



Mathematics

Applications and Concepts

Course 1

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B. Number Operations and Relationships

Grade 6

MPS Learning Target #1 (Grade 6)	MPS Learning Target #2 (Grade 6)
Represent and rename numbers, identify prime and composite numbers, and use factors, multiples, and prime factorization to solve and explain problems.	Apply, explain, and evaluate strategies to estimate, compare, and compute fractions, decimals, and percents using a variety of methods (e.g., mental computation, technology, manipulatives) with and without context.
Descriptors Concepts: 2, 4, 7 Computation: 12	Descriptors Concepts: 1, 3, 5, 6, 7 Computation: 8, 9, 10, 11, 12

Wisconsin Sub-skill Descriptors (Beginning of Grade 7)

Sub-skill B.a: Concepts

<p>Student Edition: <i>Lesson 3-1 Representing Decimals</i> <i>*Prerequisite Skills 1 Place Value and Whole Numbers</i></p> <p>Teacher Wraparound Edition: <i>Lesson 3-1 Representing Decimals</i> <i>*Prerequisite Skills 1 Place Value and Whole Numbers</i></p> <p>Quick Review Math Handbook Book 1 70-73, 126-128, 131</p>	<p>1) Recognize and apply place-value concepts to numbers less than 10,000,000 with decimals to the thousandths place.</p>
<p>Student Edition: <i>Lesson 3-1 Representing Decimals</i> <i>*Prerequisite Skills 1 Place Value and Whole Numbers</i></p> <p>Teacher Wraparound Edition: <i>Lesson 3-1 Representing Decimals</i> <i>*Prerequisite Skills 1 Place Value and Whole Numbers</i></p> <p>Quick Review Math Handbook Book 1 70-73, 126-128, 131</p>	<p>2) Read, write, and represent numbers using words, numerals, number lines, arrays, and expanded form ($12.09=10+2+0.09$) and symbolic renaming ($12.09=13-0.91$).</p>
<p>Student Edition: <i>Lesson 3-2 Comparing and Ordering Decimals</i> <i>The Game Zone: Comparing Decimals</i> <i>Lesson 5-5 Comparing and Ordering Fractions</i></p> <p>Teacher Wraparound Edition: <i>Lesson 3-2 Comparing and Ordering Decimals</i> <i>The Game Zone: Comparing Decimals</i> <i>Lesson 5-5 Comparing and Ordering Fractions</i></p> <p>Quick Review Math Handbook Book 1 108-111, 129-130, 131</p>	<p>3) Compare and order a set of fractions or decimals (to the hundredths place) and use symbols ($<$, $>$, $=$, \neq, \leq, \geq).</p>

* Prerequisite Skills pages begin on page 586.

<p>Student Edition: <i>Lesson 1-2 Divisibility Patterns</i> <i>Lesson 1-3 Prime Factors</i> <i>Lesson 1-4 Powers and Exponents</i> <i>The Game Zone: Finding Prime Factorizations</i> <i>Lesson 5-1 Greatest Common Factor</i> <i>Lesson 5-4 Least Common Multiple</i></p> <p>Teacher Wraparound Edition: <i>Lesson 1-2 Divisibility Patterns</i> <i>Lesson 1-3 Prime Factors</i> <i>Lesson 1-4 Powers and Exponents</i> <i>The Game Zone: Finding Prime Factorizations</i> <i>Lesson 5-1 Greatest Common Factor</i> <i>Lesson 5-4 Least Common Multiple</i></p> <p>Quick Review Math Handbook Book 1 80-87</p>	<p>4) Identify and use number theory concepts:</p> <ul style="list-style-type: none"> • Prime and composite numbers • Divisibility potential of numbers (divisors of 1-10, 25, and multiples of 10). • Least common multiples • Greatest common factor of two numbers
<p>Student Edition: <i>Lesson 10-5 Percent and Fractions</i></p> <p>Teacher Wraparound Edition: <i>Lesson 10-5 Percent and Fractions</i></p> <p>Quick Review Math Handbook Book 1 154-156, 161</p>	<p>5) Demonstrate understanding of fractions and benchmark percents in problems and context. (E.g., Joe got six questions correct and two were wrong, what percent did he get correct?)</p>
<p>Student Edition: <i>Lesson 10-1 Ratios</i> <i>Lesson 10-2 Algebra: Solving Proportions</i> <i>Lesson 10-2b Spreadsheet Investigation</i> <i>Lesson 10-3 Geometry: Scale Drawings and Models</i></p> <p>Teacher Wraparound Edition: 274-277</p>	<p>6) Apply proportional reasoning to a variety of problem situations (e.g., comparisons and/or rates).</p>

Student Edition:

Lesson 5-6 Writing Decimals as Fractions

Lesson 5-7 Writing Fractions as Decimals

Lesson 10-5 Percents and Fractions

Lesson 10-6 Percents and Decimals

Teacher Wraparound Edition:

Lesson 5-6 Writing Decimals as Fractions

Lesson 5-7 Writing Fractions as Decimals

Lesson 10-5 Percents and Fractions

Lesson 10-6 Percents and Decimals

Quick Review Math Handbook Book 1

154-156, 157-158, 159-161, 162-163

7) Identify equivalent forms of fractions, decimals, and percents.

Sub-skill B.b: Computation

Student Edition:

Lesson 3-5 Adding and Subtracting Decimals

Lesson 3-5b Problem-Solving Strategy

Lesson 4-1a Hands-On Lab

Lesson 4-1 Multiplying Decimals by Whole Numbers

Lesson 4-2a Hands-On Lab

Lesson 4-2 Multiplying Decimals

Lesson 4-3 Dividing Decimals by Whole Numbers

The Game Zone: Dividing Decimals by Whole Numbers

Lesson 4-4a Hands-On Lab

Lesson 4-4 Dividing by Decimals

Lesson 10-4 Modeling Percents

Lesson 10-7a Hands-On Lab

Lesson 10-7 Percent of a Number

Teacher Wraparound Edition:

Lesson 3-5 Adding and Subtracting Decimals

Lesson 3-5b Problem-Solving Strategy

Lesson 4-1 Multiplying Decimals by Whole Numbers

Lesson 4-2 Multiplying Decimals

Lesson 4-3 Dividing Decimals by Whole Numbers

The Game Zone: Dividing Decimals by Whole Numbers

Lesson 4-4 Dividing by Decimals

Lesson 10-4 Modeling Percents

Lesson 10-7 Percent of a Number

Quick Review Math Handbook Book 1

132, 134-135, 137-138, 139, 144-145, 146-147

8) Use all operations in everyday situations (including monetary contexts) to solve single or multi-step word problems.

- Solve problems involving percents with and without context.
- Add and subtract decimals including thousandths with and without context.
- Multiply decimals including hundredths with and without context.
- Divide decimals including hundredths by single-digit divisors in problems with and without context.

<p>Student Edition: <i>Lesson 7-4a Hands-On Lab</i> <i>Lesson 7-4 Dividing Fractions</i> <i>Lesson 7-5 Dividing Mixed Numbers</i></p> <p>Teacher Wraparound Edition: <i>Lesson 7-4 Dividing Fractions</i> <i>Lesson 7-5 Dividing Mixed Numbers</i></p> <p>Quick Review Math Handbook Book 1 123-125</p>	<p>9) Demonstrate understanding of the concept of division of fractions in a contextual setting.</p>
<p>Student Edition: <i>Lesson 6-3 Adding and Subtracting Fractions with Like Denominators</i> <i>The Game Zone: Adding Fractions</i> <i>Lesson 6-4a Hands-On Lab</i> <i>Lesson 6-4 Adding and Subtracting Fractions with Unlike Denominators</i> <i>Lesson 6-5 Adding and Subtracting Mixed Numbers</i> <i>Lesson 6-6 Subtracting Mixed Numbers with Renaming</i> <i>Lesson 7-2a Hands-On Lab</i> <i>Lesson 7-2 Multiplying Fractions</i> <i>Lesson 7-3 Multiplying Mixed Numbers</i> <i>The Game Zone: Multiplying Fractions</i></p> <p>Teacher Wraparound Edition: <i>Lesson 6-3 Adding and Subtracting Fractions with Like Denominators</i> <i>Lesson 6-4 Adding and Subtracting Fractions with Unlike Denominators</i> <i>Lesson 6-5 Adding and Subtracting Mixed Numbers</i> <i>Lesson 6-6 Subtracting Mixed Numbers with Renaming</i> <i>Lesson 7-2 Multiplying Fractions</i> <i>Lesson 7-3 Multiplying Mixed Numbers</i></p> <p>Quick Review Math Handbook Book 1 112-116, 119, 120-123, 125</p>	<p>10) Add, subtract, and multiply mixed numbers and fractions with like and unlike denominators.</p>

<p>Student Edition: <i>Lesson 3-4 Estimating Sums and Differences</i> <i>Lesson 3-5b Problem-Solving Strategy</i> <i>Lesson 6-2 Estimating Sums and Differences</i> <i>Lesson 10-8 Estimating with Percents</i></p> <p>Teacher Wraparound Edition: <i>Lesson 3-4 Estimating Sums and Differences</i> <i>Lesson 3-5b Problem-Solving Strategy</i> <i>Lesson 6-2 Estimating Sums and Differences</i> <i>Lesson 10-8 Estimating with Percents</i></p> <p>Quick Review Math Handbook Book 1 117-119</p>	11) Estimate the sum, difference, and product of whole numbers, common fractions, mixed numbers, and decimals to thousandths and estimate benchmark fractions.
<p>Student Edition: <i>Lesson 3-4 Estimating Sums and Differences</i> <i>Lesson 4-4b Problem-Solving Strategy</i> <i>Lesson 6-2 Estimating Sums and Differences</i></p> <p>Teacher Wraparound Edition: <i>Lesson 3-4 Estimating Sums and Differences</i> <i>Lesson 4-4b Problem-Solving Strategy</i> <i>Lesson 6-2 Estimating Sums and Differences</i></p> <p>Quick Review Math Handbook Book 1 117-119</p>	12) Determine reasonableness of answers.

C. Geometry
Grade 6

MPS Learning Target #3 (Grade 6)	MPS Learning Target #4 (Grade 6)
Identify and contrast properties of polygons and polyhedra (e.g., sides, angles, symmetry, faces) and draw or describe relationships (e.g., congruency, regularity, similarity, decomposition, transformations) of figures from multiple perspectives.	Use specifications to plot, construct, and transform points and shapes using the coordinate plane.

Descriptors Describing figures: 1, 2, 3, 4, 5 Spatial relationships and transformations: 6, 7, 8, 9, 10, 11, 12	Descriptors Spatial relationships and transformations: 6, 9, 10, 11 Coordinate systems: 13, 14,
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Wisconsin Sub-skill Descriptors (Beginning of Grade 7)	
<i>Sub-skill C.a: Describing figures</i>	
Student Edition: <i>Lesson 13-4 Two-Dimensional Figures</i> <i>Lesson 13-4b Hands-On Lab</i> Teacher Wraparound Edition: <i>Lesson 13-4 Two-Dimensional Figures</i> <i>Lesson 13-4b Hands-On Lab</i> Quick Review Math Handbook Book 1 300-302, 304-308, 309-310	1) Name regular and irregular polygons up to eight sides and identify and justify by characteristics whether a shape is a polygon.
Student Edition: <i>Lesson 14-4 Three-Dimensional Figures</i> Teacher Wraparound Edition: <i>Lesson 14-4 Three-Dimensional Figures</i> Quick Review Math Handbook Book 1 310-311, 313	2) Determine the number of faces, edges and vertices given an illustration of a 3-dimensional figure.
Student Edition: <i>Lesson 13-1 Angles</i> <i>Lesson 13-2 Using Angle Measures</i> <i>Lesson 13-3 Bisectors</i> <i>The Game Zone: Classifying Angles</i> Teacher Wraparound Edition: <i>Lesson 13-1 Angles</i> <i>Lesson 13-2 Using Angle Measures</i> <i>Lesson 13-3 Bisectors</i> <i>The Game Zone: Classifying Angles</i> Quick Review Math Handbook Book 1 296-300	3) Classify shapes according to characteristics such as parallel and perpendicular lines; identify right, acute and obtuse angles with varied orientations.
Student Edition: <i>Lesson 13-4b Hands-On Lab</i> Quick Review Math Handbook Book 1 301-302	4) Find the measure of the third angle of a triangle when given the measures of two interior angles.

<p>Quick Review Math Handbook Book 1 309-310, 312</p>	<p>5) Decompose convex polygons into triangles using diagonals from a single vertex.</p>
<p>Sub-skill C.b: Spatial relationships and transformations</p>	
<p>Student Edition: <i>Lesson 13-6 Similar and Congruent Figures</i> <i>Lesson 13-6b Hands-On Lab</i></p> <p>Teacher Wraparound Edition: <i>Lesson 13-6 Similar and Congruent Figures</i> <i>Lesson 13-6b Hands-On Lab</i></p> <p>Quick Review Math Handbook Book 1 368</p>	<p>6) Draw and/or describe a similar figure when given a polygon drawn on graph paper with vertices at lattice points.</p>
<p>Student Edition: <i>Lesson 13-6 Similar and Congruent Figures</i> <i>Lesson 13-6b Hands-On Lab</i></p> <p>Teacher Wraparound Edition: <i>Lesson 13-6 Similar and Congruent Figures</i> <i>Lesson 13-6b Hands-On Lab</i></p> <p>Quick Review Math Handbook Book 1 305, 368</p>	<p>7) Identify figures that are congruent and/or similar.</p>
<p>Student Edition: <i>Lesson 13-6 Similar and Congruent Figures</i> <i>Lesson 13-6b Hands-On Lab</i></p> <p>Teacher Wraparound Edition: <i>Lesson 13-6 Similar and Congruent Figures</i></p> <p>Quick Review Math Handbook Book 1 368</p>	<p>8) Demonstrate understanding of similarity by finding the relationship between the sides of two figures.</p>
<p>Student Edition: <i>Lesson 13-5 Lines of Symmetry</i> <i>Lesson 13-5b Hands-On Lab</i></p> <p>Teacher Wraparound Edition: <i>Lesson 13-5 Lines of Symmetry</i> <i>Lesson 13-5b Hands-On Lab</i></p> <p>Quick Review Math Handbook Book 1 314-316, 317, 318, 319</p>	<p>9) Draw or identify the image of a figure based on one or more transformations (reflection, rotations, and/or translation).</p>

<p>Student Edition: <i>Lesson 13-5 Lines of Symmetry</i></p> <p>Teacher Wraparound Edition: <i>Lesson 13-5 Lines of Symmetry</i></p> <p>Quick Review Math Handbook Book 1 314-316, 316, 317, 318, 319</p>	<p>10) Design symmetrical shapes.</p>
<p>Student Edition: <i>Lesson 13-5 Lines of Symmetry</i></p> <p>Teacher Wraparound Edition: <i>Lesson 13-5 Lines of Symmetry</i></p> <p>Quick Review Math Handbook Book 1 314-316, 317, 318, 319</p>	<p>11) Draw or identify lines of symmetry.</p>
<p>Student Edition: <i>Lesson 14-4 Three Dimensional Figures</i> <i>Lesson 14-4b Hands-On Lab</i></p> <p>Teacher Wraparound Edition: <i>Lesson 14-4 Three Dimensional Figures</i> <i>Lesson 14-4b Hands-On Lab</i></p> <p>Quick Review Math Handbook Book 1 310-311</p>	<p>12) Identify and describe 3-dimensional figures from multiple perspectives.</p>
<p>Sub-skill C.c: Coordinate systems</p>	
<p>Student Edition: <i>Lesson 8-6 Geometry: The Coordinate Plane</i> <i>Lesson 13-5b Hands-On Lab</i></p> <p>Teacher Wraparound Edition: <i>Lesson 8-6 Geometry: The Coordinate Plane</i> <i>Lesson 13-5b Hands-On Lab</i></p> <p>Quick Review Math Handbook Book 1 314-315, 318-319</p>	<p>13) Identify, locate, plot coordinates in the four quadrants and transformations of points across the x- or y-axis.</p>
<p>Student Edition: <i>Lesson 8-6 Geometry: The Coordinate Plane</i></p> <p>Teacher Wraparound Edition: <i>Lesson 8-6 Geometry: The Coordinate Plane</i></p> <p>Quick Review Math Handbook Book 1 282-289</p>	<p>14) Locate or plot coordinates in the four quadrants using a geometric figure (e.g. transformations).</p>

D. Measurement
Grade 6

MPS Learning Target #5 (Grade 6)	MPS Learning Target #6 (Grade 6)
Estimate and measure attributes of objects (including angles) and make unit conversions within and between customary and metric systems.	Estimate and determine perimeter/circumference, area, distance, and elapsed time in real-world contexts and explain strategies.
Descriptors Measurable attributes: 1, 2 Direct measurement: 3, 5	Descriptors Direct measurement: 3, 4 Indirect measurement: 6, 7, 8

Wisconsin Sub-skill Descriptors (Beginning of Grade 7)	
<i>Sub-skill D.a: Measurable attributes</i>	
Student Edition: <i>Lesson 12-1 Length in the Customary System</i> <i>Lesson 12-2 Capacity and Weight in the Customary System</i> <i>Lesson 12-3 Length in the Metric System</i> <i>Lesson 12-4 Mass and Capacity in the Metric System</i> <i>Lesson 12-5 Changing Metric Units</i> Teacher Wraparound Edition: <i>Lesson 12-1 Length in the Customary System</i> <i>Lesson 12-2 Capacity and Weight in the Customary System</i> <i>Lesson 12-3 Length in the Metric System</i> <i>Lesson 12-4 Mass and Capacity in the Metric System</i> <i>Lesson 12-5 Changing Metric Units</i> Quick Review Math Handbook Book 1 352-354, 356, 357, 358-359, 360-363, 364-365	1) Select the appropriate unit of measure to estimate the length, liquid capacity, volume, weight/mass of everyday objects using U.S. customary and metric.

<p>Student Edition: <i>Lesson 12-1 Length in the Customary System</i> <i>Lesson 12-2 Capacity and Weight in the Customary System</i> <i>Lesson 12-3 Length in the Metric System</i> <i>Lesson 12-4 Mass and Capacity in the Metric System</i> <i>Lesson 12-5 Changing Metric Units</i></p> <p>Teacher Wraparound Edition: <i>Lesson 12-1 Length in the Customary System</i> <i>Lesson 12-2 Capacity and Weight in the Customary System</i> <i>Lesson 12-3 Length in the Metric System</i> <i>Lesson 12-4 Mass and Capacity in the Metric System</i> <i>Lesson 12-5 Changing Metric Units</i></p> <p>Quick Review Math Handbook Book 1 352-354, 356, 357, 358-359, 360-363, 364-365</p>	<p>2) Convert units within a system e.g., feet to yards; ounces to pounds; inches to feet; pints to quarts. Approximate conversions of units between metric and U.S. customary systems using a model or in context (quart/liter; yard/meter).</p>
Sub-skill D.b: Direct measurement	
<p>Student Edition: <i>Lesson 12-1 Length in the Customary System</i> <i>Lesson 12-3 Length in the Metric System</i></p> <p>Teacher Wraparound Edition: <i>Lesson 12-1 Length in the Customary System</i> <i>Lesson 12-3 Length in the Metric System</i></p> <p>Quick Review Math Handbook Book 1 354-355</p>	<p>3) Apply appropriate tools and techniques to measure down to the nearest 1/4-, 1/8-, or 1/16-inch or nearest centimeter or millimeter.</p>
<p>Student Edition: <i>Lesson 12-6 Measures of Time</i></p> <p>Teacher Wraparound Edition: <i>Lesson 12-6 Measures of Time</i></p> <p>Quick Review Math Handbook Book 1 366-367</p>	<p>4) Determine and compare elapsed time in problem-solving situations.</p>

<p>Student Edition: <i>Lesson 13-1 Angles</i> <i>Lesson 13-2 Using Angle Measures</i></p> <p>Teacher Wraparound Edition: <i>Lesson 13-1 Angles</i> <i>Lesson 13-2 Using Angle Measures</i></p> <p>Quick Review Math Handbook Book 1 297-299</p>	<p>5) Measure and/or draw angles up to 180 degrees.</p>
<p>Sub-skill D.c: Indirect measurement</p>	
<p>Quick Review Math Handbook Book 1 324</p>	<p>6) Estimate area given a reference.</p>
<p>Student Edition: <i>Lesson 1-8 Geometry: Area of Rectangles</i> <i>Lesson 4-5 Geometry: Perimeter</i> <i>Lesson 4-6 Geometry: Circumference</i> <i>Lesson 14-1 Area of Parallelograms</i> <i>Lesson 14-2a Hands-On Lab</i> <i>Lesson 14-2 Area of Triangles</i> <i>Lesson 14-3 Area of Circles</i> <i>The Game Zone: Area of Circles</i></p> <p>Teacher Wraparound Edition: <i>Lesson 1-8 Geometry: Area of Rectangles</i> <i>Lesson 4-5 Geometry: Perimeter</i> <i>Lesson 4-6 Geometry: Circumference</i> <i>Lesson 14-1 Area of Parallelograms</i> <i>Lesson 14-2a Hands-On Lab</i> <i>Lesson 14-2 Area of Triangles</i> <i>Lesson 14-3 Area of Circles</i></p> <p>Quick Review Math Handbook Book 1 320-321, 322-323, 324-329</p>	<p>7) Determine perimeter/circumference and area of squares, rectangles, triangles, parallelograms, and circles in real-world context.</p>

<p>Student Edition: <i>Lesson 10-3 Geometry: Scale Drawings and Models</i> <i>Lesson 10-3b Hands-On Lab</i></p> <p>Teacher Wraparound Edition: <i>Lesson 10-3 Geometry: Scale Drawings and Models</i> <i>Lesson 10-3b Hands-On Lab</i></p> <p>Quick Review Math Handbook Book 1 369, 371</p>	8) Determine the distance between points using a scale.
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E. Statistics and Probability
Grade 6

MPS Learning Target #7 (Grade 6)	MPS Learning Target #8 (Grade 6)
Interpret and summarize data sets and displays using measures of central tendency and variation (e.g., range), and evaluate hypotheses and multiple representations for a given data set.	Gather and display data from experiments and analyze outcomes based on theoretical and experimental probabilities to determine likelihood and fairness of events and to solve problems.
Descriptors Data analysis and statistics: 1, 2, 3, 4, 5, 6	Descriptors Data analysis and statistics: 1, 2, 3, 4 Probability: 7, 8, 9, 10, 11, 12

Wisconsin Sub-skill Descriptors (Beginning of Grade 7)	
Sub-skill E.a: Data analysis and statistics	
<p>Student Edition: <i>Lesson 2-1 Frequency Tables</i> <i>Lesson 2-2a Problem-Solving Strategy</i> <i>Lesson 2-2 Bar Graphs and Line Graphs</i> <i>Lesson 2-5 Stem-and-Leaf Plots</i></p> <p>Teacher Wraparound Edition: <i>Lesson 2-1 Frequency Tables</i> <i>Lesson 2-2a Problem-Solving Strategy</i> <i>Lesson 2-2 Bar Graphs and Line Graphs</i> <i>Lesson 2-5 Stem-and-Leaf Plots</i></p> <p>Quick Review Math Handbook Book 1 190-192, 194-201</p>	1) Summarize data sets in tables, charts, and diagrams with and without context.

<p>Student Edition: <i>Lesson 2-1 Frequency Tables</i> <i>Lesson 2-2a Problem-Solving Strategy</i> <i>Lesson 2-2 Bar Graphs and Line Graphs</i> <i>Lesson 2-5 Stem-and-Leaf Plots</i></p> <p>Teacher Wraparound Edition: <i>Lesson 2-1 Frequency Tables</i> <i>Lesson 2-2a Problem-Solving Strategy</i> <i>Lesson 2-2 Bar Graphs and Line Graphs</i> <i>Lesson 2-5 Stem-and-Leaf Plots</i></p> <p>Quick Review Math Handbook Book 1 190-192, 194-201</p>	<p>2) Evaluate a set of data to generate or confirm/deny hypotheses.</p>
<p>Student Edition: <i>Lesson 2-1 Frequency Tables</i> <i>Lesson 2-2 Bar Graphs and Line Graphs</i> <i>Lesson 2-3 Circle Graphs</i> <i>Lesson 2-5 Stem-and-Leaf Plots</i> <i>Lesson 2-8 Analyzing Graphs</i></p> <p>Teacher Wraparound Edition: <i>Lesson 2-1 Frequency Tables</i> <i>Lesson 2-2 Bar Graphs and Line Graphs</i> <i>Lesson 2-3 Circle Graphs</i> <i>Lesson 2-5 Stem-and-Leaf Plots</i> <i>Lesson 2-8 Analyzing Graphs</i></p> <p>Quick Review Math Handbook Book 1 190-203</p>	<p>3) Extract, interpret, and analyze data from tables, simple stem-and-leaf plots, simple bar graphs, line plots, line graphs, simple circle graphs, charts and diagrams.</p>

<p>Student Edition: <i>Lesson 2-1 Frequency Tables</i> <i>Lesson 2-2 Bar Graphs and Line Graphs</i> <i>Lesson 2-3 Circle Graphs</i> <i>Lesson 2-5 Stem-and-Leaf Plots</i> <i>Lesson 2-8 Analyzing Graphs</i></p> <p>Teacher Wraparound Edition: <i>Lesson 2-1 Frequency Tables</i> <i>Lesson 2-2 Bar Graphs and Line Graphs</i> <i>Lesson 2-3 Circle Graphs</i> <i>Lesson 2-5 Stem-and-Leaf Plots</i> <i>Lesson 2-8 Analyzing Graphs</i></p> <p>Quick Review Math Handbook Book 1 190-203</p>	<p>4) Create graph with one-variable data sets using simple stem-and-leaf plots, bar graphs, circle graphs, line plots and line graphs; discuss appropriateness of graphs selected.</p>
<p>Student Edition: <i>Lesson 2-6 Mean</i> <i>Lesson 2-6b Spreadsheet Investigation</i> <i>Lesson 2-7 Median, Mode, and Range</i></p> <p>Teacher Wraparound Edition: <i>Lesson 2-6 Mean</i> <i>Lesson 2-6b Spreadsheet Investigation</i> <i>Lesson 2-7 Median, Mode, and Range</i></p> <p>Quick Review Math Handbook Book 1 204-209</p>	<p>5) Find mean, median (with odd set of data), mode and range of a set of data with and without context.</p>
<p>Student Edition: <i>Lesson 2-2 Bar and Line Graphs</i> <i>Lesson 2-3 Circle Graphs</i> <i>Lesson 2-4 Making Predictions</i> <i>Lesson 2-8 Analyzing Graphs</i></p> <p>Teacher Wraparound Edition: <i>Lesson 2-2 Bar and Line Graphs</i> <i>Lesson 2-3 Circle Graphs</i> <i>Lesson 2-4 Making Predictions</i> <i>Lesson 2-8 Analyzing Graphs</i></p> <p>Quick Review Math Handbook Book 1 190-209</p>	<p>6) Evaluate sources of data in context and multiple representations of a given data set.</p>

Sub-skill E.b: Probability	
<p>Student Edition: <i>Lesson 11-1 Theoretical Probability</i> <i>Lesson 11-1b Hands-On Lab</i> <i>Lesson 11-2 Outcomes</i> <i>Lesson 11-5 Probability of Independent Events</i></p> <p>Teacher Wraparound Edition: <i>Lesson 11-1 Theoretical Probability</i> <i>Lesson 11-1b Hands-On Lab</i> <i>Lesson 11-2 Outcomes</i> <i>Lesson 11-5 Probability of Independent Events</i></p> <p>Quick Review Math Handbook Book 1 218-226, 229</p>	<p>7) Determine the likelihood of an event and probability based on one independent event, (e.g., spinning the arrow on a spinner).</p>
<p>Student Edition: <i>Lesson 11-1 Theoretical Probability</i> <i>Lesson 11-1b Hands-On Lab</i> <i>Lesson 11-2 Outcomes</i></p> <p>Teacher Wraparound Edition: <i>Lesson 11-1 Theoretical Probability</i> <i>Lesson 11-1b Hands-On Lab</i> <i>Lesson 11-2 Outcomes</i></p> <p>Quick Review Math Handbook Book 1 218-226, 229</p>	<p>8) Use probabilities to estimate outcomes and evaluate fair and unfair simple events.</p>
<p>Student Edition: <i>Lesson 11-1 Theoretical Probability</i> <i>Lesson 11-1b Hands-On Lab</i> <i>Lesson 11-2 Outcomes</i> <i>Lesson 11-3 Statistics: Making Predictions</i> <i>The Game Zone: Finding Probabilities</i> <i>Lesson 11-5 Probability of Independent Events</i></p> <p>Teacher Wraparound Edition: <i>Lesson 11-1 Theoretical Probability</i> <i>Lesson 11-1b Hands-On Lab</i> <i>Lesson 11-2 Outcomes</i> <i>Lesson 11-5 Probability of Independent Events</i></p> <p>Quick Review Math Handbook Book 1 218-226, 229</p>	<p>9) Use data from simulations provided in charts/tables to solve and interpret probability problems.</p>

<p>Student Edition: <i>Lesson 11-2 Outcomes</i> <i>Lesson 11-5 Probability of Independent Events</i></p> <p>Teacher Wraparound Edition: <i>Lesson 11-2 Outcomes</i> <i>Lesson 11-5 Probability of Independent Events</i></p> <p>Quick Review Math Handbook Book 1 210-217</p>	<p>10) Describe and determine the number of combinations of selecting 3 items from 4 or more items.</p>
<p>Student Edition: <i>Lesson 11-2 Outcomes</i> <i>Lesson 11-5 Probability of Independent Events</i></p> <p>Teacher Wraparound Edition: <i>Lesson 11-2 Outcomes</i> <i>Lesson 11-5 Probability of Independent Events</i></p> <p>Quick Review Math Handbook Book 1 210-217</p>	<p>11) Solve problems involving sample spaces or diagrams.</p>
<p>Student Edition: <i>Lesson 11-1 Theoretical Probability</i> <i>Lesson 11-1b Hands-On Lab</i> <i>Lesson 11-2 Outcomes</i> <i>Lesson 11-3 Statistics: Making Predictions</i> <i>The Game Zone: Finding Probabilities</i> <i>Lesson 11-5 Probability of Independent Events</i></p> <p>Teacher Wraparound Edition: <i>Lesson 11-1 Theoretical Probability</i> <i>Lesson 11-1b Hands-On Lab</i> <i>Lesson 11-2 Outcomes</i> <i>Lesson 11-5 Probability of Independent Events</i></p> <p>Quick Review Math Handbook Book 1 218-226, 229</p>	<p>12) Analyze outcomes based on an understanding of theoretical and experimental probability.</p>

F. Algebraic Relationships
Grade 6

MPS Learning Target #9 (Grade 6)	MPS Learning Target #10 (Grade 6)
Analyze, identify, and extend patterns and functional relationships in sequences, tables, and graphs, and describe graphs of real-world situations.	Represent problem situations with mathematical models, justify solutions to equations with letter-variables, and compare expressions using order of operations and numerical properties.
Descriptors Patterns, relations and functions: 1, 2, 3, 4, 5	Descriptors Expressions, equations, & inequalities: 6, 7, 8, 9, 10, 11 Properties: 12, 13, 14
Wisconsin Sub-skill Descriptors (Beginning of Grade 7)	
Sub-skill F.a: Patterns, relations, and functions	
Student Edition: <i>Lesson 9-6a Hands-On Lab</i> <i>Lesson 9-6 Functions</i> <i>Lesson 9-7 Graphing Functions</i> Teacher Wraparound Edition: <i>Lesson 9-6 Functions</i> <i>Lesson 9-7 Graphing Functions</i> Quick Review Math Handbook Book 1 285-291	1) Use two concurrent numeric patterns to describe and analyze functional relationships between variables in two concurrent numeric patterns using addition and subtraction.
Student Edition: <i>Lesson 7-6a Problem-Solving Strategy</i> <i>Lesson 7-6 Patterns and Functions: Sequences</i> Teacher Wraparound Edition: <i>Lesson 7-6a Problem-Solving Strategy</i> <i>Lesson 7-6 Patterns and Functions: Sequences</i>	2) Extend a given arithmetic sequence of pictures or numbers.
Student Edition: <i>Lesson 9-6a Hands-On Lab</i> <i>Lesson 9-6 Functions</i> <i>Lesson 9-7 Graphing Functions</i> Teacher Wraparound Edition: <i>Lesson 9-6 Functions</i> <i>Lesson 9-7 Graphing Functions</i> Quick Review Math Handbook Book 1 285-291	3) Describe and interpret linear patterns in tables and graphs.

<p>Student Edition: <i>Lesson 9-6a Hands-On Lab</i> <i>Lesson 9-6 Functions</i> <i>Lesson 9-7 Graphing Functions</i></p> <p>Teacher Wraparound Edition: <i>Lesson 9-6 Functions</i> <i>Lesson 9-7 Graphing Functions</i></p> <p>Quick Review Math Handbook Book 1 285-291</p>	<p>4) Identify the rule to complete or extend a function table or any combination of the two using one operation (+, -, x, ÷) and numbers (0 through 100) in the function table.</p>
<p>Student Edition: <i>Lesson 9-6a Hands-On Lab</i> <i>Lesson 9-6 Functions</i></p> <p>Teacher Wraparound Edition: <i>Lesson 9-6 Functions</i></p> <p>Quick Review Math Handbook Book 1 285-291</p>	<p>5) Describe real-world phenomena represented by a graph. Describe real-world phenomena that a given graph might represent.</p>
<p>Sub-skill F.b: Expressions, equations, and inequalities</p>	
<p>Student Edition: <i>Lesson 1-7 Algebra: Solving Equations</i> <i>Lesson 9-2 Solving Addition Equations</i> <i>Lesson 9-3 Solving Subtraction Equations</i> <i>Lesson 9-4 Solving Multiplication Equations</i> <i>Lesson 9-4b Hands-On Lab</i></p> <p>Teacher Wraparound Edition: <i>Lesson 1-7 Algebra: Solving Equations</i> <i>Lesson 9-2 Solving Addition Equations</i> <i>Lesson 9-3 Solving Subtraction Equations</i> <i>Lesson 9-4 Solving Multiplication Equations</i> <i>Lesson 9-4b Hands-On Lab</i></p> <p>Quick Review Math Handbook Book 1 278-281</p>	<p>6) Demonstrate understanding of equality and inequality and solve single-variable equations using symbols (<, >, =+).</p>

<p>Student Edition: <i>Lesson 1-7 Algebra: Solving Equations</i> <i>Lesson 9-2 Solving Addition Equations</i> <i>Lesson 9-3 Solving Subtraction Equations</i> <i>Lesson 9-4 Solving Multiplication Equations</i> <i>Lesson 9-4b Hands-On Lab</i></p> <p>Teacher Wraparound Edition: <i>Lesson 1-7 Algebra: Solving Equations</i> <i>Lesson 9-2 Solving Addition Equations</i> <i>Lesson 9-3 Solving Subtraction Equations</i> <i>Lesson 9-4 Solving Multiplication Equations</i> <i>Lesson 9-4b Hands-On Lab</i></p> <p>Quick Review Math Handbook Book 1 270-273, 278-281</p>	<p>7) Solve single-variable one-step equations and algebraic expressions with one variable and one operation and whole number coefficients with and without context.</p>
<p>Student Edition: <i>Lesson 1-7 Algebra: Solving Equations</i> <i>Lesson 9-2 Solving Addition Equations</i> <i>Lesson 9-3 Solving Subtraction Equations</i> <i>Lesson 9-4 Solving Multiplication Equations</i></p> <p>Teacher Wraparound Edition: <i>Lesson 1-7 Algebra: Solving Equations</i> <i>Lesson 9-2 Solving Addition Equations</i> <i>Lesson 9-3 Solving Subtraction Equations</i> <i>Lesson 9-4 Solving Multiplication Equations</i></p> <p>Quick Review Math Handbook Book 1 270- 273, 278-281</p>	<p>8) Describe in words the generalization for a given one-operation pattern.</p>
<p>Student Edition: <i>Lesson 9-5 Solving Two-Step Equations</i></p> <p>Teacher Wraparound Edition: <i>Lesson 9-5 Solving Two-Step Equations</i></p> <p>Quick Review Math Handbook Book 1 258-259</p>	<p>9) Solve two-step multi-operation equations with letter-variables and whole number coefficients with and without context. Ex: $3x + 1 = 7$</p>

<p>Student Edition: <i>Lesson 1-7 Algebra: Solving Equations</i> <i>Lesson 9-2 Solving Addition Equations</i> <i>Lesson 9-3 Solving Subtraction Equations</i> <i>Lesson 9-4 Solving Multiplication Equations</i> <i>Lesson 9-5 Solving Two Step Equations</i> <i>Lesson 9-5b Problem-Solving Strategy</i></p> <p>Teacher Wraparound Edition: <i>Lesson 1-7 Algebra: Solving Equations</i> <i>Lesson 9-2 Solving Addition Equations</i> <i>Lesson 9-3 Solving Subtraction Equations</i> <i>Lesson 9-4 Solving Multiplication Equations</i> <i>Lesson 9-5 Solving Two-Step Equations</i></p> <p>Quick Review Math Handbook Book 1 270- 273, 278-281</p>	<p>10) Represent problem situations with one or two-step equations or expressions.</p>
<p>Student Edition: <i>Lesson 1-8 Geometry: Area of Rectangles</i></p> <p>Teacher Wraparound Edition: <i>Lesson 1-8 Geometry: Area of Rectangles</i></p> <p>Quick Review Math Handbook Book 1 271-273</p>	<p>11) Evaluate formulas with and without context by solving for a specified variable.</p>
Sub-skill F.c: Properties	
<p>Student Edition: <i>Lesson 9-1 Properties</i></p> <p>Teacher Wraparound Edition: <i>Lesson 9-1 Properties</i></p> <p>Quick Review Math Handbook Book 1 262-263</p>	<p>12) Identify a pair of equivalent numerical expressions where the commutative property of either addition or multiplication has been used.</p>
<p>Student Edition: <i>Lesson 1-5 Order of Operations</i> <i>Lesson 1-6 Algebra: Variables and Expressions</i></p> <p>Teacher Wraparound Edition: <i>Lesson 1-5 Order of Operations</i> <i>Lesson 1-6 Algebra: Variables and Expressions</i></p> <p>Quick Review Math Handbook Book 1 78-79, 270</p>	<p>13) Demonstrate understanding of up to three-step order of operations expression with and without context using parentheses and exponents.</p>

Student Edition:

Lesson 9-1 Properties

Teacher Wraparound Edition:

Lesson 9-1 Properties

Quick Review Math Handbook Book 1

264-266

14) Demonstrate understanding of distributive property.