: Estimating and Finding Differences within 1,000					
explore and demonstrate the processes of multiplication and division up to 50, using manipulatives, diagrams, and symbols		Module: Operations with Numbers Unit: Multiplication Session: Repeated Addition and Arrays					
		Module: Operations with Numbers Unit: Multiplication Session: Skip Counting to Show Multiplication					
		Module: Operations with Numbers Unit: Multiplication Session: Finding Products Less than 100					
		Module: Operations with Numbers Unit: Division Session: Meaning of Division					
		Module: Operations with Numbers Unit: Division Session: Dividing by a 1-digit Number					
recall addition and subtraction facts up to 18 and multiplication facts up to 25		Module: Operations with Numbers Unit: Multiplication Session: Repeated Addition and Arrays					

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		Module: Operations with Numbers Unit: Multiplication Session: Skip Counting to Show Multiplication					
		Module: Operations with Numbers Unit: Multiplication Session: Finding Products Less than 100					
Choose, use, and defend the appropriate calculation strategy or technology to solve problems							
calculate and justify the methods they used to find sums, differences, products, and quotients using estimation strategies, mental math techniques, manipulatives, algorithms, and calculators		Module: Operations with Numbers Unit: Addition and Subtraction Session: Sums Less than 100					
		Module: Operations with Numbers Unit: Addition and Subtraction Session: Estimating and Finding Sums less than 1,000					
		Module: Operations with Numbers Unit: Addition and Subtraction Session: Differences within 100					
		Module: Operations with Numbers Unit: Addition and Subtraction Session: Estimating and Finding Differences within 1,000					

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		Module: Operations with Numbers Unit: Addition and Subtraction Session: Estimating and Finding Differences within 9,999					
		Module: Operations with Numbers Unit: Multiplication Session: Repeated Addition and Arrays					
		Module: Operations with Numbers Unit: Multiplication Session: Skip Counting to Show Multiplication					
		Module: Operations with Numbers Unit: Multiplication Session: Finding Products Less than 100					
		Module: Operations with Numbers Unit: Division Session: Meaning of Division					
		Module: Operations with Numbers Unit: Division Session: Dividing by a 1-digit Number					
verify their solutions to problems by using inverse operations, estimation, and calculators		Module: Operations with Numbers Unit: Addition and Subtraction Session: Estimating and Finding Sums less than 1,000					

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		Module: Operations with Numbers Unit: Addition and Subtraction Session: Estimating and Finding Differences within 1,000					
		Module: Operations with Numbers Unit: Addition and Subtraction Session: Estimating and Finding Differences within 9,999					
		Module: Operations with Numbers Unit: Multiplication Session: Repeated Addition and Arrays					
		Module: Operations with Numbers Unit: Multiplication Session: Skip Counting to Show Multiplication					
		Module: Operations with Numbers Unit: Multiplication Session: Finding Products Less than 100					
		Module: Operations with Numbers Unit: Division Session: Meaning of Division					
		Module: Operations with Numbers Unit: Division Session: Dividing by a 1-digit Number					

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PATTERNS AND RELATIONS (PATTERNS)							
Investigate, establish, and communicate rules for numerical and non-numerical patterns that arise from daily and mathematical experiences, and use these rules to make predictions							
identify, create, and describe number and non-number patterns	Module: Number Sense Unit: Numbers to 100 Session: Skip- Counting by Tens and Fives	Module: Number Sense Unit: Numbers to 999 Session: Counting by Grouping					
	Module: Number Sense Unit: Numbers to 100 Session: Skip- Counting by Twos	Module: Operations with Numbers Unit: Multiplication Session: Repeated Addition and Arrays					
	Module: Algebraic Thinking Unit: Patterns and Displays Session: Shapes	Module: Operations with Numbers Unit: Multiplication Session: Skip Counting to Show Multiplication					
	Module: Algebraic Thinking Unit: Patterns and Displays Session: Number Patterns	Module: Operations with Numbers Unit: Division Session: Meaning of Division					

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
translate patterns from one mode to another using manipulatives, diagrams, charts, calculators, spoken and written terms, and symbols							
explain the rule for a pattern and make predictions based on patterns using models and objects	Module: Number Sense Unit: Numbers to 100 Session: Skip- Counting by Tens and Fives	Module: Number Sense Unit: Numbers to 999 Session: Counting by Grouping					
	Module: Number Sense Unit: Numbers to 100 Session: Skip- Counting by Twos	Module: Operations with Numbers Unit: Multiplication Session: Skip Counting to Show Multiplication					
	Module: Algebraic Thinking Unit: Patterns and Displays Session: Shapes	Module: Operations with Numbers Unit: Division Session: Meaning of Division					
	Module: Algebraic Thinking Unit: Patterns and Displays Session: Number Patterns	Module: Algebraic Thinking Unit: Properties and Relationships Session: Number Patterns and Properties					
SHAPE AND SPACE (MEASUREMENT)							
Measure, estimate, and compare, using whole numbers and non-standard and standard units of measure							

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estimate, measure, record, compare, and order objects and containers using non-standard and standard units	Module: Geometry and Measurement Unit: Measurement Session: Length	Module: Geometry and Measurement Unit: Geometry Session: Area					
	Module: Geometry and Measurement Unit: Measurement Session: Weight	Module: Geometry and Measurement Unit: Geometry Session: Volume					
		Module: Geometry and Measurement Unit: Measurement Session: Temperature					
construct a shape, length, or object using a specific non-standard unit or standard unit							
select the most appropriate standard unit for measuring length (cm, m, km), mass (g, kg), volume (L), and time (minutes, hours, days)							
describe relationships among various standard units of measure							
relate the size of units to the number of units needed when measuring							

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recognize that the size and shape of an object does not necessarily determine its mass	Module: Geometry and Measurement Unit: Measurement Session: Weight						
make connections among manipulatives, diagrams, spoken terms, and written symbols							
estimate and measure the passage of time in terms of seconds, minutes, hours, days, weeks, months, and years and relate the various measures to each other	Module: Geometry and Measurement Unit: Measurement Session: Clock and Calendar Time	Module: Geometry and Measurement Unit: Measurement Session: Time					
read and write the date, including the days of the week and use the abbreviations and names of the months of the year in order	Module: Geometry and Measurement Unit: Measurement Session: Clock and Calendar Time						
read and write time to the nearest minute using 12-hour notation (use both a digital and an analog clock)		Module: Geometry and Measurement Unit: Measurement Session: Time					
estimate, read, and record temperature to the nearest degree Celsius		Module: Geometry and Measurement Unit: Measurement Session: Temperature					
relate temperature to real-life situations		Module: Geometry and Measurement Unit: Measurement Session: Temperature					

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identify and use coins and bills to estimate, count, record collections, create equivalent sets, and make change up to ten dollars	Module: Geometry and Measurement Unit: Measurement Session: Money	MSC2: Module: Geometry and Measurement Unit: Measurement Session: Money					
read and write both forms of money notation	Module: Geometry and Measurement Unit: Measurement Session: Money	MSC2: Module: Geometry and Measurement Unit: Measurement Session: Money					
SHAPE AND SPACE (3-D OBJECTS AND 2-D SHAPES)							
Describe, classify, construct, and relate three-dimensional objects and two-dimensional shapes using common language to describe their properties							
compare, contrast, sort, and classify two-dimensional shapes and three-dimensional objects using two or more attributes	Module: Geometry and Measurement Unit: Geometry Session: Triangles and Rectangles						
	Module: Geometry and Measurement Unit: Geometry Session: Three-Dimensional Shapes						
identify, count, and describe the faces, vertices, edges, sides, and angles of polygons and solids	Module: Geometry and Measurement Unit: Geometry Session: Triangles and Rectangles						

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	Module: Geometry and Measurement Unit: Geometry Session: Three-Dimensional Shapes						
describe and name three-dimensional objects and use appropriate two-dimensional names to describe their faces	Module: Geometry and Measurement Unit: Geometry Session: Three-Dimensional Shapes						
describe and name pyramids and prisms by the shape of the base							
construct skeletons of a three-dimensional object from a model and relate the skeletons (nets) to models	Module: Geometry and Measurement Unit: Geometry Session: Three-Dimensional Shapes						
demonstrate through dismantling that a rectangular solid has more than one net							
make identical, congruent two-dimensional shapes							
construct and rearrange a design using a set of two-dimensional shapes							

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recognize congruent three-dimensional objects and two-dimensional shapes in the environment							
explore the concepts of points, lines, perpendicular lines, parallel lines, and parallel lines, and intersecting lines on three-dimensional objects							
SHAPE AND SPACE (TRANSFORMATIONS)							
Use positional language, numbers, and directional words to describe the relative positions of objects in one dimension and to communicate motion in real-world contexts							
communicate and apply positional language and cardinal directions (relating to compasses and maps) in verbal, written, or numerical form							
graph whole number points on a horizontal or a vertical number line		Module: Number Sense Unit: Numbers to 9,999 Session: Comparing and Ordering					
		Module: Operations with Numbers Unit: Addition and Subtraction Session: Estimating and Finding Sums less than 1,000					

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		Module: Operations with Numbers Unit: Addition and Subtraction Session: Estimating and Finding Differences within 1,000					
		Module: Operations with Numbers Unit: Multiplication Session: Skip Counting to Show Multiplication					
trace a path on a line following oral or written instructions							
make congruent shapes and symmetrical two- dimensional shapes using folds and reflections							
STATISTICS AND PROBABILITY (DATA ANALYSIS)							
Collect data based on first- and second-hand information, display results in more than one way, interpret data, and make predictions							
formulate questions and categories for data collection and actively collect first-hand information	Module: Algebraic Thinking Unit: Patterns and Displays Session: Tables and Graphs						

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
use a variety of methods to collect and record data, including measuring devices, printed resources, and tallies	Module: Algebraic Thinking Unit: Patterns and Displays Session: Tables and Graphs						
sort and organize data by one or more attributes and by using graphic organizers such as lists and charts	Module: Algebraic Thinking Unit: Patterns and Displays Session: Tables and Graphs						
identify attributes and rules in pre-sorted sets	Module: Algebraic Thinking Unit: Patterns and Displays Session: Shapes						
display data in more than one way, including graphs, pictographs, bar graphs, and rank ordering	Module: Algebraic Thinking Unit: Patterns and Displays Session: Tables and Graphs						
discuss data, communicate conclusions, and make predictions and inferences to solve similar problems							
generate new questions from displayed data							
obtain new information by performing arithmetic operations on the data							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
STATISTICS AND PROBABILITY (CHANCE AND UNCERTAINTY)							
Use simple experiments designed by others to illustrate and explain probability and chance							
describe the likeliness of an outcome using terms such as likely, unlikely, fair chance, probable, and expected			Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Looking at Chance				
conduct a probability experiment, choose an appropriate recording method, and draw conclusions and make predictions from the results			Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Looking at Chance				
Grade 4							
NUMBER (NUMBER CONCEPTS)							
Demonstrate a number sense for whole numbers from 0 to 10 000 and for proper fractions							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
estimate and then count the number of objects in a set (0 to 1000), and compare the estimate with the actual number							
use skip counting (both forward and backward) to support their understanding of pattern in multiplication and division	Module: Number Sense Unit: Numbers to 100 Session: Skip- Counting by Tens and Fives	Module: Operations with Numbers Unit: Multiplication Session: Skip Counting to Show Multiplication					
	Module: Number Sense Unit: Numbers to 100 Session: Skip- Counting by Twos	Module: Operations with Numbers Unit: Division Session: Meaning of Division					
compare and order numbers up to 10,000		Module: Number Sense Unit: Numbers to 999 Session: Comparing and Ordering	Module: Numbers and Number Sense Unit: Large and Small Numbers Session: Ordering and Rounding Whole Numbers				
		Module: Number Sense Unit: Numbers to 9,999 Session: Comparing and Ordering					
read and write number words to 1000		Module: Number Sense Unit: Numbers to 999 Session: Counting by Grouping	Module: Numbers and Number Sense Unit: Large and Small Numbers Session: Whole Numbers to One Million				
		Module: Number Sense Unit: Numbers to 999 Session: Place Value: Hundreds, Tens, and Ones					

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
round numbers to the nearest 10, 100 and 1000			Module: Numbers and Number Sense Unit: Large and Small Numbers Session: Ordering and Rounding Whole Numbers				
represent and describe numbers to 10,000 in a variety of ways		Module: Number Sense Unit: Numbers to 999 Session: Expanded Form and Equivalent Representations of a Number	Module: Numbers and Number Sense Unit: Large and Small Numbers Session: Whole Numbers to One Million				
		Module: Number Sense Unit: Numbers to 9,999 Session: Place Value: Thousands, Hundreds, Tens, and Ones					
demonstrate concretely, pictorially, and symbolically place-value concepts to give meaning to numbers up to 10,000		Module: Number Sense Unit: Numbers to 999 Session: Place Value: Tens and Ones	Module: Numbers and Number Sense Unit: Large and Small Numbers Session: Whole Numbers to One Million				
		Module: Number Sense Unit: Numbers to 999 Session: Place Value: Hundreds, Tens, and Ones					
		Module: Number Sense Unit: Numbers to 9,999 Session: Place Value: Thousands, Hundreds, Tens, and Ones					
sort numbers into categories using one or more attributes		Module: Number Sense Unit: Numbers to 999 Session: Expanded Form and Equivalent Representations of a Number	Module: Numbers and Number Sense Unit: Large and Small Numbers Session: Whole Numbers to One Million				

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
		Module: Number Sense Unit: Numbers to 9,999 Session: Place Value: Thousands, Hundreds, Tens, and Ones					
demonstrate an understanding of hundredths as part of a region or set			Module: Decimals Unit: Introduction Session: Tenths, Hundredths, and Thousandths				
connect proper fractions to decimal fractions (tenths and hundredths) using manipulatives, diagrams, and symbols			Module: Decimals Unit: Introduction Session: Tenths, Hundredths, and Thousandths				
			Module: Decimals Unit: Introduction Session: Ratios, Decimals, and Percents				
NUMBER (NUMBER OPERATIONS)							
Apply arithmetic operations on whole numbers and illustrate their use in solving problems							
demonstrate and describe the process of addition and subtraction of numbers up to 10,000, using manipulatives, diagrams, and symbols		Module: Operations with Numbers Unit: Addition and Subtraction Session: Sums Less than 100	Module: Operations with Numbers Unit: Addition and Subtraction of Whole Numbers Session: Whole Number Sums				

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
		Module: Operations with Numbers Unit: Addition and Subtraction Session: Estimating and Finding Sums less than 1,000	Module: Operations with Numbers Unit: Addition and Subtraction of Whole Numbers Session: Differences Between Large Numbers				
		Module: Operations with Numbers Unit: Addition and Subtraction Session: Differences within 100					
		Module: Operations with Numbers Unit: Addition and Subtraction Session: Estimating and Finding Differences within 1,000					
		Module: Operations with Numbers Unit: Addition and Subtraction Session: Estimating and Finding Differences within 9,999					
demonstrate the process of multiplication (three-digit by one-digit numbers), using manipulatives, diagrams, and symbols							
demonstrate the process of division (two-digit by one-digit numbers), using manipulatives, diagrams, and symbols		Module: Operations with Numbers Unit: Division Session: Dividing by a 1-digit Number	Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Introduction to Long Division				
recall multiplication and division facts up to 81							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
justify their choice of method for multiplication and division (using estimation, calculators, mental mathematics, manipulatives, algorithms)							
verify solutions to multiplication and division problems by using estimation and calculators			Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Multipliers				
			Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Introduction to Long Division				
verify solutions to multiplication and division problems by using the inverse operation		Module: Operations with Numbers Unit: Division Session: Dividing by a 1-digit Number	Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Introduction to Long Division				
Demonstrate an understanding of the addition and subtraction of decimal fractions							
demonstrate an understanding of the addition and subtraction of decimal fractions (tenths and hundredths) by using concrete and pictorial representations							
PATTERNS AND RELATIONS (PATTERNS)							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
Investigate, establish, and communicate rules for, and predictions from, numerical and non-numerical patterns							
Identify and explain mathematical relationships and patterns through the use of grids, tables, charts, or calculators							
make and justify predictions, using numerical and non-numerical patterns							
SHAPE AND SPACE (MEASUREMENT)							
Estimate, measure, and compare quantities, using decimal numbers and standard units of measure							
construct specific lengths (mm)							
select the most appropriate standard unit (mm, cm, m, km) to measure length							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
describe the relationships among mm, cm, m, and km							
estimate, measure, record, compare, and order objects by length, height, perimeter, and circumference using standard units							
estimate, measure, record, compare, and order shapes by area using standard units							
construct a number of shapes given a specific area							
select the most appropriate standard unit to measure area							
relate the number of units needed to the size of the units to measure the area of an object							
estimate, measure, record, compare, and order the capacity of containers using standard units							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
relate the number of units needed to the size of the units to measure the mass of an object							
describe the relationship between grams and kilograms							
solve problems involving mass using grams and kilograms							
relate years, decades, centuries, and millenniums							
read and write time on a 24-hour clock							
read and write time using a.m. and p.m.		Module: Geometry and Measurement Unit: Measurement Session: Time					
estimate, count, and record collections of coins and bills up to 100 dollars		MSC2: Module: Geometry and Measurement Unit: Measurement Session: Money					

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
make purchases and change up to 100 dollars		MSC2: Module: Geometry and Measurement Unit: Measurement Session: Money					
SHAPE AND SPACE (3-D OBJECTS AND 2-D SHAPES)							
Describe, classify, construct, and relate three- dimensional objects and two-dimensional shapes using mathematical vocabulary to describe their properties							
design and construct nets for pyramids and prisms							
relate nets to three-dimensional objects	Module: Geometry and Measurement Unit: Geometry Session: Three-Dimensional Shapes						
compare and contrast pyramids and prisms to describe a relationship							
identify and sort specific quadrilaterals, such as squares, rectangles, parallelograms, and trapezoids			Module: Geometry Unit: Measurement Session: Rectangles and Squares				

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
			Module: Geometry Unit: Measurement Session: Parallelograms and Trapezoids				
classify angles in a variety of orientations according to whether they are a right angle, less than a right angle, or greater than a right angle			Module: Geometry Unit: Measurement Session: Lines, Angles, and Circles				
recognize, draw, and name the following: point, line, parallel lines, and intersecting lines			Module: Geometry Unit: Measurement Session: Lines, Angles, and Circles				
			Module: Geometry Unit: Measurement Session: Rectangles and Squares				
SHAPE AND SPACE (TRANSFORMATIONS)							
Use numbers and directional words to describe the relative positions of objects in two dimensions, using real-world contexts							
communicate and apply terms of directions to maps (north, south, east, and west)							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
place an object on a grid using columns and rows			Module: Geometry Unit: Coordinate Geometry and Algebra Session: The Coordinate Plane				
describe the position of an object on a grid using columns and rows			Module: Geometry Unit: Coordinate Geometry and Algebra Session: The Coordinate Plane				
trace a path on a grid or map, using oral or written instructions (and vice versa)			Module: Geometry Unit: Coordinate Geometry and Algebra Session: The Coordinate Plane				
create and verify symmetrical two-dimensional shapes by drawing lines of symmetry							
STATISTICS AND PROBABILITY (DATA ANALYSIS)							
Collect first- and second-hand data, assess and validate the data-collection process, and graph the data							
select an appropriate sample or population and organize the collection of data							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
manipulate data to create an interval graph/table for display purposes			Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Displaying and Analyzing Data				
construct a bar graph and a pictograph using many-to-one correspondence and justify the choice of intervals and correspondence used							
evaluate the process by which the data was collected							
<b>STATISTICS AND PROBABILITY (CHANCE AND UNCERTAINTY)</b>							
Conduct simple probability experiments to explain outcomes							
identify an outcome using the terms possible, impossible, certain, or uncertain			Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Looking at Chance				
compare outcomes using the terms equally, likely, more likely, or less likely			Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Looking at Chance				

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
design and conduct experiments to answer their own questions			Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Looking at Chance				
Grade 5							
NUMBER (NUMBER CONCEPTS)							
Demonstrate a number sense for whole numbers from 0 to 100,000 and will explore proper fractions and decimal fractions							
demonstrate concretely and pictorially an understanding of place value from hundredths			Module: Numbers and Number Sense Unit: Large and Small Numbers Session: Whole Numbers to One Million				
			Module: Decimals Unit: Introduction Session: Tenths, Hundredths, and Thousandths				
read and write numerals to a million			Module: Numbers and Number Sense Unit: Large and Small Numbers Session: Whole Numbers to One Million				

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
read and write number words to 100,000			Module: Numbers and Number Sense Unit: Large and Small Numbers Session: Whole Numbers to One Million				
use estimation strategies for quantities up to 100,000							
recognize, model, and describe multiples, factors, composites, and primes			Module: Numbers and Number Sense Unit: Numbers as Factors Session: Finding Factors				
			Module: Numbers and Number Sense Unit: Numbers as Factors Session: Prime and Composite Numbers				
			Module: Numbers and Number Sense Unit: Numbers as Factors Session: Identifying Common Factors				
compare and/or order whole numbers			Module: Numbers and Number Sense Unit: Large and Small Numbers Session: Ordering and Rounding Whole Numbers				
represent and describe proper fractions concretely, pictorially, and symbolically			Module: Fractions Unit: Proper and Improper Fractions Session: Proper Fractions				

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
demonstrate and describe equivalent fractions			Module: Fractions Unit: Proper and Improper Fractions Session: Equivalent Fractions				
compare and order proper and decimal fractions to hundredths			Module: Fractions Unit: Proper and Improper Fractions Session: Ordering and Rounding Fractions				
			Module: Decimals Unit: Introduction Session: Ordering and Rounding				
NUMBER (NUMBER OPERATIONS)							
Apply arithmetic operations on whole numbers and decimal fractions and illustrate the use of decimal fractions in solving problems							
add and subtract decimal fractions to hundredths concretely, pictorially, and symbolically			Module: Decimals Unit: Addition and Subtraction Session: Adding Decimals				
			Module: Decimals Unit: Addition and Subtraction Session: Subtracting Decimals				

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
estimate, mentally calculate, or compute and verify the product (three-digit by two-digit numbers) and quotient (three-digit by one-digit numbers) of the multiplication and division of whole numbers			Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Multipliers				
			Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Introduction to Long Division				
multiply and divide decimal fractions to hundredths concretely, pictorially, and symbolically using one-digit, whole number multipliers and divisors			Module: Decimals Unit: Multiplication and Division Session: Multiplying Decimals				
			Module: Decimals Unit: Multiplication and Division Session: Dividing Decimals by Whole Numbers				
PATTERNS AND RELATIONS (PATTERNS)							
Construct, extend, and summarize patterns, using rules, charts, mental mathematics, and calculators							
develop charts to record and reveal number patterns							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
describe how a pattern grows using everyday language orally and in writing							
construct and expand patterns in two and three dimensions, concretely and pictorially							
generate number patterns within a problem-solving context							
predict and justify pattern extensions							
SHAPE AND SPACE (MEASUREMENT)							
Use measurement concepts, appropriate tools, and the results of measurements to solve problems in real-life contexts							
recognize and explain the meaning of length, width, height, depth, thickness, perimeter, and circumference			Module: Geometry Unit: Measurement Session: Rectangles and Squares				

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
			Module: Geometry Unit: Measurement Session: Triangles				
			Module: Geometry Unit: Measurement Session: Parallelograms and Trapezoids				
			Module: Geometry Unit: Coordinate Geometry and Algebra Session: The Coordinate Plane				
solve problems involving mass using grams, kilograms, and tonnes							
evaluate which units of measure would be most appropriate when selecting different measuring tools							
estimate and measure the area of irregular shapes by dividing them into parts			Module: Geometry Unit: Coordinate Geometry and Algebra Session: The Coordinate Plane				
estimate and measure the perimeter of irregular shapes			Module: Geometry Unit: Coordinate Geometry and Algebra Session: The Coordinate Plane				

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
estimate and measure the effect on a rectangle's perimeter or area of changing one or more of its dimensions							
relate the perimeter and area of a rectangle using manipulatives and diagrams			Module: Geometry Unit: Measurement Session: Rectangles and Squares				
relate the units cm cubed and mL							
estimate, measure, record, and order containers by volume using cm cubed							
construct objects of a specific volume expressed in cm cubed							
read and write SI notation for recording dates and time							
SHAPE AND SPACE (3-D OBJECTS AND 2-D SHAPES)							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
Use the visualization of two-dimensional shapes and three-dimensional objects to solve problems related to spatial relation							
construct, analyse, and classify triangles according to their side measurements			Module: Geometry Unit: Measurement Session: Triangles				
build, represent, and describe geometric objects and shapes			Module: Geometry Unit: Measurement Session: Rectangles and Squares				
			Module: Geometry Unit: Measurement Session: Triangles				
			Module: Geometry Unit: Measurement Session: Parallelograms and Trapezoids				
classify and name polygons according to the number of their sides			Module: Geometry Unit: Measurement Session: Rectangles and Squares				
			Module: Geometry Unit: Measurement Session: Triangles				

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
			Module: Geometry Unit: Measurement Session: Parallelograms and Trapezoids				
cover two-dimensional shapes with a set of tangram pieces							
complete the drawing of a three-dimensional object on grid paper given the front face							
determine experimentally the minimum information needed to draw or identify a given two-dimensional shape							
SHAPE AND SPACE (TRANSFORMATIONS)							
Describe motion in terms of a slide, a turn, or a flip							
recognize motion as a slide (translation), a turn (rotation), or a flip (reflection)			Module: Geometry Unit: Coordinate Geometry and Algebra Session: Symmetry and Transformations				

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
recognize tessellations created with regular and irregular shapes in the environment							
locate planes of symmetry by cutting solids							
use coordinates to describe the position of objects in two dimensions			Module: Geometry Unit: Coordinate Geometry and Algebra Session: The Coordinate Plane				
plot whole number, ordered number pairs in the first quadrant with intervals of 1, 2, 5, and 10							
identify a point in the first quadrant using ordered pairs			Module: Geometry Unit: Coordinate Geometry and Algebra Session: The Coordinate Plane				
cover a surface using one or more tessellating shapes							
create and identify tessellations using regular polygons							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
identify regular polygons that can tessellate a plane							
STATISTICS AND PROBABILITY (DATA ANALYSIS)							
Develop and implement a plan for the collection, display, and analysis of data gathered from appropriate samples							
identify a question to generate appropriate data and predict results							
distinguish between a total population and a sample							
use a variety of methods to collect and record data			Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Displaying and Analyzing Data				
create classifications and ranges for grouping data							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
display data by hand or by computer in a variety of ways, including:							
			Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Displaying and Analyzing Data				
evaluate the graphic presentation of the data to ensure the clear representation of the results			Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Displaying and Analyzing Data				
discuss the reasonableness of the data and the results			Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Displaying and Analyzing Data				
make inferences from the data to generate a conclusion			Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Displaying and Analyzing Data				
STATISTICS AND PROBABILITY (CHANCE AND UNCERTAINTY)							
Predict outcomes, conduct experiments, and communicate the probability of single events							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
list all possible outcomes of an event			Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Looking at Chance				
explain events using the vocabulary of probability			Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Looking at Chance				
conduct probability experiments and explain the results using the vocabulary of probability			Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Looking at Chance				
conduct probability experiments to demonstrate that results are not influenced by factors such as the age, experience, or skill of the participant							
Grade 6							
NUMBER (NUMBER CONCEPTS)							
Develop a number sense for common fractions and explore number sense for whole numbers							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
read and write numerals greater than a million							
use estimation strategies for quantities up to a million							
distinguish relationships among multiples, factors, composites, and primes			Module: Numbers and Number Sense Unit: Numbers as Factors Session: Finding Factors	Module: Fractions Unit: Equivalent Fractions Session: Identifying the Factors of a Number			
			Module: Numbers and Number Sense Unit: Numbers as Factors Session: Prime and Composite Numbers	Module: Fractions Unit: Multiplying Fractions Session: Using the GCF in Finding Products			
			Module: Numbers and Number Sense Unit: Numbers as Factors Session: Identifying Common Factors				
represent positive powers of numbers concretely, pictorially, and symbolically				Module: Integers and Order of Operations Unit: Order of Operations Session: Simplifying Expressions			
use power, base, and exponent to represent repeated multiplication				Module: Integers and Order of Operations Unit: Order of Operations Session: Simplifying Expressions			

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
explain the meaning of integers by extending their counting to numbers less than 0			Module: Numbers and Number Sense Unit: Large and Small Numbers Session: Negative Whole Numbers	Module: Integers and Order of Operations Unit: Adding and Subtracting Signed Numbers Session: Exploring the Number Line and Absolute Value			
identify practical applications of integers			Module: Numbers and Number Sense Unit: Large and Small Numbers Session: Negative Whole Numbers	Module: Integers and Order of Operations Unit: Adding and Subtracting Signed Numbers Session: Exploring the Number Line and Absolute Value			
read and write numbers to thousandths			Module: Decimals Unit: Introduction Session: Tenths, Hundredths, and Thousandths	Module: Decimals Unit: Essentials of Decimals Session: Investigating Decimal Place Values			
demonstrate and explain the meaning of improper fractions and mixed numbers (positive) concretely and pictorially			Module: Fractions Unit: Proper and Improper Fractions Session: Proper Fractions	Module: Fractions Unit: Essentials of Fractions Session: Recognizing a Fraction			
			Module: Fractions Unit: Proper and Improper Fractions Session: Improper Fractions	Module: Fractions Unit: Essentials of Fractions Session: Exploring Proper and Improper Fractions			
			Module: Fractions Unit: Proper and Improper Fractions Session: Equivalent Fractions	Module: Fractions Unit: Essentials of Fractions Session: Working with Mixed Numbers			
demonstrate and describe equivalent mixed numbers and improper fractions concretely and pictorially			Module: Fractions Unit: Proper and Improper Fractions Session: Improper Fractions	Module: Fractions Unit: Essentials of Fractions Session: Exploring Proper and Improper Fractions			

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
			Module: Fractions Unit: Proper and Improper Fractions Session: Equivalent Fractions	Module: Fractions Unit: Essentials of Fractions Session: Working with Mixed Numbers			
				Module: Fractions Unit: Equivalent Fractions Session: Expressing Fractions in Lowest Terms			
				Module: Fractions Unit: Equivalent Fractions Session: Writing and Comparing Equivalent Fractions			
compare and order improper fractions, mixed numbers, and decimal fractions to thousandths			Module: Fractions Unit: Proper and Improper Fractions Session: Equivalent Fractions	Module: Fractions Unit: Equivalent Fractions Session: Identifying the Factors of a Number			
			Module: Fractions Unit: Proper and Improper Fractions Session: Ordering and Rounding Fractions	Module: Fractions Unit: Equivalent Fractions Session: Expressing Fractions in Lowest Terms			
			Module: Decimals Unit: Introduction Session: Ordering and Rounding	Module: Fractions Unit: Equivalent Fractions Session: Writing and Comparing Equivalent Fractions			
			Module: Decimals Unit: Introduction Session: Ratios, Decimals, and Percents	Module: Decimals Unit: Essentials of Decimals Session: Rounding Decimals			

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
demonstrate and explain the meaning of ratio concretely and pictorially			Module: Decimals Unit: Introduction Session: Ratios, Decimals, and Percents		Module: Ratio & Proportion Unit: Ratio Session: Defining Ratio		
demonstrate and explain the meaning of percentage concretely and pictorially				Module: Percents Unit: Essentials of Percents Session: Investigating the Meaning of Percent			
NUMBER (NUMBER OPERATIONS)							
Apply arithmetic operations on whole numbers and decimal fractions in solving problems							
estimate the solutions to calculations involving whole numbers and decimal fractions			Module: Operations with Numbers Unit: Addition and Subtraction of Whole Numbers Session: Whole Number Sums				
			Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Introduction to Long Division				
			Module: Decimals Unit: Addition and Subtraction Session: Adding Decimals				

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
			Module: Decimals Unit: Addition and Subtraction Session: Subtracting Decimals				
			Module: Decimals Unit: Multiplication and Division Session: Multiplying Decimals				
			Module: Decimals Unit: Multiplication and Division Session: Dividing Decimals by Whole Numbers				
PATTERNS AND RELATIONS (PATTERNS)							
Use relationships to summarize, generalize, and extend patterns							
construct a visual representation of a pattern to clarify relationships and to verify predictions							
summarize a relationship using everyday language in spoken or written form					Module: Essentials of Algebra Unit: Variable on Both Sides of the Equation Session: Writing Equations	Module: The Language of Algebra Unit: Variables, Expressions, and Equations Session: Translating Words into Expressions	

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
create expressions and rules to describe patterns and relationships (e.g., area, perimeter, volume)					Module: Essentials of Algebra Unit: Algebra Fundamentals Session: Replacing Variables in a Formula		
					Module: Essentials of Algebra Unit: Evaluating an Algebraic Expression Session: Representing the Dimensions & Area of a Rectangle		
					Module: Essentials of Algebra Unit: Simple Equations Session: Using Variables to Express Relationships		
					Module: Essentials of Algebra Unit: Solving Literal Equations Session: Identifying the Variables in a Given Formula		
					Module: Essentials of Algebra Unit: Solving Literal Equations Session: Rewriting a Formula in Terms of a Different Variable		
interpolate number values from a given graph					Module: Fundamentals of Statistics Unit: Interpreting and Constructing Graphs Session: Exploring Line Graphs		
					Module: Fundamentals of Statistics Unit: Interpreting and Constructing Graphs Session: Exploring Bar Graphs		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Fundamentals of Statistics Unit: Interpreting and Constructing Graphs Session: Interpreting Pie Charts		
					Module: Fundamentals of Statistics Unit: Frequency Distribution and Histograms Session: Creating & Interpreting a Frequency Table		
					Module: Fundamentals of Statistics Unit: Frequency Distribution and Histograms Session: Exploring Cumulative Frequency Graphs		
predict pattern relationships							
PATTERNS AND RELATIONS (VARIABLES AND EQUATIONS)							
Use informal and concrete representations of equality and operations on equality to solve problems							
generalize a pattern by substituting numbers into a frame and compare the results to the original pattern contexts					Module: Essentials of Algebra Unit: Algebra Fundamentals Session: Replacing Variables in a Formula		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Essentials of Algebra Unit: Evaluating an Algebraic Expression Session: Evaluating Expressions Using Substitution		
					Module: Essentials of Algebra Unit: Simple Equations Session: Using Variables to Express Relationships		
					Module: Essentials of Algebra Unit: Solving Literal Equations Session: Identifying the Variables in a Given Formula		
					Module: Essentials of Algebra Unit: Solving Literal Equations Session: Rewriting a Formula in Terms of a Different Variable		
					Module: Essentials of Algebra Unit: Solving Literal Equations Session: Substituting Values & Solving an Equation		
demonstrate the meaning and the preservation of equality using objects, models, and diagrams					Module: Essentials of Algebra Unit: Evaluating an Algebraic Expression Session: Combining Like Terms		
					Module: Essentials of Algebra Unit: Evaluating an Algebraic Expression Session: Evaluating Expressions Using Substitution		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Essentials of Algebra Unit: Simple Equations Session: Simplifying Algebraic Expressions		
					Module: Essentials of Algebra Unit: Simple Equations Session: Solving Simple Equations		
					Module: Essentials of Algebra Unit: Variable on Both Sides of the Equation Session: Simplifying Both Sides of an Equation		
					Module: Essentials of Algebra Unit: Solving Literal Equations Session: Substituting Values & Solving an Equation		
graph ordered pairs in the first quadrant, analyse results, and generalize relationships			Module: Geometry Unit: Coordinate Geometry and Algebra Session: The Coordinate Plane			Module: Linear Functions and Equations Unit: The Rectangular Coordinate Plane Session: Graphing Ordered Pairs	
solve one-variable equations with whole number coefficients and solutions using informal techniques					Module: Essentials of Algebra Unit: Simple Equations Session: Solving Simple Equations	Module: The Language of Algebra Unit: Variables, Expressions, and Equations Session: Applying Properties of Real Numbers	
					Module: Essentials of Algebra Unit: Solving Literal Equations Session: Substituting Values & Solving an Equation	Module: The Language of Algebra Unit: Variables, Expressions, and Equations Session: Evaluating and Simplifying Expressions	

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
						Module: The Language of Algebra Unit: Linear Equations in One Variable Session: Applying Inverse Operations	
						Module: The Language of Algebra Unit: Linear Equations in One Variable Session: Transforming Equations using Multiple Operations	
						Module: The Language of Algebra Unit: Linear Equations in One Variable Session: Solving Absolute Value Equations	
SHAPE AND SPACE (MEASUREMENT)							
Be able to solve problems involving perimeter, area, surface area, volume, and angle measurement							
convert between commonly used SI units of length, mass, and capacity							
develop, verify, and use rules or expressions to determine the perimeter of polygons			Module: Geometry Unit: Measurement Session: Rectangles and Squares				

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
			Module: Geometry Unit: Measurement Session: Triangles				
			Module: Geometry Unit: Measurement Session: Parallelograms and Trapezoids				
develop, verify, and use rules or expressions to determine the area of rectangles			Module: Geometry Unit: Measurement Session: Rectangles and Squares	Module: Fractions Unit: Subtracting Fractions Session: Subtracting with Like Denominators	Module: Essentials of Algebra Unit: Evaluating an Algebraic Expression Session: Representing the Dimensions & Area of a Rectangle		
estimate, measure, and then calculate the surface area of right rectangular prisms (without using a formula)							
discover, generalize, and use rules to determine the volume of right rectangular prisms					Module: Fundamentals of Geometry Unit: Volume and Surface Area Session: Calculating the Volume of a Right Triangular Prism		
					Module: Essentials of Algebra Unit: Algebra Fundamentals Session: Introducing Variables		
determine the volume of an object by measuring the amount of liquid displaced by that object							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
recognize angles as being more than 90 degrees, equal to 90 degrees, less than 90 degrees, or greater than 180 degrees			Module: Geometry Unit: Measurement Session: Lines, Angles, and Circles		Module: Fundamentals of Geometry Unit: Geometry Fundamentals Session: Naming and Measuring Angles		
					Module: Fundamentals of Geometry Unit: Geometry Fundamentals Session: Defining Complementary & Supplementary Angles		
					Module: Fundamentals of Geometry Unit: Geometry Fundamentals Session: Recognizing Congruent Angles		
estimate and measure angles using a circular protractor			Module: Geometry Unit: Measurement Session: Lines, Angles, and Circles		Module: Fundamentals of Geometry Unit: Geometry Fundamentals Session: Naming and Measuring Angles		
draw and sketch an angle in which the degrees in the angle are specified			Module: Geometry Unit: Measurement Session: Lines, Angles, and Circles		Module: Fundamentals of Geometry Unit: Geometry Fundamentals Session: Naming and Measuring Angles		
classify given angles as acute, right, obtuse, straight, or reflex			Module: Geometry Unit: Measurement Session: Lines, Angles, and Circles		Module: Fundamentals of Geometry Unit: Geometry Fundamentals Session: Naming and Measuring Angles		
identify and compare examples of angles in the environment			Module: Geometry Unit: Measurement Session: Lines, Angles, and Circles		Module: Fundamentals of Geometry Unit: Geometry Fundamentals Session: Naming and Measuring Angles		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Fundamentals of Geometry Unit: Geometry Fundamentals Session: Defining Complementary & Supplementary Angles		
					Module: Fundamentals of Geometry Unit: Geometry Fundamentals Session: Recognizing Congruent Angles		
SHAPE AND SPACE (3-D OBJECTS AND 2-D SHAPES)							
Use visualization and symmetry to solve problems involving classification and sketching							
classify triangles according to the measurement of their angles			Module: Geometry Unit: Measurement Session: Triangles		Module: Fundamentals of Geometry Unit: Triangles Session: Classifying Triangles by Angles		
sort quadrilaterals and regular polygons according to the number of lines of symmetry							
recognize and describe optical illusions							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
reproduce a given geometric drawing on grid paper							
sketch three-dimensional solids and skeletons with or without grids					Module: Fundamentals of Geometry Unit: Volume and Surface Area Session: Calculating the Volume of a Right Triangular Prism		
					Module: Fundamentals of Geometry Unit: Volume and Surface Area Session: Calculating the Surface Area of a Right Triangular Prism		
					Module: Fundamentals of Geometry Unit: Volume and Surface Area Session: Calculating the Volume & Surface Area of a Right Cylinder		
SHAPE AND SPACE (TRANSFORMATIONS)							
Create patterns and designs that incorporate symmetry, translations, tessellations, and reflections							
create, analyse, and describe designs using translations (slides) and reflections (flips)							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
draw designs using ordered pairs in the first quadrant of the coordinate grid, together with slide and flip images							
STATISTICS AND PROBABILITY (DATA ANALYSIS)							
Develop and implement a plan for the collection, display, and analysis of data gathered from appropriate samples							
formulate a key question from a problem-solving context							
identify appropriate data sources (first-hand, secondhand, a combination of first and second-hand)							
select and justify appropriate methods of collecting data (designing and using structured questionnaires, experiments, observations, and electronic networks)							
select and justify the choice of an appropriate population sample to use to answer a particular question							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
discuss how the data collected are affected by the nature of the sample, the method of collection, the sample size, and biases					Module: Fundamentals of Probability Unit: Probability of Combined Events Session: Determining the Sample Space of an Experiment		
display data by hand or by computer in a variety of ways, including histograms, double bar graphs, and stem and leaf plots					Module: Fundamentals of Statistics Unit: Interpreting and Constructing Graphs Session: Exploring Line Graphs		Module: Describing Data Unit: Graphical Displays Session: Stem- &-Leaf Plots & Box Plots
					Module: Fundamentals of Statistics Unit: Interpreting and Constructing Graphs Session: Exploring Bar Graphs		Module: Describing Data Unit: Graphical Displays Session: Scatter Plots & Linear Best-Fit Graphs
					Module: Fundamentals of Statistics Unit: Interpreting and Constructing Graphs Session: Interpreting Pie Charts		
					Module: Fundamentals of Statistics Unit: Frequency Distribution and Histograms Session: Creating & Interpreting a Frequency Table		
					Module: Fundamentals of Statistics Unit: Frequency Distribution and Histograms Session: Exploring Cumulative Frequency Graphs		
read and interpret graphs that are provided					Module: Fundamentals of Statistics Unit: Interpreting and Constructing Graphs Session: Exploring Line Graphs		Module: Describing Data Unit: Graphical Displays Session: Stem- &-Leaf Plots & Box Plots

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Fundamentals of Statistics Unit: Interpreting and Constructing Graphs Session: Exploring Bar Graphs		Module: Describing Data Unit: Graphical Displays Session: Scatter Plots & Linear Best-Fit Graphs
					Module: Fundamentals of Statistics Unit: Interpreting and Constructing Graphs Session: Interpreting Pie Charts		
					Module: Fundamentals of Statistics Unit: Frequency Distribution and Histograms Session: Creating & Interpreting a Frequency Table		
					Module: Fundamentals of Statistics Unit: Frequency Distribution and Histograms Session: Exploring Cumulative Frequency Graphs		
describe the general distribution of data:					Module: Fundamentals of Statistics Unit: The Mean, Median, & Mode Session: Defining the Mean & Median		
					Module: Fundamentals of Statistics Unit: Frequency Distribution and Histograms Session: Creating & Interpreting a Frequency Table		
					Module: Fundamentals of Statistics Unit: The Mean, Median, & Mode Session: Calculating the Mean, Median, & Mode		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
STATISTICS AND PROBABILITY (CHANCE AND UNCERTAINTY)							
Use numbers to communicate the probability of single events from experiments and models							
distinguish between the experimental and theoretical probability of single events					Module: Fundamentals of Probability Unit: Simple Probability Session: Defining & Expressing Probability		
using various polyhedrons as dice, identify the relationship between the number of faces and the probability of a single event							
calculate theoretical probability using numbers between 0 and 1			Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Looking at Chance		Module: Fundamentals of Probability Unit: Simple Probability Session: Defining & Expressing Probability		
demonstrate that different outcomes may occur when the same experiment is repeated			Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Looking at Chance		Module: Fundamentals of Probability Unit: Simple Probability Session: Calculating Probabilities on a Color Wheel		
					Module: Fundamentals of Probability Unit: Simple Probability Session: Determining Probabilities of Complementary Events		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
compare experimental results with theoretical results			Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Looking at Chance		Module: Fundamentals of Probability Unit: Simple Probability Session: Calculating Probabilities on a Color Wheel		
					Module: Fundamentals of Probability Unit: Simple Probability Session: Determining Probabilities of Complementary Events		
Grade 7							
NUMBER (NUMBER CONCEPTS)							
Demonstrate a number sense for decimal fractions and integers (including whole numbers)							
recognize, model, identify, and describe common multiples, common factors, least common multiples, greatest common factors, and prime factorization			Module: Numbers and Number Sense Unit: Numbers as Factors Session: Finding Factors				
			Module: Numbers and Number Sense Unit: Numbers as Factors Session: Prime and Composite Numbers				

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
			Module: Numbers and Number Sense Unit: Numbers as Factors Session: Identifying Common Factors				
write whole numbers as expanded numerals using powers of 10 and in scientific notation					Module: Radicals & Exponents Unit: Introduction to Scientific Notation Session: Writing Numbers Using Scientific Notation		
					Module: Radicals & Exponents Unit: Introduction to Scientific Notation Session: Comparing Numbers in Scientific Notation		
use divisibility rules to determine whether a number is divisible by 2, 3, 4, 5, 6, 8, 9, 10, or 11							
read and write numbers to any number of decimal places			Module: Decimals Unit: Introduction Session: Tenths, Hundredths, and Thousandths	Module: Decimals Unit: Essentials of Decimals Session: Investigating Decimal Place Values			
recognize and illustrate that all fractions and mixed numbers can be represented in decimal form (including terminating and repeating decimal fractions)				Module: Decimals Unit: Essentials of Decimals Session: Investigating Decimal Place Values			
				Module: Decimals Unit: Essentials of Decimals Session: Exploring Repeating and Terminating Decimals			

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
convert from terminating decimal fractions to common fractions and from single-digit repeating decimal numbers to common fractions using patterns			Module: Decimals Unit: Introduction Session: Tenths, Hundredths, and Thousandths	Module: Decimals Unit: Essentials of Decimals Session: Investigating Decimal Place Values			
			Module: Decimals Unit: Introduction Session: Ratios, Decimals, and Percents	Module: Decimals Unit: Essentials of Decimals Session: Exploring Repeating and Terminating Decimals			
demonstrate concretely and pictorially that the sum of opposite integers is 0			Module: Operations with Numbers Unit: The Integers Session: Differences Between Integers	Module: Integers and Order of Operations Unit: Adding and Subtracting Signed Numbers Session: Subtracting with Absolute Value			
represent integers in a variety of concrete, pictorial, and symbolic ways			Module: Numbers and Number Sense Unit: Large and Small Numbers Session: Negative Whole Numbers	Module: Integers and Order of Operations Unit: Adding and Subtracting Signed Numbers Session: Exploring the Number Line and Absolute Value			
compare and order integers			Module: Numbers and Number Sense Unit: Large and Small Numbers Session: Negative Whole Numbers	Module: Integers and Order of Operations Unit: Adding and Subtracting Signed Numbers Session: Exploring the Number Line and Absolute Value			
NUMBER (NUMBER OPERATIONS)							
Apply arithmetic operations on decimal fractions and integers and illustrate their use in solving problems							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
use patterns, manipulatives, and diagrams to demonstrate the concepts of multiplication and division by decimal fractions			Module: Decimals Unit: Multiplication and Division Session: Multiplying Decimals	Module: Decimals Unit: Multiplying Decimals Session: Multiplying Decimals by Powers of 10			
			Module: Decimals Unit: Multiplication and Division Session: Dividing Decimals by Whole Numbers	Module: Decimals Unit: Multiplying Decimals Session: Calculating Products			
				Module: Decimals Unit: Multiplying Decimals Session: Finding the Volume of a Prism			
				Module: Decimals Unit: Dividing Decimals Session: Dividing Decimals by Whole Numbers			
				Module: Decimals Unit: Dividing Decimals Session: Estimating and Finding Quotients			
				Module: Decimals Unit: Dividing Decimals Session: Dividing by Powers of 10			
use estimation strategies to predict or assess the reasonableness of their calculations			Module: Decimals Unit: Addition and Subtraction Session: Adding Decimals				

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
			Module: Decimals Unit: Addition and Subtraction Session: Subtracting Decimals				
			Module: Decimals Unit: Multiplication and Division Session: Multiplying Decimals				
			Module: Decimals Unit: Multiplication and Division Session: Dividing Decimals by Whole Numbers				
add, subtract, multiply, and divide decimal fractions (using technology for more than two-digit divisors or multipliers)			Module: Decimals Unit: Addition and Subtraction Session: Adding Decimals	Module: Decimals Unit: Adding and Subtracting Decimals Session: Using Place Value Grids			
			Module: Decimals Unit: Addition and Subtraction Session: Subtracting Decimals	Module: Decimals Unit: Adding and Subtracting Decimals Session: Regrouping with Whole Numbers			
			Module: Decimals Unit: Multiplication and Division Session: Multiplying Decimals	Module: Decimals Unit: Adding and Subtracting Decimals Session: Regrouping to Hundredths			
			Module: Decimals Unit: Multiplication and Division Session: Dividing Decimals by Whole Numbers	Module: Decimals Unit: Multiplying Decimals Session: Multiplying Decimals by Powers of 10			

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
				Module: Decimals Unit: Multiplying Decimals Session: Calculating Products			
				Module: Decimals Unit: Multiplying Decimals Session: Finding the Volume of a Prism			
				Module: Decimals Unit: Dividing Decimals Session: Dividing Decimals by Whole Numbers			
				Module: Decimals Unit: Dividing Decimals Session: Estimating and Finding Quotients			
				Module: Decimals Unit: Dividing Decimals Session: Dividing by Powers of 10			
demonstrate an understanding of the order of operations, using paper and pencil and a calculator				Module: Integers and Order of Operations Unit: Order of Operations Session: Simplifying Expressions			
				Module: Integers and Order of Operations Unit: Order of Operations Session: Introducing the Distributive Property			

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
				Module: Integers and Order of Operations Unit: Order of Operations Session: Using Grouping Symbols			
add, subtract, multiply, and divide integers concretely, pictorially, and symbolically			Module: Operations with Numbers Unit: The Integers Session: Integer Sums	Module: Integers and Order of Operations Unit: Adding and Subtracting Signed Numbers Session: Exploring the Number Line and Absolute Value			
			Module: Operations with Numbers Unit: The Integers Session: Differences Between Integers	Module: Integers and Order of Operations Unit: Adding and Subtracting Signed Numbers Session: Adding with Absolute Value			
				Module: Integers and Order of Operations Unit: Adding and Subtracting Signed Numbers Session: Subtracting with Absolute Value			
				Module: Integers and Order of Operations Unit: Multiplying and Dividing Signed Numbers Session: Finding Products of Signed Numbers			
				Module: Integers and Order of Operations Unit: Multiplying and Dividing Signed Numbers Session: Representing the Multiplication of Signed Numbers			
				Module: Integers and Order of Operations Unit: Multiplying and Dividing Signed Numbers Session: Finding Quotients Using Reciprocals			

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
Illustrate the use of ratios, rates, percentages, and decimal numbers in solving problems							
estimate and calculate percentages				Module: Percents Unit: Finding Percents of Quantities Session: Finding Percents of a Whole			
				Module: Percents Unit: Finding Percents of Quantities Session: Expressing Ratios as Percents			
				Module: Percents Unit: Finding Percents of Quantities Session: Calculating the Whole from a Part and a Percent			
distinguish between rate and ratio					Module: Ratio & Proportion Unit: Ratio Session: Defining Ratio		
					Module: Ratio & Proportion Unit: Ratio Session: Forming Ratios between Unlike Quantities		
explain and demonstrate the use of proportion in solving problems					Module: Ratio & Proportion Unit: Proportion Session: Defining a Proportion		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Ratio & Proportion Unit: Proportion Session: Solving for a Variable in a Proportion		
					Module: Ratio & Proportion Unit: Proportion Session: Applying the Means/Extremes Property		
mentally convert proper fractions, decimal fractions, and percentages from one to another to facilitate the solution of problems			Module: Decimals Unit: Introduction Session: Ratios, Decimals, and Percents	Module: Decimals Unit: Essentials of Decimals Session: Exploring Repeating and Terminating Decimals	Module: Ratio & Proportion Unit: Ratio Session: Expressing Ratios as Equivalent Fractions & Decimals		
				Module: Percents Unit: Essentials of Percents Session: Expressing Percents as Proper Fractions	Module: Ratio & Proportion Unit: Proportion Session: Defining a Proportion		
				Module: Percents Unit: Essentials of Percents Session: Expressing Percents greater than 100% as Improper Fractions			
				Module: Percents Unit: Finding Percents of Quantities Session: Expressing Ratios as Percents			
PATTERNS AND RELATIONS (PATTERNS)							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
Express patterns in terms of variables and use expressions containing variables to make predictions							
create formulas for finding area, perimeter, and volume			Module: Geometry Unit: Measurement Session: Rectangles and Squares	Module: Decimals Unit: Multiplying Decimals Session: Calculating Products	Module: Essentials of Algebra Unit: Evaluating an Algebraic Expression Session: Representing the Dimensions & Area of a Rectangle		
			Module: Geometry Unit: Measurement Session: Triangles	Module: Decimals Unit: Multiplying Decimals Session: Finding the Volume of a Prism	Module: Essentials of Algebra Unit: Solving Literal Equations Session: Identifying the Variables in a Given Formula		
			Module: Geometry Unit: Measurement Session: Parallelograms and Trapezoids		Module: Essentials of Algebra Unit: Solving Literal Equations Session: Rewriting a Formula in Terms of a Different Variable		
			Module: Geometry Unit: Coordinate Geometry and Algebra Session: The Coordinate Plane		Module: Fundamentals of Geometry Unit: Triangles Session: Exploring the Area of a Triangle		
					Module: Fundamentals of Geometry Unit: Volume and Surface Area Session: Calculating the Volume of a Right Triangular Prism		
					Module: Fundamentals of Geometry Unit: Volume and Surface Area Session: Calculating the Surface Area of a Right Triangular Prism		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Fundamentals of Geometry Unit: Volume and Surface Area Session: Calculating the Volume & Surface Area of a Right Cylinder		
					Module: Radicals & Exponents Unit: Introduction to Radicals & Pythagorean Theorem Session: Exploring the Pythagorean Theorem		
					Module: Ratio & Proportion Unit: Similar Polygons Session: Setting up & Solving Proportions in Similar Polygons		
predict and justify the nth value of a number pattern							
PATTERNS AND RELATIONS (VARIABLES AND EQUATIONS)							
Use variables and equations to express, summarize, and apply relationships as problem-solving tools in a restricted range of contexts							
generalize a pattern arising from a problem-solving context using an open number sentence with appropriate variables					Module: Essentials of Algebra Unit: Algebra Fundamentals Session: Introducing Variables		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Essentials of Algebra Unit: Algebra Fundamentals Session: Identifying Components of Algebraic Expressions		
					Module: Essentials of Algebra Unit: Algebra Fundamentals Session: Replacing Variables in a Formula		
					Module: Essentials of Algebra Unit: Simple Equations Session: Using Variables to Express Relationships		
					Module: Essentials of Algebra Unit: Simple Equations Session: Solving Simple Equations		
					Module: Essentials of Algebra Unit: Variable on Both Sides of the Equation Session: Writing Equations		
substitute number variables and compare the results to concrete models and tables					Module: Essentials of Algebra Unit: Algebra Fundamentals Session: Replacing Variables in a Formula		
					Module: Essentials of Algebra Unit: Evaluating an Algebraic Expression Session: Evaluating Expressions Using Substitution		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Essentials of Algebra Unit: Solving Literal Equations Session: Substituting Values & Solving an Equation		
write expressions involving variables using standard mathematical conventions					Module: Essentials of Algebra Unit: Algebra Fundamentals Session: Replacing Variables in a Formula		
					Module: Essentials of Algebra Unit: Evaluating an Algebraic Expression Session: Evaluating Expressions Using Substitution		
					Module: Essentials of Algebra Unit: Solving Literal Equations Session: Substituting Values & Solving an Equation		
analyse relations graphically to discover how changes in one quantity may affect others						Module: Linear Functions and Equations Unit: Introduction to Functions Session: Relations and Functions	
graph relations, analyse results, and draw conclusions						Module: Linear Functions and Equations Unit: Introduction to Functions Session: Relations and Functions	
solve and verify simple linear equations using a variety of techniques						Module: The Language of Algebra Unit: Linear Equations in One Variable Session: Applying Inverse Operations	

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
						Module: The Language of Algebra Unit: Linear Equations in One Variable Session: Transforming Equations using Multiple Operations	
						Module: The Language of Algebra Unit: Linear Equations in One Variable Session: Solving Absolute Value Equations	
						Module: Linear Functions and Equations Unit: Introduction to Functions Session: Exploring the Slope-Intercept Equation of a Line	
						Module: Linear Functions and Equations Unit: Introduction to Functions Session: Exploring the Point-Slope Equation of a Line	
						Module: Linear Functions and Equations Unit: Introduction to Functions Session: Relations and Functions	
use patterns and relationships to represent and solve problems by translating everyday language into mathematical symbols and vice versa						Module: The Language of Algebra Unit: Variables, Expressions, and Equations Session: Translating Words into Expressions	
					Module: Essentials of Algebra Unit: Simple Equations Session: Using Variables to Express Relationships		
					Module: Essentials of Algebra Unit: Variable on Both Sides of the Equation Session: Writing Equations		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
explain how to solve simple problems using informal algebraic methods					Module: Essentials of Algebra Unit: Simple Equations Session: Solving Simple Equations	Module: The Language of Algebra Unit: Linear Equations in One Variable Session: Applying Inverse Operations	
						Module: The Language of Algebra Unit: Linear Equations in One Variable Session: Transforming Equations using Multiple Operations	
SHAPE AND SPACE (MEASUREMENT)							
Solve problems involving the properties of circles and their relationships to angles and time zones							
measure the diameter, radius, and circumference of circles and generalize the relationships					Module: Essentials of Algebra Unit: Solving Literal Equations Session: Identifying the Variables in a Given Formula		
					Module: Fundamentals of Geometry Unit: Volume and Surface Area Session: Calculating the Volume & Surface Area of a Right Cylinder		
solve problems involving circles (radius, diameter, and circumference)					Module: Essentials of Algebra Unit: Solving Literal Equations Session: Identifying the Variables in a Given Formula		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Fundamentals of Geometry Unit: Volume and Surface Area Session: Calculating the Volume & Surface Area of a Right Cylinder		
explain how time zones are determined							
determine time in various regions of the world							
research and report how measurement instruments are used in the community							
design and construct rectangles, given either or both the perimeter and the area (in whole numbers)			Module: Geometry Unit: Measurement Session: Rectangles and Squares				
demonstrate and generalize that many rectangles are possible for a given perimeter or a given area			Module: Geometry Unit: Measurement Session: Rectangles and Squares				
SHAPE AND SPACE (3-D OBJECTS AND 2-D SHAPES)							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
Link angle measurements to the properties of parallel lines							
measure and classify pairs of angles, complementary angles (90 degrees), or supplementary angles (180 degrees)					Module: Fundamentals of Geometry Unit: Geometry Fundamentals Session: Naming and Measuring Angles		
					Module: Fundamentals of Geometry Unit: Geometry Fundamentals Session: Defining Complementary & Supplementary Angles		
					Module: Fundamentals of Geometry Unit: Geometry Fundamentals Session: Recognizing Congruent Angles		
identify and name pairs of angles pertaining to parallel lines and transversals, including:					Module: Fundamentals of Geometry Unit: Geometry Fundamentals Session: Recognizing Congruent Angles		
describe the relationships between the pairs of angles pertaining to parallel lines and transversals					Module: Fundamentals of Geometry Unit: Geometry Fundamentals Session: Recognizing Congruent Angles		
use mathematical reasoning to determine the measures of angles in a diagram					Module: Fundamentals of Geometry Unit: Geometry Fundamentals Session: Naming and Measuring Angles		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Fundamentals of Geometry Unit: Geometry Fundamentals Session: Defining Complementary & Supplementary Angles		
					Module: Fundamentals of Geometry Unit: Geometry Fundamentals Session: Recognizing Congruent Angles		
perform calculations with angle measures					Module: Fundamentals of Geometry Unit: Geometry Fundamentals Session: Naming and Measuring Angles		
					Module: Fundamentals of Geometry Unit: Geometry Fundamentals Session: Defining Complementary & Supplementary Angles		
					Module: Fundamentals of Geometry Unit: Geometry Fundamentals Session: Recognizing Congruent Angles		
construct angle bisectors and perpendicular bisectors							
explain in more than one way why the sum of the measures of the angles of a triangle is 180 degrees					Module: Fundamentals of Geometry Unit: Triangles Session: Classifying Triangles by Angles		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
SHAPE AND SPACE (TRANSFORMATIONS)							
Create and analyse patterns and designs using congruence, symmetry, translation, rotation, and reflection							
create, analyse, and describe designs using rotation (turns), reflections (flips), and translations (slides)							
use informal concepts of congruence to describe images after rotations (turns), reflections (flips), and translations (slides)							
draw designs using ordered pairs in all four quadrants of the coordinate grid, together with slide and flip images							
connect reflections with lines and planes of symmetry							
STATISTICS AND PROBABILITY (DATA ANALYSIS)							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
Develop and implement a plan for the collection, display, and analysis of data, using measures of variability and central tendency							
formulate questions that explore whether or not a relationship exists in a real-world context							
select and justify appropriate methods of collecting data (designing and using questionnaires, interviews, experiments, and research)							
display data by hand or by computer in a variety of ways, including circle graphs					Module: Fundamentals of Statistics Unit: Interpreting and Constructing Graphs Session: Exploring Line Graphs		Module: Describing Data Unit: Graphical Displays Session: Stem- &-Leaf Plots & Box Plots
					Module: Fundamentals of Statistics Unit: Interpreting and Constructing Graphs Session: Exploring Bar Graphs		Module: Describing Data Unit: Graphical Displays Session: Scatter Plots & Linear Best-Fit Graphs
					Module: Fundamentals of Statistics Unit: Interpreting and Constructing Graphs Session: Interpreting Pie Charts		
					Module: Fundamentals of Statistics Unit: Frequency Distribution and Histograms Session: Creating & Interpreting a Frequency Table		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Fundamentals of Statistics Unit: Frequency Distribution and Histograms Session: Defining a Histogram		
					Module: Fundamentals of Statistics Unit: Frequency Distribution and Histograms Session: Exploring Cumulative Frequency Graphs		
read and interpret graphs that are provided					Module: Fundamentals of Statistics Unit: Interpreting and Constructing Graphs Session: Exploring Line Graphs		Module: Describing Data Unit: Graphical Displays Session: Stem- &-Leaf Plots & Box Plots
					Module: Fundamentals of Statistics Unit: Interpreting and Constructing Graphs Session: Exploring Bar Graphs		Module: Describing Data Unit: Graphical Displays Session: Scatter Plots & Linear Best-Fit Graphs
					Module: Fundamentals of Statistics Unit: Interpreting and Constructing Graphs Session: Interpreting Pie Charts		
					Module: Fundamentals of Statistics Unit: Frequency Distribution and Histograms Session: Creating & Interpreting a Frequency Table		
					Module: Fundamentals of Statistics Unit: Frequency Distribution and Histograms Session: Defining a Histogram		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Fundamentals of Statistics Unit: Frequency Distribution and Histograms Session: Exploring Cumulative Frequency Graphs		
determine measures of central tendency for a set of data:					Module: Fundamentals of Statistics Unit: The Mean, Median, & Mode Session: Defining the Mode		Module: Describing Data Unit: Graphical Displays Session: Stem- &-Leaf Plots & Box Plots
					Module: Fundamentals of Statistics Unit: The Mean, Median, & Mode Session: Defining the Mean & Median		Module: Describing Data Unit: Graphical Displays Session: Scatter Plots & Linear Best-Fit Graphs
					Module: Fundamentals of Statistics Unit: The Mean, Median, & Mode Session: Calculating the Mean, Median, & Mode		
					Module: Fundamentals of Statistics Unit: Frequency Distribution and Histograms Session: Creating & Interpreting a Frequency Table		
					Module: Fundamentals of Statistics Unit: Frequency Distribution and Histograms Session: Defining a Histogram		
determine measures of the distribution of a set of data:							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Fundamentals of Statistics Unit: Interpreting and Constructing Graphs Session: Exploring Bar Graphs		Module: The Real Number System Unit: Rational & Irrational Numbers Session: The Square Root Function
							Module: Quadratic Functions & Equations Unit: Graphing Quadratic Functions & Equations Session: Graphing Parabolas
							Module: Algebraic Expressions & Functions Unit: Rational Expressions, Equations & Functions Session: Rational Functions
							Module: Describing Data Unit: Graphical Displays Session: Stem- &-Leaf Plots & Box Plots
					Module: Fundamentals of Statistics Unit: Frequency Distribution and Histograms Session: Creating & Interpreting a Frequency Table		
					Module: Fundamentals of Statistics Unit: Frequency Distribution and Histograms Session: Defining a Histogram		
interpolate from data to make predictions							Module: Describing Data Unit: Graphical Displays Session: Scatter Plots & Linear Best-Fit Graphs

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
STATISTICS AND PROBABILITY (CHANCE AND UNCERTAINTY)							
Create and solve problems using probability							
use a table to identify all possible outcomes of two independent events					Module: Fundamentals of Probability Unit: Probability of Combined Events Session: Calculating the Probability of Independent Events		
use simulation or experimentation to solve probability problems					Module: Fundamentals of Probability Unit: Simple Probability Session: Calculating Probabilities on a Color Wheel		
					Module: Fundamentals of Probability Unit: Simple Probability Session: Determining Probabilities of Complementary Events		
					Module: Fundamentals of Probability Unit: Probability of Combined Events Session: Calculating the Probability of Independent Events		
					Module: Fundamentals of Probability Unit: Probability of Combined Events Session: Calculating the Probability of Mutually Exclusive Events		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
create and solve problems using the definition of probability as favourable outcomes over total outcomes					Module: Fundamentals of Probability Unit: Simple Probability Session: Defining & Expressing Probability		
Grade 8							
NUMBER (Number Concepts)							
define, identify, compare, and order any rational numbers				Module: Fractions Unit: Equivalent Fractions Session: Expressing Fractions in Lowest Terms			
				Module: Fractions Unit: Equivalent Fractions Session: Writing and Comparing Equivalent Fractions			
				Module: Decimals Unit: Essentials of Decimals Session: Rounding Decimals			
				Module: Decimals Unit: Essentials of Decimals Session: Exploring Repeating and Terminating Decimals			

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
				Module: Percents Unit: Essentials of Percents Session: Expressing Percents as Proper Fractions			
				Module: Percents Unit: Essentials of Percents Session: Expressing Percents greater than 100% as Improper Fractions			
				Module: Percents Unit: Finding Percents of Quantities Session: Expressing Ratios as Percents			
express two-term ratios in equivalent forms					Module: Ratio & Proportion Unit: Ratio Session: Forming Ratios between Unlike Quantities		
represent and apply fractional percents and percents greater than 100 in fraction or decimal form and vice versa				Module: Percents Unit: Essentials of Percents Session: Expressing Percents greater than 100% as Improper Fractions			
represent square roots concretely, pictorially, and symbolically					Module: Radicals & Exponents Unit: Introduction to Radicals & Pythagorean Theorem Session: Investigating Squares & Square Roots		Module: The Real Number System Unit: Rational & Irrational Numbers Session: Defining the Real Numbers
distinguish between a square root and its decimal approximation as it appears on a calculator					Module: Radicals & Exponents Unit: Introduction to Radicals & Pythagorean Theorem Session: Investigating Squares & Square Roots		Module: The Real Number System Unit: Rational & Irrational Numbers Session: Defining the Real Numbers

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
express rates in equivalent forms							
represent any number in scientific notation					Module: Radicals & Exponents Unit: Introduction to Scientific Notation Session: Writing Numbers Using Scientific Notation		
					Module: Radicals & Exponents Unit: Introduction to Scientific Notation Session: Comparing Numbers in Scientific Notation		
					Module: Radicals & Exponents Unit: Introduction to Scientific Notation Session: Writing Numbers between 0 & 1 in Scientific Notation		
NUMBER (Number Operations)							
add, subtract, multiply, and divide fractions concretely, pictorially, and symbolically				Module: Fractions Unit: Multiplying Fractions Session: Finding Products of Fractions, Whole Numbers, and Mixed Numbers			
				Module: Fractions Unit: Multiplying Fractions Session: Using the GCF in Finding Products			

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
				Module: Fractions Unit: Multiplying Fractions Session: Representing Multiplication			
				Module: Fractions Unit: Dividing Fractions Session: Estimating Quotients of Fractions			
				Module: Fractions Unit: Dividing Fractions Session: Using Multiplicative Inverses			
				Module: Fractions Unit: Dividing Fractions Session: Solving Missing Value Problems when Dividing Fractions			
				Module: Fractions Unit: Adding Fractions Session: Adding with Like Denominators			
				Module: Fractions Unit: Adding Fractions Session: Adding with Unlike Denominators			
				Module: Fractions Unit: Adding Fractions Session: Solving Missing Value Problems when Adding Fractions			

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
				Module: Fractions Unit: Subtracting Fractions Session: Subtracting with Like Denominators			
				Module: Fractions Unit: Subtracting Fractions Session: Subtracting with Unlike Denominators			
				Module: Fractions Unit: Subtracting Fractions Session: Solving Missing Value Problems when Subtracting Fractions			
estimate, compute, and verify the sum, difference, product, and quotient of rational numbers				Module: Fractions Unit: Multiplying Fractions Session: Using the GCF in Finding Products			
				Module: Fractions Unit: Multiplying Fractions Session: Representing Multiplication			
				Module: Fractions Unit: Dividing Fractions Session: Estimating Quotients of Fractions			
				Module: Fractions Unit: Dividing Fractions Session: Using Multiplicative Inverses			

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
				Module: Fractions Unit: Dividing Fractions Session: Solving Missing Value Problems when Dividing Fractions			
				Module: Fractions Unit: Adding Fractions Session: Adding with Like Denominators			
				Module: Fractions Unit: Adding Fractions Session: Adding with Unlike Denominators			
				Module: Fractions Unit: Adding Fractions Session: Solving Missing Value Problems when Adding Fractions			
				Module: Fractions Unit: Subtracting Fractions Session: Subtracting with Like Denominators			
				Module: Fractions Unit: Subtracting Fractions Session: Subtracting with Unlike Denominators			
				Module: Fractions Unit: Subtracting Fractions Session: Solving Missing Value Problems when Subtracting Fractions			

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
				Module: Decimals Unit: Adding and Subtracting Decimals Session: Using Place Value Grids			
				Module: Decimals Unit: Adding and Subtracting Decimals Session: Regrouping with Whole Numbers			
				Module: Decimals Unit: Adding and Subtracting Decimals Session: Regrouping to Hundredths			
				Module: Decimals Unit: Multiplying Decimals Session: Multiplying Decimals by Powers of 10			
				Module: Decimals Unit: Multiplying Decimals Session: Calculating Products			
				Module: Decimals Unit: Multiplying Decimals Session: Finding the Volume of a Prism			
				Module: Decimals Unit: Dividing Decimals Session: Dividing Decimals by Whole Numbers			

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
				Module: Decimals Unit: Dividing Decimals Session: Estimating and Finding Quotients			
				Module: Decimals Unit: Dividing Decimals Session: Dividing by Powers of 10			
				Module: Percents Unit: Finding Percents of Quantities Session: Finding Percents of a Whole			
				Module: Percents Unit: Finding Percents of Quantities Session: Expressing Ratios as Percents			
				Module: Percents Unit: Finding Percents of Quantities Session: Calculating the Whole from a Part and a Percent			
				Module: Percents Unit: Increasing and Decreasing Percents Session: Calculating Percent Increases			
				Module: Percents Unit: Increasing and Decreasing Percents Session: Calculating Percent Decreases			

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
				Module: Percents Unit: Increasing and Decreasing Percents Session: Calculating Simple Interest			
estimate, compute (using a calculator), and verify approximate square roots of whole numbers					Module: Radicals & Exponents Unit: Introduction to Radicals & Pythagorean Theorem Session: Investigating Squares & Square Roots		Module: The Real Number System Unit: Rational & Irrational Numbers Session: Defining the Real Numbers
use concepts of rate, ratio, proportion, and percent to solve problems in meaningful contexts				Module: Percents Unit: Finding Percents of Quantities Session: Finding Percents of a Whole	Module: Ratio & Proportion Unit: Ratio Session: Defining Ratio		
				Module: Percents Unit: Finding Percents of Quantities Session: Expressing Ratios as Percents	Module: Ratio & Proportion Unit: Ratio Session: Expressing Ratios as Equivalent Fractions & Decimals		
				Module: Percents Unit: Finding Percents of Quantities Session: Calculating the Whole from a Part and a Percent	Module: Ratio & Proportion Unit: Ratio Session: Forming Ratios between Unlike Quantities		
				Module: Percents Unit: Increasing and Decreasing Percents Session: Calculating Percent Increases	Module: Ratio & Proportion Unit: Proportion Session: Defining a Proportion		
				Module: Percents Unit: Increasing and Decreasing Percents Session: Calculating Percent Decreases	Module: Ratio & Proportion Unit: Proportion Session: Solving for a Variable in a Proportion		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
				Module: Percents Unit: Increasing and Decreasing Percents Session: Calculating Simple Interest	Module: Ratio & Proportion Unit: Proportion Session: Applying the Means/Extremes Property		
derive and apply unit rates							
express rates and ratios in equivalent forms					Module: Ratio & Proportion Unit: Ratio Session: Expressing Ratios as Equivalent Fractions & Decimals		
					Module: Ratio & Proportion Unit: Ratio Session: Forming Ratios between Unlike Quantities		
					Module: Ratio & Proportion Unit: Proportion Session: Applying the Means/Extremes Property		
Patterns and Relations (Patterns)							
substitute numbers for variables in expressions and graph and analyse the relation					Module: Essentials of Algebra Unit: Algebra Fundamentals Session: Replacing Variables in a Formula	Module: The Language of Algebra Unit: Variables, Expressions, and Equations Session: Translating Words into Expressions	

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Essentials of Algebra Unit: Simple Equations Session: Using Variables to Express Relationships	Module: The Language of Algebra Unit: Variables, Expressions, and Equations Session: Applying Properties of Real Numbers	
					Module: Essentials of Algebra Unit: Solving Literal Equations Session: Identifying the Variables in a Given Formula	Module: The Language of Algebra Unit: Variables, Expressions, and Equations Session: Evaluating and Simplifying Expressions	
					Module: Essentials of Algebra Unit: Solving Literal Equations Session: Rewriting a Formula in Terms of a Different Variable		
					Module: Essentials of Algebra Unit: Solving Literal Equations Session: Substituting Values & Solving an Equation		
translate between an oral or written expression and an equivalent algebraic expression					Module: Essentials of Algebra Unit: Simple Equations Session: Using Variables to Express Relationships	Module: The Language of Algebra Unit: Variables, Expressions, and Equations Session: Translating Words into Expressions	
					Module: Essentials of Algebra Unit: Variable on Both Sides of the Equation Session: Writing Equations		
generalize a pattern from a problem-solving context							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
Patterns and Relations (Variables and Equations)							
illustrate the solution process for a one-step, single-variable, first-degree equation, using concrete materials or diagrams					Module: Essentials of Algebra Unit: Simple Equations Session: Solving Simple Equations	Module: The Language of Algebra Unit: Linear Equations in One Variable Session: Applying Inverse Operations	
					Module: Essentials of Algebra Unit: Variable on Both Sides of the Equation Session: Simplifying Both Sides of an Equation	Module: The Language of Algebra Unit: Linear Equations in One Variable Session: Transforming Equations using Multiple Operations	
					Module: Essentials of Algebra Unit: Variable on Both Sides of the Equation Session: Checking the Solution to an Equation	Module: The Language of Algebra Unit: Linear Equations in One Variable Session: Solving Absolute Value Equations	
solve and verify one-step, first-degree equations of the form: $x + a = b$ , $ax = b$ , $x/a = b$ , where $a$ and $b$ are integers					Module: Essentials of Algebra Unit: Simple Equations Session: Solving Simple Equations	Module: The Language of Algebra Unit: Linear Equations in One Variable Session: Applying Inverse Operations	
					Module: Essentials of Algebra Unit: Variable on Both Sides of the Equation Session: Simplifying Both Sides of an Equation	Module: The Language of Algebra Unit: Linear Equations in One Variable Session: Transforming Equations using Multiple Operations	
					Module: Essentials of Algebra Unit: Variable on Both Sides of the Equation Session: Checking the Solution to an Equation	Module: The Language of Algebra Unit: Linear Equations in One Variable Session: Solving Absolute Value Equations	

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
solve problems involving one-step, first-degree equations					Module: Essentials of Algebra Unit: Simple Equations Session: Solving Simple Equations	Module: The Language of Algebra Unit: Linear Equations in One Variable Session: Applying Inverse Operations	
					Module: Essentials of Algebra Unit: Variable on Both Sides of the Equation Session: Simplifying Both Sides of an Equation	Module: The Language of Algebra Unit: Linear Equations in One Variable Session: Transforming Equations using Multiple Operations	
					Module: Essentials of Algebra Unit: Variable on Both Sides of the Equation Session: Checking the Solution to an Equation	Module: The Language of Algebra Unit: Linear Equations in One Variable Session: Solving Absolute Value Equations	
Shape and Space (Measurement)							
use the Pythagorean relationship to calculate the measure of the third side of a right triangle, given the other two sides in 2-D applications hands-on activities					Module: Radicals & Exponents Unit: Introduction to Radicals & Pythagorean Theorem Session: Exploring the Pythagorean Theorem		
describe patterns and generalize the relationships by determining the areas and perimeters of quadrilaterals and the areas and circumferences of circles							
estimate and calculate the area of composite figures							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
Shape and Space (3-D Objects and 2-D Shapes)							
identify, investigate, and classify quadrilaterals, regular polygons, and circles according to their properties					Module: Fundamentals of Geometry Unit: Triangles Session: Classifying Triangles by Sides		
					Module: Fundamentals of Geometry Unit: Triangles Session: Classifying Triangles by Angles		
Shape and Space (Transformations)							
represent, analyse, and describe enlargements and reductions					Module: Ratio & Proportion Unit: Similar Polygons Session: Setting up & Solving Proportions in Similar Polygons		
draw and interpret scale diagrams					Module: Ratio & Proportion Unit: Similar Polygons Session: Defining Similarity		
					Module: Ratio & Proportion Unit: Similar Polygons Session: Identifying Equivalent Ratios		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Ratio & Proportion Unit: Similar Polygons Session: Setting up & Solving Proportions in Similar Polygons		
Statistics and Probability (Data Analysis)							
formulate questions for investigation, using existing data							
select, defend, and use appropriate methods of collecting data:							
designing and using surveys							
research, using electronic media							
display data by hand or by computer in a variety of ways					Module: Fundamentals of Statistics Unit: Interpreting and Constructing Graphs Session: Exploring Line Graphs		Module: Describing Data Unit: Graphical Displays Session: Stem- &-Leaf Plots & Box Plots

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Fundamentals of Statistics Unit: Interpreting and Constructing Graphs Session: Exploring Bar Graphs		Module: Describing Data Unit: Graphical Displays Session: Scatter Plots & Linear Best-Fit Graphs
					Module: Fundamentals of Statistics Unit: Interpreting and Constructing Graphs Session: Interpreting Pie Charts		
					Module: Fundamentals of Statistics Unit: Frequency Distribution and Histograms Session: Creating & Interpreting a Frequency Table		
					Module: Fundamentals of Statistics Unit: Frequency Distribution and Histograms Session: Defining a Histogram		
					Module: Fundamentals of Statistics Unit: Frequency Distribution and Histograms Session: Exploring Cumulative Frequency Graphs		
determine and use the most appropriate measure of central tendency in a given context					Module: Fundamentals of Statistics Unit: The Mean, Median, & Mode Session: Defining the Mean & Median		
					Module: Fundamentals of Statistics Unit: The Mean, Median, & Mode Session: Defining the Mode		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Fundamentals of Statistics Unit: The Mean, Median, & Mode Session: Calculating the Mean, Median, & Mode		
Statistics and Probability (Chance and Uncertainty)							
use various data-collection techniques (including computers) to simulate and solve probability problems							
recognize that if $n$ events are equally likely, the probability of any one of them occurring is $1/n$							
determine the probability of two independent events where the combined sample space has 52 or fewer elements					Module: Fundamentals of Probability Unit: Probability of Combined Events Session: Calculating the Probability of Independent Events		
predict population characteristics from sample data							
Grade 9							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
Number (Number Concepts)							
give examples of situations where answers would involve the positive (principal) square root or both positive and negative square roots of a number							
illustrate power, base, coefficient, and exponent using rational numbers or variables as bases or coefficients							Module: Powers & Polynomials Unit: Polynomial Arithmetic Session: Working with Powers
Number (Number Operations)							
document and explain the calculator keying sequences used to perform calculations involving rational numbers							
solve problems, using rational numbers in meaningful contexts						Module: The Language of Algebra Unit: Variables, Expressions, and Equations Session: Applying Properties of Real Numbers	
						Module: The Language of Algebra Unit: Linear Equations in One Variable Session: Applying Inverse Operations	

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
						Module: The Language of Algebra Unit: Linear Equations in One Variable Session: Transforming Equations using Multiple Operations	
						Module: The Language of Algebra Unit: Linear Equations in One Variable Session: Solving Absolute Value Equations	
						Module: Systems of Linear Equations Unit: Algebraic Solutions of Linear Systems Session: Using Substitution to Eliminate a Variable	
						Module: Systems of Linear Equations Unit: Algebraic Solutions of Linear Systems Session: Using Addition or Subtraction to Eliminate a Variable	
						Module: Linear Inequalities Unit: Inequalities in One Variable Session: Applying Inverse Operations	
						Module: Linear Inequalities Unit: Inequalities in One Variable Session: Solving Absolute Value Inequalities	
evaluate exponential expressions with numerical bases							Module: Powers & Polynomials Unit: Polynomial Arithmetic Session: Working with Powers

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
Patterns and Relations (Patterns)							
model situations that can be represented by first-degree expressions					Module: Essentials of Algebra Unit: Evaluating an Algebraic Expression Session: Representing the Dimensions & Area of a Rectangle	Module: The Language of Algebra Unit: Variables, Expressions, and Equations Session: Translating Words into Expressions	
					Module: Essentials of Algebra Unit: Simple Equations Session: Using Variables to Express Relationships	Module: The Language of Algebra Unit: Variables, Expressions, and Equations Session: Applying Properties of Real Numbers	
					Module: Essentials of Algebra Unit: Simple Equations Session: Solving Simple Equations	Module: The Language of Algebra Unit: Variables, Expressions, and Equations Session: Evaluating and Simplifying Expressions	
					Module: Essentials of Algebra Unit: Variable on Both Sides of the Equation Session: Writing Equations	Module: The Language of Algebra Unit: Linear Equations in One Variable Session: Applying Inverse Operations	
					Module: Essentials of Algebra Unit: Solving Literal Equations Session: Identifying the Variables in a Given Formula	Module: The Language of Algebra Unit: Linear Equations in One Variable Session: Transforming Equations using Multiple Operations	
					Module: Essentials of Algebra Unit: Solving Literal Equations Session: Rewriting a Formula in Terms of a Different Variable	Module: The Language of Algebra Unit: Linear Equations in One Variable Session: Solving Absolute Value Equations	

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Essentials of Algebra Unit: Solving Literal Equations Session: Substituting Values & Solving an Equation		
write equivalent forms of algebraic expressions, or equations, with integral coefficients					Module: Essentials of Algebra Unit: Simple Equations Session: Using Variables to Express Relationships	Module: The Language of Algebra Unit: Variables, Expressions, and Equations Session: Translating Words into Expressions	
					Module: Essentials of Algebra Unit: Simple Equations Session: Solving Simple Equations	Module: The Language of Algebra Unit: Variables, Expressions, and Equations Session: Applying Properties of Real Numbers	
					Module: Essentials of Algebra Unit: Variable on Both Sides of the Equation Session: Writing Equations	Module: The Language of Algebra Unit: Variables, Expressions, and Equations Session: Evaluating and Simplifying Expressions	
					Module: Essentials of Algebra Unit: Variable on Both Sides of the Equation Session: Simplifying Both Sides of an Equation	Module: The Language of Algebra Unit: Linear Equations in One Variable Session: Applying Inverse Operations	
					Module: Essentials of Algebra Unit: Variable on Both Sides of the Equation Session: Checking the Solution to an Equation	Module: The Language of Algebra Unit: Linear Equations in One Variable Session: Transforming Equations using Multiple Operations	
					Module: Essentials of Algebra Unit: Solving Literal Equations Session: Identifying the Variables in a Given Formula	Module: The Language of Algebra Unit: Linear Equations in One Variable Session: Solving Absolute Value Equations	

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Essentials of Algebra Unit: Solving Literal Equations Session: Rewriting a Formula in Terms of a Different Variable		
Patterns and Relations (Variables and Equations)							
illustrate the solutions process for a first-degree, single-variable equation, using concrete materials or diagrams					Module: Essentials of Algebra Unit: Simple Equations Session: Solving Simple Equations	Module: The Language of Algebra Unit: Variables, Expressions, and Equations Session: Applying Properties of Real Numbers	
					Module: Essentials of Algebra Unit: Variable on Both Sides of the Equation Session: Simplifying Both Sides of an Equation	Module: The Language of Algebra Unit: Variables, Expressions, and Equations Session: Evaluating and Simplifying Expressions	
					Module: Essentials of Algebra Unit: Variable on Both Sides of the Equation Session: Checking the Solution to an Equation	Module: The Language of Algebra Unit: Linear Equations in One Variable Session: Applying Inverse Operations	
					Module: Essentials of Algebra Unit: Solving Literal Equations Session: Substituting Values & Solving an Equation	Module: The Language of Algebra Unit: Linear Equations in One Variable Session: Transforming Equations using Multiple Operations	
						Module: The Language of Algebra Unit: Linear Equations in One Variable Session: Solving Absolute Value Equations	

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
solve and verify first-degree, single-variable equations of forms such as: $ax = b + cx$ ; $a(x+b)=c$ ; $ax + b = cx + d$ where a, b, c, and d are integers, and use equations of this type to model and solve problems						Module: The Language of Algebra Unit: Linear Equations in One Variable Session: Applying Inverse Operations	
identify constant terms, coefficients, and variables in polynomial expressions					Module: Essentials of Algebra Unit: Algebra Fundamentals Session: Identifying Components of Algebraic Expressions		Module: Powers & Polynomials Unit: Polynomial Arithmetic Session: Adding & Subtracting Polynomial Expressions
evaluate polynomial expressions, given the value(s) of the variable(s)							Module: Powers & Polynomials Unit: Polynomial Arithmetic Session: Working with Powers
							Module: Powers & Polynomials Unit: Polynomial Arithmetic Session: Adding & Subtracting Polynomial Expressions
Shape and Space (Measurement)							
explain the meaning of sine, cosine, and tangent ratios in right triangles							
demonstrate the use of trigonometric ratios (sine, cosine, and tangent) in solving right triangles							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
calculate an unknown side or an unknown angle in a right triangle, using appropriate technology					Module: Radicals & Exponents Unit: Introduction to Radicals & Pythagorean Theorem Session: Exploring the Pythagorean Theorem		
model and then solve given problem situations involving only one right triangle					Module: Radicals & Exponents Unit: Introduction to Radicals & Pythagorean Theorem Session: Exploring the Pythagorean Theorem		
Shape and Space (3-D Objects and 2-D Shapes)							
draw the plan and elevation of a 3-D object from sketches and models							
sketch or build a 3-D object, given its plan and elevation views							
recognize when, and explain why, two triangles are similar, and use the properties of similar triangles to solve problems and rafter designs					Module: Ratio & Proportion Unit: Similar Polygons Session: Defining Similarity		
					Module: Ratio & Proportion Unit: Similar Polygons Session: Setting up & Solving Proportions in Similar Polygons		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
recognize when, and explain why, two triangles are congruent, and use the properties of congruent triangles to solve problems							
Statistics and Probability (Data Analysis)							
design, conduct, and report on an experiment to investigate a relationship between two variables							
create scatter plots							Module: Describing Data Unit: Graphical Displays Session: Scatter Plots & Linear Best-Fit Graphs
interpret a scatter plot to determine if there is an apparent linear relationship							Module: Describing Data Unit: Graphical Displays Session: Scatter Plots & Linear Best-Fit Graphs
determine the lines of best fit from a scatter plot for an apparent linear relationship by:							
inspection							Module: Describing Data Unit: Graphical Displays Session: Scatter Plots & Linear Best-Fit Graphs

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
using technology (equations are not expected)							Module: Describing Data Unit: Graphical Displays Session: Scatter Plots & Linear Best-Fit Graphs
draw and justify conclusions from the line of best fit							Module: Describing Data Unit: Graphical Displays Session: Scatter Plots & Linear Best-Fit Graphs
Statistics and Probability (Chance and Uncertainty)							
recognize that decisions based on probability may be a combination of theoretical calculations, experimental results, and subjective judgments							
demonstrate an understanding of the role of probability and statistics in society							
solve problems involving the probability of independent events					Module: Fundamentals of Probability Unit: Probability of Combined Events Session: Calculating the Probability of Independent Events		
Grade 10							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
Number (Number Concepts)							
use words and algebraic expressions to describe the data and the interrelationships in a table with rows that are not related recursively (not calculated from previous data)					Module: Fundamentals of Statistics Unit: The Mean, Median, & Mode Session: Defining the Mean & Median		
					Module: Fundamentals of Statistics Unit: Frequency Distribution and Histograms Session: Creating & Interpreting a Frequency Table		
use words and algebraic expressions to describe the data and the interrelationships in a table with rows that are related recursively (calculated from previous data)					Module: Fundamentals of Statistics Unit: Frequency Distribution and Histograms Session: Exploring Cumulative Frequency Graphs		
Number (Number Operations)							
communicate a set of instructions used to solve an arithmetic problem							
perform arithmetic operations on irrational numbers, using appropriate decimal approximations							Module: The Real Number System Unit: Rational & Irrational Numbers Session: Defining the Real Numbers

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
							Module: The Real Number System Unit: Rational & Irrational Numbers Session: Working with Radicals
create and modify tables from both recursive and nonrecursive situations					Module: Fundamentals of Statistics Unit: The Mean, Median, & Mode Session: Defining the Mean & Median		Module: Describing Data Unit: Graphical Displays Session: Stem- &-Leaf Plots & Box Plots
					Module: Fundamentals of Statistics Unit: Frequency Distribution and Histograms Session: Creating & Interpreting a Frequency Table		
use and modify a spreadsheet template to model recursive situations							
solve problems involving combinations of tables, using:							
addition or subtraction of two tables							
multiplication of a table by a real number							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
spreadsheet functions and templates							
Patterns and Relations (Relations and Functions)							
plot linear and nonlinear data, using appropriate scales					Module: Fundamentals of Statistics Unit: Interpreting and Constructing Graphs Session: Exploring Line Graphs	Module: Linear Functions and Equations Unit: The Rectangular Coordinate Plane Session: Graphing Ordered Pairs	Module: Describing Data Unit: Graphical Displays Session: Scatter Plots & Linear Best-Fit Graphs
represent data, using function models						Module: Linear Functions and Equations Unit: Introduction to Functions Session: Relations and Functions	
use a graphing tool to draw the graph of a function from its equation							
describe a function in terms of:							
ordered pairs						Module: Linear Functions and Equations Unit: Introduction to Functions Session: Exploring the Slope-Intercept Equation of a Line	

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
						Module: Linear Functions and Equations Unit: Introduction to Functions Session: Exploring the Point-Slope Equation of a Line	
						Module: Linear Functions and Equations Unit: Introduction to Functions Session: Relations and Functions	
a rule, in word or equation form						Module: Linear Functions and Equations Unit: Introduction to Functions Session: Exploring the Slope-Intercept Equation of a Line	
						Module: Linear Functions and Equations Unit: Introduction to Functions Session: Exploring the Point-Slope Equation of a Line	
a graph						Module: Linear Functions and Equations Unit: Introduction to Functions Session: Exploring the Slope-Intercept Equation of a Line	
						Module: Linear Functions and Equations Unit: Introduction to Functions Session: Exploring the Point-Slope Equation of a Line	
						Module: Linear Functions and Equations Unit: Introduction to Functions Session: Relations and Functions	

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
use function notation to evaluate and represent functions						Module: Linear Functions and Equations Unit: Introduction to Functions Session: Relations and Functions	
determine the domain and range of a relation from its graph						Module: Linear Functions and Equations Unit: Introduction to Functions Session: Relations and Functions	Module: The Real Number System Unit: Rational & Irrational Numbers Session: The Square Root Function
determine the following characteristics of the graph of a linear function, given its equation:							
intercepts						Module: Linear Functions and Equations Unit: The Rectangular Coordinate Plane Session: Finding x- and y- Intercepts	
slope						Module: Linear Functions and Equations Unit: The Rectangular Coordinate Plane Session: Defining Slope	
						Module: Linear Functions and Equations Unit: Introduction to Functions Session: Exploring the Slope-Intercept Equation of a Line	
						Module: Linear Functions and Equations Unit: Introduction to Functions Session: Exploring the Point-Slope Equation of a Line	

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
domain						Module: Linear Functions and Equations Unit: Introduction to Functions Session: Relations and Functions	
range						Module: Linear Functions and Equations Unit: Introduction to Functions Session: Relations and Functions	
use partial variation and arithmetic sequences as applications of linear functions							
Shape and Space (Measurement)							
calculate the volume and surface area of a sphere, using formulas that are provided							
determine the relationships among linear scale factors, areas, the surface areas and the volumes of similar figures and objects					Module: Fundamentals of Geometry Unit: Volume and Surface Area Session: Calculating the Volume of a Right Triangular Prism		
					Module: Fundamentals of Geometry Unit: Volume and Surface Area Session: Calculating the Surface Area of a Right Triangular Prism		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Fundamentals of Geometry Unit: Volume and Surface Area Session: Calculating the Volume & Surface Area of a Right Cylinder		
					Module: Ratio & Proportion Unit: Proportion Session: Solving for a Variable in a Proportion		
					Module: Ratio & Proportion Unit: Proportion Session: Applying the Means/Extremes Property		
					Module: Ratio & Proportion Unit: Similar Polygons Session: Setting up & Solving Proportions in Similar Polygons		
solve problems involving two right triangles					Module: Ratio & Proportion Unit: Similar Polygons Session: Defining Similarity		
					Module: Ratio & Proportion Unit: Similar Polygons Session: Identifying Equivalent Ratios		
					Module: Ratio & Proportion Unit: Similar Polygons Session: Setting up & Solving Proportions in Similar Polygons		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
extend the concepts of sine and cosine for angles through to 180 degrees							
apply the sine and cosine laws, excluding the ambiguous case, to solve problems							
select and apply appropriate instruments, units of measure (in SI and Imperial systems) and measurement strategies to find lengths, areas and volumes					Module: Fundamentals of Geometry Unit: Triangles Session: Exploring the Area of a Triangle		
					Module: Fundamentals of Geometry Unit: Volume and Surface Area Session: Calculating the Volume of a Right Triangular Prism		
					Module: Fundamentals of Geometry Unit: Volume and Surface Area Session: Calculating the Surface Area of a Right Triangular Prism		
					Module: Fundamentals of Geometry Unit: Volume and Surface Area Session: Calculating the Volume & Surface Area of a Right Cylinder		
					Module: Radicals & Exponents Unit: Introduction to Radicals & Pythagorean Theorem Session: Exploring the Pythagorean Theorem		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
analyse the limitations of measuring instruments and measurement strategies, using the concepts of precision and accuracy							
solve problems involving length, area, volume, time, mass and rates derived from these					Module: Fundamentals of Geometry Unit: Triangles Session: Exploring the Area of a Triangle		
					Module: Fundamentals of Geometry Unit: Volume and Surface Area Session: Calculating the Volume of a Right Triangular Prism		
					Module: Fundamentals of Geometry Unit: Volume and Surface Area Session: Calculating the Surface Area of a Right Triangular Prism		
					Module: Fundamentals of Geometry Unit: Volume and Surface Area Session: Calculating the Volume & Surface Area of a Right Cylinder		
					Module: Radicals & Exponents Unit: Introduction to Radicals & Pythagorean Theorem Session: Exploring the Pythagorean Theorem		
interpret drawings, and use the information to solve problems							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
Shape and Space (3-D Objects and 2-D Shapes)							
solve problems involving distances between points in the coordinate plane							
solve problems involving midpoints of line segments							
solve problems involving rise, run and slope of line segments						Module: Linear Functions and Equations Unit: The Rectangular Coordinate Plane Session: Defining Slope	
determine the equation of a line, given information that uniquely determines the line						Module: Linear Functions and Equations Unit: The Rectangular Coordinate Plane Session: Defining Slope	
						Module: Linear Functions and Equations Unit: Introduction to Functions Session: Exploring the Slope-Intercept Equation of a Line	
						Module: Linear Functions and Equations Unit: Introduction to Functions Session: Exploring the Point-Slope Equation of a Line	

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
solve problems using slopes of:							
parallel lines						Module: Systems of Linear Equations Unit: Graphic Solutions of Linear Systems Session: Graphing Parallel & Perpendicular Lines	
perpendicular lines						Module: Systems of Linear Equations Unit: Graphic Solutions of Linear Systems Session: Graphing Parallel & Perpendicular Lines	
Statistics and Probability (Data Analysis)							
choose, justify and apply sampling techniques that will result in an appropriate, unbiased sample from a given population							
defend or oppose inferences and generalizations about populations, based on data from samples							
determine the equation of a line of best fit, using:							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
estimate of slope and one point							Module: Describing Data Unit: Graphical Displays Session: Scatter Plots & Linear Best-Fit Graphs
least squares method with technology							
use technological devices to determine the correlation coefficient $r$							
interpret the correlation coefficient $r$ and its limitations for varying problem situations, using relevant scatterplots							