



**CORRELATION
SUNSHINE STATE STANDARDS
& GRADE LEVEL EXPECTATIONS**

SUBJECT: M/J Mathematics Series 1, 2, 3

SUBMISSION TITLE: Impact Math Course 3 (Grade 8)

PUBLISHER: Glencoe/McGraw-Hill

GRADE: 8

STRAND A: Number Sense, Concepts and Operations

STANDARD 1: The student understands the different ways numbers are represented and used in the real world.

BENCHMARK	GRADE LEVEL EXPECTATIONS	PAGES(S) OR LOCATIONS(S) WHERE TAUGHT	I/M*
<p><i>Benchmark MA.A.1.3.1: The student associates verbal names, written word names, and standard numerals with integers, fractions, decimals; numbers expressed as percents; numbers with exponents; numbers in scientific notation; radicals; absolute value; and ratios.</i></p>	<p>1. knows word names and standard numerals for integers, fractions, decimals, numbers expressed as percents, numbers with exponents, numbers expressed in scientific notation, absolute value, radicals, and ratios.</p>	<p>Students use and know word names and standard numerals for all real numbers, including radicals, throughout Course 3. Scientific notation and absolute value are also included.</p>	I
<p><i>Benchmark MA.A.1.3.2: The student understands the relative size of integers, fractions, and decimals; numbers expressed as percents; numbers with exponents; numbers in scientific notation; radicals; absolute value; and ratios.</i></p>	<p>1. compares and orders fractions, decimals, integers, and radicals using graphic models, number lines, and symbols.</p> <p>2. compares and orders numbers expressed in absolute value, scientific notation, integers, percents, numbers with exponents, fractions, decimals, radicals, and ratios.</p>	<p>Chapter 3, p. 199 (radicals) Fractions, decimals, integers in Courses 1 and 2</p> <p>Chapter 3, p. 148, pp. 150-151, pp. 196-199, p. 203-208</p>	I

<p><i>Benchmark MA.A.1.3.3:</i> The student understands concrete and symbolic representations of rational numbers and irrational numbers in real-world situations.</p>	1. knows examples of rational and irrational numbers in real-world situations.	Chapter 3, pp. 182-191	I
	2. describes the meanings of rational and irrational numbers using physical or graphical displays.	Chapter 3, pp. 159-181 (rational numbers)	I
	3. constructs models to represent rational and irrational numbers.	Chapter 3, pp. 159-161, p. 202	I
<p><i>Benchmark MA.A.1.3.4:</i> The student understands that numbers can be represented in a variety of equivalent forms, including integers, fractions, decimals, percents, scientific notation, exponents, radicals, and absolute value.</p>	1. knows the relationships among fractions, decimals, and percents given a real-world context.	Not covered. (Covered in Course 2)	
	2. simplifies expressions using integers, exponents, and radicals.	Chapter 3, pp. 154-155, p. 158, p. 163, pp. 193-197	I
	3. knows equivalent forms of large and small numbers in scientific and standard notation.	Chapter 3, pp. 156-164	I
	4. identifies and explains the absolute value of a number.	Chapter 2, p. 118 Chapter 4, p. 224, p. 227	M

STANDARD 2: The student understands number systems.

BENCHMARK	GRADE LEVEL EXPECTATIONS	PAGES(S) OR LOCATIONS(S) WHERE TAUGHT	I/M*
<p><i>Benchmark MA.A.2.3.1:</i> The student understands and uses exponential and scientific notation.</p>	1. expresses rational numbers in exponential notation including negative exponents (for example, $2^{-3} = \frac{1}{2^3} = 1/8$).	Chapter 3, pp. 146-162	I
	2. expresses numbers in scientific or standard notation including decimals between 0 and 1.	Chapter 3, pp. 156-167	I
	3. evaluates numerical or algebraic expressions that contain exponential notation.	Chapter 3, pp. 148-152, pp. 164-167	I

<p><i>Benchmark MA.A.2.3.2:</i> The student understands the structure of number systems other than the decimal number system.</p>	1. expresses base ten numbers as equivalent numbers in different bases, such as base two, base five, and base eight.	Chapter 10, p. 651	M
	2. discusses the application of the binary (base two) number system in computer technology.	Chapter 10, p. 651	M
	3. expresses non-base ten numbers as equivalent numbers in base ten.	Not covered.	

STANDARD 3: The student understands the effects of operations on numbers and the relationships among these operations, selects appropriate operations, and computes for problem solving.

BENCHMARK	GRADE LEVEL EXPECTATIONS	PAGES(S) OR LOCATIONS(S) WHERE TAUGHT	I/M*
<p><i>Benchmark MA.A.3.3.1:</i> The student understands and explains the effects of addition, subtraction, multiplication, and division on whole numbers, fractions, including mixed numbers, and decimals, including the inverse relationships of positive and negative numbers.</p>	1. knows the effects of the four basic operations on whole numbers, fractions, mixed numbers, decimals, and integers.	Not covered. (Covered in Courses 1 and 2)	I
	2. knows the inverse relationship of positive and negative numbers.	Not covered. (Covered in Course 2)	
<p><i>Benchmark MA.A.3.3.2:</i> The student selects the appropriate operation to solve problems involving addition, subtraction, multiplication, and division of rational numbers, ratios, proportions, and percents, including the appropriate application of the algebraic order of operations.</p>	3. applies the properties of real numbers to solve problems (commutative, associative, distributive, identity, equality, inverse, and closure).	Chapter 6, pp. 358-359, p. 361, p. 368, p. 372, p. 376, p. 378, p. 427 (distributive property) Chapter 4, p. 220 (inverse) p. T220-T222, Teacher Edition (commutative, closure)	I
	1. knows the appropriate operations to solve real-world problems involving integers, ratios, rates, proportions, numbers expressed as percents, decimals, and fractions.	Chapter 1, pp. 12-22 Chapter 2, pp. 110-120 (percents, decimals and fractions covered in depth in Courses 1 and 2)	I
	2. solves real-world problems involving integers, ratios, proportions, numbers expressed as percents, decimals, and fractions in two- or three-step problems.	Chapter 4, p. 218, p. 225 Chapter 10, pp. 605-607, pp. 636-639	M

<p><i>Benchmark MA.A.3.3.3: The student adds, subtracts, multiplies, and divides whole numbers, decimals, and fractions, including mixed numbers, to solve real-world problems, using appropriate methods of computing, such as mental mathematics, paper and pencil, and calculator.</i></p>	<p>3. solves real-world problems involving percents including percents greater than 100% (for example percent of change, commission).</p> <p>4. writes and simplifies expressions from real-world situations using the order of operations.</p> <p>1. solves multi-step real-world problems involving fractions, decimals, and integers using appropriate methods of computation, such as mental computation, paper and pencil, and calculator.</p>	<p>Not covered. (Covered in Course 2)</p> <p>Chapter 6, pp. 358-362, pp. 366-372</p> <p>Chapter 4, pp. 256-276</p>	<p>I</p> <p>I</p>
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STANDARD 4: The student uses estimation in problem solving and computation.

BENCHMARK	GRADE LEVEL EXPECTATIONS	PAGES(S) OR LOCATIONS(S) WHERE TAUGHT	I/M*
<p><i>Benchmark MA.A.4.3.1: The student uses estimation strategies to predict results and to check the reasonableness of results.</i></p>	<p>1. knows appropriate estimation techniques for a given situation using real numbers.</p> <p>2. estimates to predict results and to check reasonableness of results.</p>	<p>Not covered.</p> <p>Chapter 10, p. 632</p>	<p>M</p>

STANDARD 5: The student understands and applies theories related to numbers.

BENCHMARK	GRADE LEVEL EXPECTATIONS	PAGES(S) OR LOCATIONS(S) WHERE TAUGHT	I/M*
<i>Benchmark MA.A.5.3.1: The student uses concepts about numbers, including primes, factors, and multiples, to build number sequences.</i>	<ol style="list-style-type: none"> 1. knows if numbers are relatively prime. 2. applies number theory concepts to determine the terms in a real number sequence. 3. applies number theory concepts, including divisibility rules, to solve real-world or mathematical problems. 	<p>Not covered. (Covered in Course 1)</p> <p>Not covered</p> <p>Not covered</p>	

STRAND B: Measurements

STANDARD 1: The student measures quantities in the real world and uses the measures to solve problems.

BENCHMARK	GRADE LEVEL EXPECTATIONS	PAGES(S) OR LOCATIONS(S) WHERE TAUGHT	I/M*
<p><i>Benchmark MA.B.1.3.1: The student uses concrete and graphic models to derive formulas for finding perimeter, area, surface area, circumference, and volume of two- and three-dimensional shapes, including rectangular solids and cylinders</i></p> <p><i>Benchmark MA.B.1.3.2: The student uses concrete and graphic models to derive formulas for finding rates, distance, time, and angle measures.</i></p>	<ol style="list-style-type: none"> 1. uses concrete and graphic models to explore and derive formulas for surface area and volume of three-dimensional regular shapes, including pyramids, prisms, and cones. 2. solves and explains real-world problems involving surface area and volume of three-dimensional shapes. <ol style="list-style-type: none"> 1. applies formulas for finding rates, distance, time and angle measures. 2. describes and uses rates of change (for example, temperature as it changes throughout the day, or speed as the rate of change in distance over time) and other derived measures. 	<p>Not covered. (Covered in Course 2)</p> <p>Not covered. (Covered in Course 2)</p> <p>Not covered. (Covered in Course 2)</p> <p>Chapter 8, pp. 526-527</p>	M

<p><i>Benchmark MA.B.1.3.3: The student understands and describes how the change of a figure in such dimensions as length, width, height, or radius affects its other measurements such as perimeter, area, surface area, and volume.</i></p>	<ol style="list-style-type: none"> 1. knows how a change in a figure's dimensions affects its perimeter, area, circumference, surface area, or volume. 2. knows how changes in the volume, surface area, area, or perimeter of a figure affect the dimensions of the figure. 3. solves real-world or mathematical problems involving the effects of changes either to the dimensions of a figure or to the volume, surface area, area, perimeter, or circumference of figures. 	<p>Chapter 5, pp. 329-336 (in reference to scaling)</p> <p>Not covered. (Covered in Course 2)</p> <p>Not covered. (Covered in Course 2)</p>	<p style="text-align: center;">M</p>
<p><i>Benchmark MA.B.1.3.4: The student constructs, interprets, and uses scale drawings such as those based on number lines and maps to solve real-world problems.</i></p>	<ol style="list-style-type: none"> 1. interprets and applies various scales including those based on number lines, graphs, models, and maps. (Scale may include rational numbers.) 2. constructs and uses scale drawings to recreate a given situation. 	<p>Chapter 5, pp. 329-337</p>	<p style="text-align: center;">M</p>

STANDARD 2: The student compares, contrasts, and converts within systems of measurement (both standard/nonstandard and metric/customary).

BENCHMARK	GRADE LEVEL EXPECTATIONS	PAGES(S) OR LOCATIONS(S) WHERE TAUGHT	I/M*
<p><i>Benchmark MA.B.2.3.1: The student uses direct (measured) and indirect (not measured) measures to compare a given characteristic in either metric or customary units.</i></p>	<ol style="list-style-type: none"> 1. finds measures of length, weight or mass, and capacity or volume using proportional relationships and properties of similar geometric figures. 	<p>Not covered.</p>	

<p><i>Benchmark MA.B.2.3.2: The student solves problems involving units of measure and converts answers to a larger or smaller unit within either the metric or customary system.</i></p>	<ol style="list-style-type: none"> 1. solves problems using mixed units within each system, such as feet and inches, hours and minutes. 2. solves problems using the conversion of measurements within the customary system. 3. solves problems using the conversions of measurement within the metric system. 	<p>Not covered.</p> <p>Chapter 3, p. 157</p> <p>Not covered.</p>	<p>M</p>
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STANDARD 3: The student estimates measurements in real-world problem situations.

BENCHMARK	GRADE LEVEL EXPECTATIONS	PAGES(S) OR LOCATIONS(S) WHERE TAUGHT	I/M*
<p><i>Benchmark MA.B.3.3.1: The student solves real-world and mathematical problems involving estimates of measurements including length, time, weight/mass, temperature, money, perimeter, area, and volume, in either customary or metric units.</i></p>	<ol style="list-style-type: none"> 1. knows a variety of strategies to estimate, describe, make comparisons, and solve real-world and mathematical problems involving measurements. 	<p>Chapter 3, pp. 156-161 Chapter 10, pp. 612-616</p>	<p>M</p>

STANDARD 4: The student selects and uses appropriate units and instruments for measurement to achieve the degree of precision and accuracy required in real-world situations.

BENCHMARK	GRADE LEVEL EXPECTATIONS	PAGES(S) OR LOCATIONS(S) WHERE TAUGHT	I/M*
<p><i>Benchmark MA.B.4.3.1: The student selects appropriate units of measurement and determines and applies significant digits in a real-world context. (Significant digits should relate to both instrument precision and to the least precise unit of measurement).</i></p>	<ol style="list-style-type: none"> 1. selects the appropriate unit of measure for a given situation. 2. knows the precision of different measuring instruments. 3. determines the appropriate precision unit for a given situation. 4. identifies the number of significant digits as it relates to the least precise unit of measure. 	<p>Not covered.</p> <p>Not covered.</p> <p>Not covered.</p> <p>Not covered.</p>	

<p><i>Benchmark MA.B.4.3.2: The student selects and uses appropriate instruments, technology, and techniques to measure quantities in order to achieve specified degrees of accuracy in a problem situation.</i></p>	<p>5. determines the greatest possible error of a given measurement and the possible actual measurements of an object.</p>	<p>Not covered.</p>	<p>M</p>
	<p>1. applies significant digits in the real-world context.</p>	<p>Not covered.</p>	
	<p>2. selects and uses appropriate instruments, technology, and techniques to measure quantities and dimensions to a specified degree of accuracy.</p>	<p>Chapter 10, pp. 612-615</p>	

STRAND C: Geometry and Spatial Sense

STANDARD 1: The student describes, draws, identifies, and analyzes two- and three-dimensional shapes.

BENCHMARK	GRADE LEVEL EXPECTATIONS	PAGES(S) OR LOCATIONS(S) WHERE TAUGHT	I/M*
<p><i>Benchmark MA.C.1.3.1: The student understands the basic properties of, and relationships pertaining to, regular and irregular geometric shapes in two- and three-dimensions.</i></p>	<p>1. determines and justifies the measures of various types of angles based upon geometric relationships in two- and three-dimensional shapes.</p>	<p>Chapter 8, p. 510 (Covered in Course 2 in depth)</p>	<p>M</p>
	<p>2. compares regular and irregular polygons and two- and three-dimensional shapes.</p>	<p>Chapter 2, p. 76 (Covered in Course 2 in depth)</p>	<p>M</p>
	<p>3. draws and builds three-dimensional figures from various perspectives (for example, flat patterns, isometric drawings, nets).</p>	<p>Not covered. (Covered in Course 2)</p>	
	<p>4. knows the properties of two- and three-dimensional figures.</p>	<p>Not covered. (Covered in Course 2)</p>	

STANDARD 2: The student visualizes and illustrates ways in which shapes can be combined, subdivided, and changed.

BENCHMARK	GRADE LEVEL EXPECTATIONS	PAGES(S) OR LOCATIONS(S) WHERE TAUGHT	I/M*
<p><i>Benchmark MA.C.2.3.1: The student understands the geometric concepts of symmetry, reflections, congruency, similarity, perpendicularity, parallelism, and transformations, including flips, slides, turns, and enlargements.</i></p>	1. use the properties of parallelism, perpendicularity, and symmetry in solving real-world problems.	Chapter 5, pp. 288-291, pp. 294-295, p. 299	M
	2. identifies congruent and similar figures in real-world situations and justifies the identification.	Chapter 5, p. 308, p. 311	M I
	3. identifies and performs the various transformations (reflection, translation, rotation, dilation) of a given figure on a coordinate plane.	Chapter 5, pp. 343-351	I
<p><i>Benchmark MA.C.2.3.2: The student predicts and verifies patterns involving tessellations (a covering of a plane with congruent copies of the same pattern with no holes and no overlaps, like floor tiles).</i></p>	1. continues a tessellation pattern using the needed transformations.	Chapter 5, pp. 318-321	I
	2. creates an original tessellating tile and tessellation pattern using a combination of transformations.	Chapter 5, pp. 318-321	I

STANDARD 3: The student uses coordinate geometry to locate objects in both two- and three dimensions and to describe objects algebraically.

BENCHMARK	GRADE LEVEL EXPECTATIONS	PAGES(S) OR LOCATIONS(S) WHERE TAUGHT	I/M*
<p><i>Benchmark MA.C.3.3.1: The student represents and applies geometric properties and relationships to solve real-world and mathematical problems.</i></p>	1. observes, explains, makes and tests conjectures regarding geometric properties and relationships (among regular and irregular shapes of two and three dimensions).	Chapter 5, p. 294, p. 304, p. 308	M
	2. applies the Pythagorean Theorem in real-world problems (for example, finds the relationship among sides in 45° – 45° and 30° – 60° right triangles).	Chapter 3, p. 202 (Special right triangles not covered.)	M
		Chapter 1, pp. 6-19	I

<p><i>Benchmark MA.C.3.3.2:</i> <i>The student identifies and plots ordered pairs in all four quadrants of a rectangular coordinate system (graph) and applies simple properties of lines.</i></p>	<p>1. given an equation or its graph, finds ordered-pair solutions (for example, $y = 2x$).</p>	<p>Chapter 2, pp. 70-120</p>	<p>I</p> <p>I</p>
	<p>2. given the graph of a line, identifies the slope of the line (including the slope of vertical and horizontal lines).</p>	<p>Chapter 1, pp. 24-44</p>	
	<p>3. given the graph of a linear relationship, applies and explains the simple properties of lines on a graph, including parallelism, perpendicularity, and identifying the x and y intercepts, the midpoint of a horizontal or vertical line segment, and the intersection point of two lines.</p>	<p>Chapter 1, p. 31, pp. 36-37, pp. 64-65, Chapter 4, pp. 256-280</p>	

STRAND D: Algebraic Thinking

STANDARD 1: The student describes, analyzes, and generalizes a wide variety of patterns, relations, and functions.

BENCHMARK	GRADE LEVEL EXPECTATIONS	PAGES(S) OR LOCATIONS(S) WHERE TAUGHT	I/M*
<p><i>Benchmark MA.D.1.3.1:</i> <i>The student describes a wide variety of patterns, relationships, and functions through models, such as manipulatives, tables, graphs, expressions, equations, and inequalities.</i></p>	<p>1. reads, analyzes, and describes graphs of linear relationships.</p>	<p>Chapter 1, pp. 4-63</p>	I
	<p>2. uses variables to represent unknown quantities in real-world problems.</p>	<p>Throughout Chapters 1, 2, 3, 6, and 8 variables are used to represent unknown quantities in real-world problems.</p>	I
	<p>3. uses the information provided in a table, graph, or rule to determine if a function is linear and justifies reasoning.</p>	<p>Chapter 1, pp. 4-45 Chapter 2, p. 128</p>	
	<p>4. finds a function rule to describe tables of related input-output variables.</p>	<p>Chapter 1, p. 6, p. 10, p. 15, p. 31, pp. 58-59 Chapter 2, pp. 86-87, p. 98, pp. 110-111, p. 115, pp. 120-121, pp. 123-125</p>	I
	<p>5. predicts outcomes based upon function rules.</p>	<p>Chapter 1, p. 58 Chapter 8, p. 498, p. 507, p. 521</p>	M

<p><i>Benchmark MA.D.1.3.2:</i> <i>The student creates and interprets tables, graphs, equations, and verbal descriptions to explain cause-and-effect relationships.</i></p>	<p>1. interprets and creates tables and graphs (function tables).</p>	<p>Chapter 1, pp. 4-45 Chapter 2, pp. 70-139 Chapter 3, pp. 146-189 Chapter 8, pp. 514-537</p>	<p>I</p>
	<p>2. writes equations and inequalities to express relationships.</p>	<p>Chapter 1, pp. 4-45 Chapter 2, pp. 70-139 Chapter 3, pp. 146-189 Chapter 4, pp. 226-239 Chapter 8, pp. 514-537</p>	<p>I</p>
	<p>3. graphs equations and inequalities to explain cause-and-effect relationships.</p>	<p>Chapter 1, p. 58 Chapter 4, pp. 226-239 Chapter 8, p. 498, p. 507, p. 521 Chapter 10, pp. 612-615</p>	<p>M</p>
	<p>4. interprets the meaning of the slope of a line from a graph depicting a real-world situation.</p>	<p>pp. 24-26, p. 30</p>	<p>I</p>

STANDARD 2: The student uses expressions, equations, inequalities, graphs, and formulas to represent and interpret situations.

BENCHMARK	GRADE LEVEL EXPECTATIONS	PAGES(S) OR LOCATIONS(S) WHERE TAUGHT	I/M*
<p><i>Benchmark MA.D.2.3.1:</i> <i>The student represents and solves real-world problems graphically, with algebraic expressions, equations, and inequalities.</i></p>	<p>1. translates verbal expressions and sentences into algebraic expressions, equations, and inequalities.</p>	<p>Chapter 1, pp. 6-8, pp. 10-13, pp. 16-17, pp. 20-22, p. 30, pp. 34-35 Chapter 2, pp. 74-77, p. 107, pp. 110-111, p. 138, Chapter 4, pp. 227-229, p. 235 Chapter 8, pp. 500-501</p>	<p>I</p>
	<p>2. translates algebraic expressions, equations, or inequalities representing real-world relationships into verbal expressions or sentences.</p>	<p>Chapter 1, pp. 6-8, pp. 10-13, pp. 16-17, pp. 20-22, p. 30, pp. 34-35 Chapter 2, p. 107, pp. 110-111, p. 138, Chapter 4, p. 228, p. 235 Chapter 8, pp. 500-501</p>	<p>I</p>
	<p>3. solves single- and multiple-step linear equations and inequalities in concrete or abstract form.</p>	<p>Chapter 4, pp. 214-255</p>	<p>I</p>
	<p>4. graphs linear equations on the coordinate plane using tables of</p>	<p>Chapter 1, pp. 4-23, pp. 51-56</p>	<p>I</p>

<p><i>Benchmark MA.D.2.3.2: The student uses algebraic problem-solving strategies to solve real-world problems involving linear equations and inequalities.</i></p>	coordinate plane using tables of values.	Chapter 4, pp. 240-255	I
	5. graphically displays real-world situations represented by algebraic equations or inequalities.	Chapter 1, pp. 6-8, pp. 10-13, pp. 16-17, pp. 20-22, p. 30, pp. 34-35 Chapter 2, p. 107, pp. 110-111, p. 138, Chapter 4, p. 228, p. 235 Chapter 8, pp. 500-501	I
	6. evaluates algebraic expressions, equations, and inequalities by substituting integral values for variables and simplifying the results.	Chapter 1, pp. 32-33, p. 43, p. 56 Chapter 2, p. 111, p. 131 Chapter 3, p. 147, p. 151, p. 178	
	7. simplifies algebraic expressions that represent real-world situations by combining like terms and applying the properties of real numbers.	Not covered.	
	1. simplifies algebraic expressions with a maximum of two variables.	Chapter 1, pp. 49-50, p. 57	M
2. solves single- and multi-step linear equations and inequalities that represent real-world situations.	Chapter 4, pp. 214-255	I	

STRAND E: Data Analysis and Probability

STANDARD 1: The student understands and uses the tools of data analysis for managing information.

BENCHMARK	GRADE LEVEL EXPECTATIONS	PAGES(S) OR LOCATIONS(S) WHERE TAUGHT	I/M*
<p><i>Benchmark MA.E.1.3.1: The student collects, organizes, and displays data in a variety of forms, including tables, line graphs, charts, bar graphs, to determine how different ways of presenting data can lead to different interpretations.</i></p>	1. reads and interprets data displayed in a variety of forms including histograms.	Chapter 8, p. 537 Chapter 10, pp. 602-621, pp. 625-627	I
	2. constructs and interprets displays of data, (including circle, line, bar, and box-and-whisker graphs) and explains how different displays of data can lead to different interpretations.	Chapter 10, pp. 602-621, pp. 625-627	I

<p><i>Benchmark MA.E.1.3.2:</i> The student understands and applies the concepts of range and central tendency (mean, median, and mode).</p>	1. finds the mean, median, and mode of a set of data using raw data, tables, charts, or graphs.	Chapter 1, p. 45, p. 53 Chapter 10, p. 614	M
	2. interprets measures of dispersion (range) and of central tendency.	Chapter 10, pp. 602-612	M
	3. determines appropriate measures of central tendency for a given situation or set of data.	Chapter 1, p. 53 Chapter 10, pp. 602-612	M
<p><i>Benchmark MA.E.1.3.3:</i> The student analyzes real-world data by applying appropriate formulas for measures of central tendency and organizing data in a quality display, using appropriate technology, including calculators and computers.</p>	1. determines the mean, median, mode, and range of a set of real-world data using appropriate technology.	Chapter 1, p. 45, p. 53 Chapter 10, p. 614	M
	2. organizes, graphs and analyzes a set of real-world data using appropriate technology.	Chapter 10, pp. 602-648	I

STANDARD 2: The student identifies patterns and makes predictions from an orderly display of data using concepts of probability and statistics.

BENCHMARK	GRADE LEVEL EXPECTATIONS	PAGES(S) OR LOCATIONS(S) WHERE TAUGHT	I/M*
<p><i>Benchmark MA.E.2.3.1:</i> The student compares experimental results with mathematical expectations of probabilities.</p>	1. compares and explains the results of an experiment with the mathematically expected outcomes.	Chapter 9, pp. 547-550, pp. 566-572, pp. 582-589	I
	2. calculates simple mathematical probabilities for independent and dependent events.	Chapter 9, pp. 545-594	I
<p><i>Benchmark MA.E.2.3.2:</i> The student determines odds for and odds against a given situation.</p>	1. predicts the mathematical odds for and against a specified outcome in a given real-world situation.	Not covered.	

STANDARD 3: The student uses statistical methods to make inferences and valid arguments about real-world situations.

BENCHMARK	GRADE LEVEL EXPECTATIONS	PAGES(S) OR LOCATIONS(S) WHERE TAUGHT	I/M*
<p><i>Benchmark MA.E.3.3.1: The student formulates hypotheses, designs experiments, collects and interprets data, and evaluates hypotheses by making inferences and drawing conclusions based on statistics (range, mean, median, and mode) and tables, graphs, and charts.</i></p>	<ol style="list-style-type: none"> 1. formulates a hypothesis and designs an experiment. 2. performs the experiment and collects, organizes, and displays the data. 3. evaluates the hypothesis by making inferences and drawing conclusions based on statistical results. 	<p>Not covered. (Covered in Course 2)</p> <p>Not covered. (Covered in Course 2)</p> <p>Not covered. (Covered in Course 2)</p>	
<p><i>Benchmark MA.E.3.3.2: The student identifies the common uses and misuses of probability or statistical analysis in the everyday world.</i></p>	<ol style="list-style-type: none"> 1. knows appropriate uses of statistics and probability in real-world situations. 2. knows when statistics and probability are used in misleading ways. 3. identifies and uses different types of sampling techniques (for example, random, systematic, stratified). 4. knows whether a sample is biased. 	<p>Chapter 10, pp. 602-648</p> <p>Chapter 10, pp. 625-629</p> <p>Not covered.</p> <p>Not covered.</p>	<p style="text-align: center;">I</p> <p style="text-align: center;">I</p>

*Indepth/Mentioned