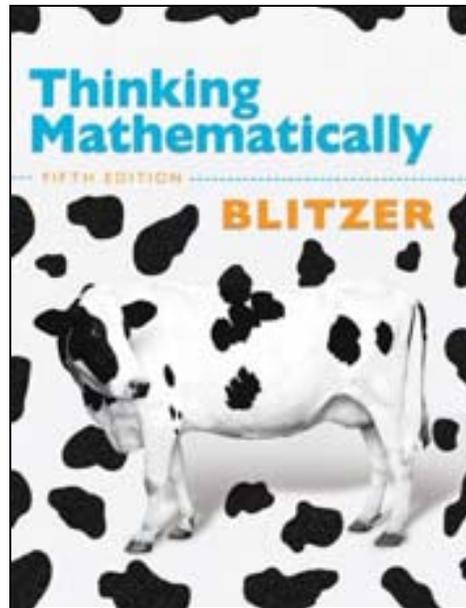


A Correlation of

**Thinking Mathematically  
Blitzer**

©2011



To the

**Florida State Standards for  
Liberal Arts Mathematics - 1208290**

CORRELATION  
 FLORIDA DEPARTMENT OF EDUCATION  
 INSTRUCTIONAL MATERIALS CORRELATION  
 COURSE STANDARDS/BENCHMARKS

**SUBJECT:** Mathematics  
**GRADE LEVEL:** 9-12  
**COURSE TITLE:** Liberal Arts Mathematics 1  
**COURSE CODE:** 1208290  
**SUBMISSION TITLE:** Thinking Mathematically, Blitzer, 5th Edition  
**BID ID:** 2234  
**PUBLISHER:** Pearson Education, Inc. publishing as Prentice Hall  
**PUBLISHER ID:** 22-1603684-03

BENCHMARK CODE	BENCHMARK	LESSONS WHERE BENCHMARK IS DIRECTLY ADDRESSED IN-DEPTH IN MAJOR TOOL (Include page numbers of lesson, a link to lesson, or other identifier for easy lookup by reviewers.)
LACC.910.RST.1.3:	Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks, attending to special cases or exceptions defined in the text.	This standard is met throughout the text. See the following: <b>SE/TE:</b> 14, 26, 90, 127, 165, 179, 203, 232, 234, 241, 244-246, 251-252, 255, 502-505, 625-627
LACC.910.RST.2.4:	Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 9–10 texts and topics.	This standard is met throughout the text. See the following: <b>SE/TE:</b> 3, 7, 46-48, 50-52, 57-58, 68-69, 105, 143, 151, 153, 164, 229-230, 240, 250, 265
LACC.910.RST.3.7:	Translate quantitative or technical information expressed in words in a text into visual form (e.g., a table or chart) and translate information expressed visually or mathematically (e.g., in an equation) into words.	This standard is met throughout the text. See the following: <b>SE/TE:</b> 308, 310, 315-316, 317, 323-324, 326-327, 329-331, 331-341, 359-361, 363-364, 372-376, 381-382, 390-393, 403-404, 406-407

BENCHMARK CODE	BENCHMARK	LESSONS WHERE BENCHMARK IS DIRECTLY ADDRESSED IN-DEPTH IN MAJOR TOOL (Include page numbers of lesson, a link to lesson, or other identifier for easy lookup by reviewers.)
LACC.910.SL.1.1:	<p>Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 9–10 topics, texts, and issues, building on others’ ideas and expressing their own clearly and persuasively.</p> <ul style="list-style-type: none"> <li>a. Come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas.</li> <li>b. Work with peers to set rules for collegial discussions and decision-making (e.g., informal consensus, taking votes on key issues, presentation of alternate views), clear goals and deadlines, and individual roles as needed.</li> <li>c. Propel conversations by posing and responding to questions that relate the current discussion to broader themes or larger ideas; actively incorporate others into the discussion; and clarify, verify, or challenge ideas and conclusions.</li> <li>d. Respond thoughtfully to diverse perspectives, summarize points of agreement and disagreement, and, when warranted, qualify or justify their own views and understanding and make new connections in light of the evidence and reasoning presented.</li> </ul>	<p>These standards are met throughout the text. See the following:  <b>SE/TE:</b> 12, 25, 37, 64, 87, 97, 122, 201, 263, 341, 422, 468, 518, 593, 658</p>
LACC.910.SL.1.2:	<p>Integrate multiple sources of information presented in diverse media or formats (e.g., visually, quantitatively, orally) evaluating the credibility and accuracy of each source.</p>	<p>This standard is met throughout the text. See the following:  <b>SE/TE:</b> 25 (#78), 122 (#121), 145, 147 (#99), 156 (#51), 161, 175-177, 436 (#56), 481, 494 (#40), 681-682, 685, 699, 707, 732</p>

BENCHMARK CODE	BENCHMARK	<b>LESSONS WHERE BENCHMARK IS DIRECTLY ADDRESSED IN-DEPTH IN MAJOR TOOL</b> (Include page numbers of lesson, a link to lesson, or other identifier for easy lookup by reviewers.)
LACC.910.SL.1.3:	Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric, identifying any fallacious reasoning or exaggerated or distorted evidence.	This standard is met throughout the text. See the following: <b>SE/TE:</b> 12, 25, 37, 64, 87, 97, 122, 201, 263, 341, 422, 468, 518, 593, 658
LACC.910.SL.2.4:	Present information, findings, and supporting evidence clearly, concisely, and logically such that listeners can follow the line of reasoning and the organization, development, substance, and style are appropriate to purpose, audience, and task.	This standard is met throughout the text. See the following: <b>SE/TE:</b> 25, 37, 64, 87, 97, 122, 201, 263, 341, 422, 468, 481, 518, 593, 658
LACC.910.WHST.1.1:	Write arguments focused on discipline-specific content. <ol style="list-style-type: none"> <li>a. Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relationships among the claim(s), counterclaims, reasons, and evidence.</li> <li>b. Develop claim(s) and counterclaims fairly, supplying data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form and in a manner that anticipates the audience's knowledge level and concerns.</li> <li>c. Use words, phrases, and clauses to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.</li> <li>d. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.</li> <li>e. Provide a concluding statement or section that follows from or supports the argument presented.</li> </ol>	These standards are met throughout the text. See the following: <b>SE/TE:</b> 164-177, 178-186, 681-682, 685-686, 699, 706-707, 714-715, 726-728, 732, 735

BENCHMARK CODE	BENCHMARK	LESSONS WHERE BENCHMARK IS DIRECTLY ADDRESSED IN-DEPTH IN MAJOR TOOL (Include page numbers of lesson, a link to lesson, or other identifier for easy lookup by reviewers.)
LACC.910.WHST.2.4:	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	This standard is met throughout the text. See the following: <b>SE/TE:</b> 11, 55, 76, 110, 214, 237, 316, 382, 459, 493, 549, 607, 686, 753, 841
LACC.910.WHST.3.9:	Draw evidence from informational texts to support analysis, reflection, and research.	This standard is met throughout the text. See the following: <b>SE/TE:</b> 25, 64, 122, 177, 186, 207, 215, 237, 316 (#83), 436, 481, 593, 686, 699, 707
MA.912.F.1.1:	Explain the difference between simple and compound interest.	<b>SE/TE:</b> 454-459, 460-468, 469-472
MA.912.F.1.2:	Solve problems involving compound interest.	<b>SE/TE:</b> 460-468, 469-473, 478-480
MA.912.F.1.3:	Demonstrate the relationship between simple interest and linear growth.	<b>SE/TE:</b> 454-459
MA.912.F.1.4:	Demonstrate the relationship between compound interest and exponential growth.	<b>SE/TE:</b> 460-468
MA.912.F.2.1:	Calculate the future value of a given amount of money with and without technology.	<b>SE/TE:</b> 456-459, 461-464, 466-468, 469-473, 478-480
MA.912.F.2.2:	Calculate the present value of a certain amount of money for a given length of time in the future with and without technology.	<b>SE/TE:</b> 457, 459, 463, 466-468

<b>BENCHMARK CODE</b>	<b>BENCHMARK</b>	<b>LESSONS WHERE BENCHMARK IS DIRECTLY ADDRESSED IN-DEPTH IN MAJOR TOOL</b> (Include page numbers of lesson, a link to lesson, or other identifier for easy lookup by reviewers.)
MA.912.F.4.10:	Analyze diversification in investments.	<b>SE/TE:</b> 468-481
MA.912.F.4.11:	Purchase stock with a set amount of money, and follow the process through gains, losses, and selling.	<b>SE/TE:</b> 474-481
MA.912.F.4.12:	Compare and contrast income from purchase of common stock, preferred stock, and bonds.	<b>SE/TE:</b> 468-481
MA.912.F.4.13:	Given current exchange rates be able to convert from one form of currency to another.	This standard is outside the scope of <i>Thinking Mathematically</i> , Blitzer, 5 <sup>th</sup> edition.
MA.912.F.4.14:	Use data to compare historical rates of return on investments with investment claims to make informed decisions and identify potential fraud.	<b>SE/TE:</b> 474, 481
MA.912.F.5.1:	Demonstrate how price and quantity demanded relate, how price and quantity supplied relate, and how price changes or price controls affect distribution and allocation in the economy.	<b>SE/TE:</b> 403-404, 406-407
MA.912.F.5.2:	Use basic terms and indicators associated with levels of economic performance and the state of the economy.	<b>SE/TE:</b> 286, 289, 306

BENCHMARK CODE	BENCHMARK	LESSONS WHERE BENCHMARK IS DIRECTLY ADDRESSED IN-DEPTH IN MAJOR TOOL (Include page numbers of lesson, a link to lesson, or other identifier for easy lookup by reviewers.)
MACC.912.A-APR.1.1:	Understand that polynomials form a system analogous to the integers, namely, they are closed under the operations of addition, subtraction, and multiplication; add, subtract, and multiply polynomials.	The opportunity to address this standard is available. See the following: <b>SE/TE:</b> 310-313, 350-361, 394-404, 744-753, 753-764
MACC.912.A-CED.1.1:	Create equations and inequalities in one variable and use them to solve problems. Include equations arising from linear and quadratic functions, and simple rational and exponential functions.	<b>SE/TE:</b> 317-331, 331-341, 342-350, 350-364, 375-376, 381-382, 383, 390-393, 424-426, 428, 433-435
MACC.912.A-CED.1.2:	Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales.	<b>SE/TE:</b> 371-382, 383-393, 394-407, 408-422, 422-436
MACC.912.A-CED.1.3:	Represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret solutions as viable or nonviable options in a modeling context. For example, represent inequalities describing nutritional and cost constraints on combinations of different foods.	<b>SE/TE:</b> 317-331, 331-341, 342-350, 350-364, 371-382, 383-393, 394-407, 408-422, 422-436
MACC.912.A-CED.1.4:	Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations. For example, rearrange Ohm's law $V = IR$ to highlight resistance $R$ .	<b>SE/TE:</b> 337-338, 341

<b>BENCHMARK CODE</b>	<b>BENCHMARK</b>	<b>LESSONS WHERE BENCHMARK IS DIRECTLY ADDRESSED IN-DEPTH IN MAJOR TOOL</b> (Include page numbers of lesson, a link to lesson, or other identifier for easy lookup by reviewers.)
MACC.912.A-REI.1.1:	Explain each step in solving a simple equation as following from the equality of numbers asserted at the previous step, starting from the assumption that the original equation has a solution. Construct a viable argument to justify a solution method.	<b>SE/TE:</b> 319-328, 333, 335-338, 355-360
MACC.912.A-REI.1.2:	Solve simple rational and radical equations in one variable, and give examples showing how extraneous solutions may arise.	The opportunity to address this standard is available. See the following: <b>SE/TE:</b> 265-274, 325-327, 329-331
MACC.912.A-REI.2.3:	Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters.	<b>SE/TE:</b> 317-324, 328-331, 331-341, 342-350
MACC.912.A-REI.3.5:	Prove that, given a system of two equations in two variables, replacing one equation by the sum of that equation and a multiple of the other produces a system with the same solutions.	<b>SE/TE:</b> 398-401, 405, 407
MACC.912.A-REI.3.6:	Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables.	<b>SE/TE:</b> 394-407
MACC.912.A-REI.4.10:	Understand that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane, often forming a curve (which could be a line).	<b>SE/TE:</b> 359-360, 371-373, 375-377, 380-382, 383-393, 394-397, 401-402, 404-407, 423, 426-427, 429, 431

BENCHMARK CODE	BENCHMARK	LESSONS WHERE BENCHMARK IS DIRECTLY ADDRESSED IN-DEPTH IN MAJOR TOOL (Include page numbers of lesson, a link to lesson, or other identifier for easy lookup by reviewers.)
MACC.912.A-REI.4.11:	Explain why the x-coordinates of the points where the graphs of the equations $y = f(x)$ and $y = g(x)$ intersect are the solutions of the equation $f(x) = g(x)$ ; find the solutions approximately, e.g., using technology to graph the functions, make tables of values, or find successive approximations. Include cases where $f(x)$ and/or $g(x)$ are linear, polynomial, rational, absolute value, exponential, and logarithmic functions.	<b>SE/TE:</b> 373, 394-396, 403-404, 406
MACC.912.A-REI.4.12:	Graph the solutions to a linear inequality in two variables as a half-plane (excluding the boundary in the case of a strict inequality), and graph the solution set to a system of linear inequalities in two variables as the intersection of the corresponding half-planes.	<b>SE/TE:</b> 342-350, 408-416, 416-422
MACC.912.A-SSE.1.1:	Interpret expressions that represent a quantity in terms of its context. a. Interpret parts of an expression, such as terms, factors, and coefficients. b. Interpret complicated expressions by viewing one or more of their parts as a single entity. For example, interpret as the product of P and a factor not depending on P.	<b>SE/TE:</b> 308, 310-312, 314-316, 326-327, 333, 335-337, 342-343, 347, 351, 383, 403, 406, 417, 418, 455
MACC.912.F-IF.1.1:	Understand that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range. If $f$ is a function and $x$ is an element of its domain, then $f(x)$ denotes the output of $f$ corresponding to the input $x$ . The graph of $f$ is the graph of the equation $y = f(x)$ .	<b>SE/TE:</b> 373-382, 391, 393, 403-406, 423-425, 428-429, 433-434
MACC.912.F-IF.1.2:	Use function notation, evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of a context.	<b>SE/TE:</b> 373-382, 391, 393, 403-406, 423-425, 428-429, 433-434

BENCHMARK CODE	BENCHMARK	LESSONS WHERE BENCHMARK IS DIRECTLY ADDRESSED IN-DEPTH IN MAJOR TOOL (Include page numbers of lesson, a link to lesson, or other identifier for easy lookup by reviewers.)
MACC.912.F-IF.2.4:	For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship. Key features include: intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior; and periodicity.	<b>SE/TE:</b> 317, 323-324, 359-360, 372-373, 375-382, 384-393, 394-395, 397, 402, 404-407, 423, 426-427, 429, 431, 435
MACC.912.F-IF.2.5:	Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes. For example, if the function $h(n)$ gives the number of person-hours it takes to assemble $n$ engines in a factory, then the positive integers would be an appropriate domain for the function.	<b>SE/TE:</b> 317, 323-324, 359-360, 372-373, 375-382, 384-393, 394-395, 397, 402, 404-407, 423, 426-427, 429, 431, 435
MACC.912.F-IF.2.6:	Calculate and interpret the average rate of change of a function (presented symbolically or as a table) over a specified interval. Estimate the rate of change from a graph.	<b>SE/TE:</b> 389-393
MACC.912.G-CO.1.1:	Know precise definitions of angle, circle, perpendicular line, parallel line, and line segment, based on the undefined notions of point, line, distance along a line, and distance around a circular arc.	<b>SE/TE:</b> 533-539, 540-542, 546-549, 562-567
MACC.912.G-CO.1.3:	Given a rectangle, parallelogram, trapezoid, or regular polygon, describe the rotations and reflections that carry it onto itself.	The opportunity to address this standard is available. See the following: <b>SE/TE:</b> 550-557, 558-562, 564-567, 753-755, 757, 759, 761

<b>BENCHMARK CODE</b>	<b>BENCHMARK</b>	<b>LESSONS WHERE BENCHMARK IS DIRECTLY ADDRESSED IN-DEPTH IN MAJOR TOOL</b> (Include page numbers of lesson, a link to lesson, or other identifier for easy lookup by reviewers.)
MACC.912.G-CO.1.4:	Develop definitions of rotations, reflections, and translations in terms of angles, circles, perpendicular lines, parallel lines, and line segments.	The opportunity to address this standard is available. See the following: <b>SE/TE:</b> 533-542, 546-549, 562-567, 753-755, 757, 759, 761
MACC.912.G-CO.4.12:	Make formal geometric constructions with a variety of tools and methods (compass and straightedge, string, reflective devices, paper folding, dynamic geometric software, etc.). Copying a segment; copying an angle; bisecting a segment; bisecting an angle; constructing perpendicular lines, including the perpendicular bisector of a line segment; and constructing a line parallel to a given line through a point not on the line.	The opportunity to address this standard is available. See the following: <b>SE/TE:</b> 553-554, 556-557, 590-592
MACC.912.G-CO.4.13:	Construct an equilateral triangle, a square, and a regular hexagon inscribed in a circle.	The opportunity to address this standard is available. See the following: <b>SE/TE:</b> 542, 545, 548, 550-557, 558, 562-567
MACC.912.G-GMD.1.3:	Use volume formulas for cylinders, pyramids, cones, and spheres to solve problems.	<b>SE/TE:</b> 568-575
MACC.912.G-GMD.2.4:	Identify the shapes of two-dimensional cross-sections of three-dimensional objects, and identify three-dimensional objects generated by rotations of two-dimensional objects.	The opportunity to address this standard is available. See the following: <b>SE/TE:</b> 568-575, 586-590, 592-593
MACC.912.G-MG.1.1:	Use geometric shapes, their measures, and their properties to describe objects (e.g., modeling a tree trunk or a human torso as a cylinder).	<b>SE/TE:</b> 535, 539, 540, 542-546, 548-549, 550-552, 556-557, 559, 562-564, 566-567, 570, 574-575, 576, 579-580, 582-584, 585, 590-593

<b>BENCHMARK CODE</b>	<b>BENCHMARK</b>	<b>LESSONS WHERE BENCHMARK IS DIRECTLY ADDRESSED IN-DEPTH IN MAJOR TOOL</b> (Include page numbers of lesson, a link to lesson, or other identifier for easy lookup by reviewers.)
MACC.912.G-MG.1.2:	Apply concepts of density based on area and volume in modeling situations (e.g., persons per square mile, BTUs per cubic foot).	The opportunity to address this standard is available. See the following: <b>SE/TE:</b> 575
MACC.912.G-MG.1.3:	Apply geometric methods to solve design problems (e.g., designing an object or structure to satisfy physical constraints or minimize cost; working with typographic grid systems based on ratios).	<b>SE/TE:</b> 545-546 (Example 6), 548-549
MACC.912.G-SRT.1.2:	Given two figures, use the definition of similarity in terms of similarity transformations to decide if they are similar; explain using similarity transformations the meaning of similarity for triangles as the equality of all corresponding pairs of angles and the proportionality of all corresponding pairs of sides.	<b>SE/TE:</b> 542-544, 547-549, 590-592
MACC.912.G-SRT.1.3:	Use the properties of similarity transformations to establish the AA criterion for two triangles to be similar.	<b>SE/TE:</b> 542-544, 547-549
MACC.912.G-SRT.2.4:	Prove theorems about triangles. Theorems include: a line parallel to one side of a triangle divides the other two proportionally, and conversely; the Pythagorean Theorem proved using triangle similarity.	<b>SE/TE:</b> 542-543, 545-546
MACC.912.G-SRT.2.5:	Use congruence and similarity criteria for triangles to solve problems and to prove relationships in geometric figures.	<b>SE/TE:</b> 542-544, 547-549, 553-554, 556-557, 590-592
MACC.912.N-Q.1.1:	Use units as a way to understand problems and to guide the solution of multi-step problems; choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays.	<b>SE/TE:</b> 375, 378-379, 381, 383, 390, 404, 406, 537, 539, 544-546, 548-549, 550-552, 556-557, 559, 563-564, 566-567, 569-570, 574-575, 579-580, 582-584

<b>BENCHMARK CODE</b>	<b>BENCHMARK</b>	<b>LESSONS WHERE BENCHMARK IS DIRECTLY ADDRESSED IN-DEPTH IN MAJOR TOOL</b> (Include page numbers of lesson, a link to lesson, or other identifier for easy lookup by reviewers.)
MACC.912.N-Q.1.2:	Define appropriate quantities for the purpose of descriptive modeling.	<b>SE/TE:</b> 535, 539, 540, 542-546, 548-549, 550-552, 556-557, 559, 562-564, 566-567, 570, 574-575, 576, 579-580, 582-584, 585, 590-593
MACC.912.N-Q.1.3:	Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.	<b>SE/TE:</b> 537, 539, 544-546, 548-549, 550-552, 556-557, 559, 563-564, 566-567, 569-570, 574-575, 579-580, 582-584
MACC.912.S-ID.1.1:	Represent data with plots on the real number line (dot plots, histograms, and box plots).	<b>SE/TE:</b> 645-646, 656, 679, 681, 684-686, 693, 697-698, 700, 702, 704-705, 707-710, 712, 714, 716-719, 726-727, 729-730, 732-734
MACC.912.S-ID.1.2:	Use statistics appropriate to the shape of the data distribution to compare center (median, mean) and spread (interquartile range, standard deviation) of two or more different data sets.	<b>SE/TE:</b> 687-699, 699-707
MACC.912.S-ID.1.3:	Interpret differences in shape, center, and spread in the context of the data sets, accounting for possible effects of extreme data points (outliers).	<b>SE/TE:</b> 645-646, 656, 679, 681, 684-686, 693, 697-698, 700, 702, 704-705, 707-710, 712, 714, 716-719, 721-724, 726-727, 729-730, 732-734
MACC.912.S-ID.1.4:	Use the mean and standard deviation of a data set to fit it to a normal distribution and to estimate population percentages. Recognize that there are data sets for which such a procedure is not appropriate. Use calculators, spreadsheets, and tables to estimate areas under the normal curve.	<b>SE/TE:</b> 687-699, 699-707, 707-719, 720-725

BENCHMARK CODE	BENCHMARK	LESSONS WHERE BENCHMARK IS DIRECTLY ADDRESSED IN-DEPTH IN MAJOR TOOL (Include page numbers of lesson, a link to lesson, or other identifier for easy lookup by reviewers.)
MACC.K12.MP.1.1:	<p>Make sense of problems and persevere in solving them.</p> <p>Mathematically proficient students start by explaining to themselves the meaning of a problem and looking for entry points to its solution. They analyze givens, constraints, relationships, and goals. They make conjectures about the form and meaning of the solution and plan a solution pathway rather than simply jumping into a solution attempt. They consider analogous problems, and try special cases and simpler forms of the original problem in order to gain insight into its solution. They monitor and evaluate their progress and change course if necessary. Older students might, depending on the context of the problem, transform algebraic expressions or change the viewing window on their graphing calculator to get the information they need. Mathematically proficient students can explain correspondences between equations, verbal descriptions, tables, and graphs or draw diagrams of important features and relationships, graph data, and search for regularity or trends. Younger students might rely on using concrete objects or pictures to help conceptualize and solve a problem. Mathematically proficient students check their answers to problems using a different method, and they continually ask themselves, “Does this make sense?” They can understand the approaches of others to solving complex problems and identify correspondences between different approaches.</p>	<p>This standard is met throughout the text. See the following:  <b>SE/TE:</b> 26-36, 85-87, 136-137, 248-249, 290-291, 329-330, 406-407, 467-468, 525-526, 548-549, 606-607, 717-719, 763-764, 801-803, 839-841</p>

BENCHMARK CODE	BENCHMARK	<b>LESSONS WHERE BENCHMARK IS DIRECTLY ADDRESSED IN-DEPTH IN MAJOR TOOL</b> (Include page numbers of lesson, a link to lesson, or other identifier for easy lookup by reviewers.)
MACC.K12.MP.2.1:	Reason abstractly and quantitatively. Mathematically proficient students make sense of quantities and their relationships in problem situations. They bring two complementary abilities to bear on problems involving quantitative relationships: the ability to decontextualize—to abstract a given situation and represent it symbolically and manipulate the representing symbols as if they have a life of their own, without necessarily attending to their referents—and the ability to contextualize, to pause as needed during the manipulation process in order to probe into the referents for the symbols involved. Quantitative reasoning entails habits of creating a coherent representation of the problem at hand; considering the units involved; attending to the meaning of quantities, not just how to compute them; and knowing and flexibly using different properties of operations and objects.	This standard is met throughout the text. See the following: <b>SE/TE:</b> 2-12, 87, 156, 207, 237, 330-331, 407, 454, 518, 567, 614-615, 686, 753, 780, 841

BENCHMARK CODE	BENCHMARK	LESSONS WHERE BENCHMARK IS DIRECTLY ADDRESSED IN-DEPTH IN MAJOR TOOL (Include page numbers of lesson, a link to lesson, or other identifier for easy lookup by reviewers.)
MACC.K12.MP.3.1:	<p>Construct viable arguments and critique the reasoning of others.</p> <p>Mathematically proficient students understand and use stated assumptions, definitions, and previously established results in constructing arguments. They make conjectures and build a logical progression of statements to explore the truth of their conjectures. They are able to analyze situations by breaking them into cases, and can recognize and use counterexamples. They justify their conclusions, communicate them to others, and respond to the arguments of others. They reason inductively about data, making plausible arguments that take into account the context from which the data arose. Mathematically proficient students are also able to compare the effectiveness of two plausible arguments, distinguish correct logic or reasoning from that which is flawed, and—if there is a flaw in an argument—explain what it is. Elementary students can construct arguments using concrete referents such as objects, drawings, diagrams, and actions. Such arguments can make sense and be correct, even though they are not generalized or made formal until later grades. Later, students learn to determine domains to which an argument applies. Students at all grades can listen or read the arguments of others, decide whether they make sense, and ask useful questions to clarify or improve the arguments.</p>	<p>This standard is met throughout the text. See the following:  <b>SE/TE:</b> 12, 25, 37, 64, 87, 97, 122, 201, 263, 341, 422, 468, 593, 699, 735</p>

BENCHMARK CODE	BENCHMARK	LESSONS WHERE BENCHMARK IS DIRECTLY ADDRESSED IN-DEPTH IN MAJOR TOOL (Include page numbers of lesson, a link to lesson, or other identifier for easy lookup by reviewers.)
MACC.K12.MP.4.1:	<p>Model with mathematics.</p> <p>Mathematically proficient students can apply the mathematics they know to solve problems arising in everyday life, society, and the workplace. In early grades, this might be as simple as writing an addition equation to describe a situation. In middle grades, a student might apply proportional reasoning to plan a school event or analyze a problem in the community. By high school, a student might use geometry to solve a design problem or use a function to describe how one quantity of interest depends on another. Mathematically proficient students who can apply what they know are comfortable making assumptions and approximations to simplify a complicated situation, realizing that these may need revision later. They are able to identify important quantities in a practical situation and map their relationships using such tools as diagrams, two-way tables, graphs, flowcharts and formulas. They can analyze those relationships mathematically to draw conclusions. They routinely interpret their mathematical results in the context of the situation and reflect on whether the results make sense, possibly improving the model if it has not served its purpose.</p>	<p>This standard is met throughout the text. See the following:  <b>SE/TE:</b> 13-25, 85-87, 136-137, 248-249, 290-291, 329-330, 406-407, 467-468, 525-526, 548-549, 606-607, 717-719, 763-764, 801-803, 839-841</p>

BENCHMARK CODE	BENCHMARK	LESSONS WHERE BENCHMARK IS DIRECTLY ADDRESSED IN-DEPTH IN MAJOR TOOL (Include page numbers of lesson, a link to lesson, or other identifier for easy lookup by reviewers.)
MACC.K12.MP.5.1:	<p>Use appropriate tools strategically. Mathematically proficient students consider the available tools when solving a mathematical problem. These tools might include pencil and paper, concrete models, a ruler, a protractor, a calculator, a spreadsheet, a computer algebra system, a statistical package, or dynamic geometry software. Proficient students are sufficiently familiar with tools appropriate for their grade or course to make sound decisions about when each of these tools might be helpful, recognizing both the insight to be gained and their limitations. For example, mathematically proficient high school students analyze graphs of functions and solutions generated using a graphing calculator. They detect possible errors by strategically using estimation and other mathematical knowledge. When making mathematical models, they know that technology can enable them to visualize the results of varying assumptions, explore consequences, and compare predictions with data. Mathematically proficient students at various grade levels are able to identify relevant external mathematical resources, such as digital content located on a website, and use them to pose or solve problems. They are able to use technological tools to explore and deepen their understanding of concepts.</p>	<p>This standard is met throughout the text. See the following:  <b>SE/TE:</b> 205-206, 245, 249, 289, 292, 504, 516, 523, 534, 537, 568-572, 580, 587-588, 702, 729</p>

BENCHMARK CODE	BENCHMARK	<b>LESSONS WHERE BENCHMARK IS DIRECTLY ADDRESSED IN-DEPTH IN MAJOR TOOL</b> (Include page numbers of lesson, a link to lesson, or other identifier for easy lookup by reviewers.)
MACC.K12.MP.6.1:	Attend to precision. Mathematically proficient students try to communicate precisely to others. They try to use clear definitions in discussion with others and in their own reasoning. They state the meaning of the symbols they choose, including using the equal sign consistently and appropriately. They are careful about specifying units of measure, and labeling axes to clarify the correspondence with quantities in a problem. They calculate accurately and efficiently, express numerical answers with a degree of precision appropriate for the problem context. In the elementary grades, students give carefully formulated explanations to each other. By the time they reach high school they have learned to examine claims and make explicit use of definitions.	This standard is met throughout the text. See the following: <b>SE/TE:</b> 13-18, 111-120, 282-291, 341 (#79), 422-428, 444-452, 460-465, 468-473, 482-491, 505, 534, 563-564, 642-644, 701-703, 727-731

BENCHMARK CODE	BENCHMARK	LESSONS WHERE BENCHMARK IS DIRECTLY ADDRESSED IN-DEPTH IN MAJOR TOOL (Include page numbers of lesson, a link to lesson, or other identifier for easy lookup by reviewers.)
MACC.K12.MP.7.1:	<p>Look for and make use of structure. Mathematically proficient students look closely to discern a pattern or structure. Young students, for example, might notice that three and seven more is the same amount as seven and three more, or they may sort a collection of shapes according to how many sides the shapes have. Later, students will see <math>7 \times 8</math> equals the well remembered <math>7 \times 5 + 7 \times 3</math>, in preparation for learning about the distributive property. In the expression <math>x^2 + 9x + 14</math>, older students can see the 14 as <math>2 \times 7</math> and the 9 as <math>2 + 7</math>. They recognize the significance of an existing line in a geometric figure and can use the strategy of drawing an auxiliary line for solving problems. They also can step back for an overview and shift perspective. They can see complicated things, such as some algebraic expressions, as single objects or as being composed of several objects. For example, they can see <math>5 - 3(x - y)^2</math> as 5 minus a positive number times a square and use that to realize that its value cannot be more than 5 for any real numbers <math>x</math> and <math>y</math>.</p>	<p>This standard is met throughout the text. See the following:  <b>SE/TE:</b> 2-12, 65-76, 104-110, 194-200, 275-281, 308-316, 394-407, 460-467, 502-510, 584-593, 621-629, 725-735, 744-752, 753-763, 820-829</p>

BENCHMARK CODE	BENCHMARK	LESSONS WHERE BENCHMARK IS DIRECTLY ADDRESSED IN-DEPTH IN MAJOR TOOL (Include page numbers of lesson, a link to lesson, or other identifier for easy lookup by reviewers.)
MACC.K12.MP.8.1:	<p>Look for and express regularity in repeated reasoning.</p> <p>Mathematically proficient students notice if calculations are repeated, and look both for general methods and for shortcuts. Upper elementary students might notice when dividing 25 by 11 that they are repeating the same calculations over and over again, and conclude they have a repeating decimal. By paying attention to the calculation of slope as they repeatedly check whether points are on the line through (1, 2) with slope 3, middle school students might abstract the equation <math>(y - 2)/(x - 1) = 3</math>. Noticing the regularity in the way terms cancel when expanding <math>(x - 1)(x + 1)</math>, <math>(x - 1)(x^2 + x + 1)</math>, and <math>(x - 1)(x^3 + x^2 + x + 1)</math> might lead them to the general formula for the sum of a geometric series. As they work to solve a problem, mathematically proficient students maintain oversight of the process, while attending to the details. They continually evaluate the reasonableness of their intermediate results.</p>	<p>This standard is met throughout the text. See the following:  <b>SE/TE:</b> 4-9, 203-206, 208-212, 231-235, 253-256, 292-301, 351, 423, 427, 433, 460, 484-486, 553-554, 610-611, 616-619</p>