

MATH *Connections*[®]

Correlation
Florida Department of Education
Instructional Materials Correlation
Course Standards

Subject: Mathematics

Grade Level: 9–12

Course Title: Algebra 1

Course Code: 1200310

Submission Title:

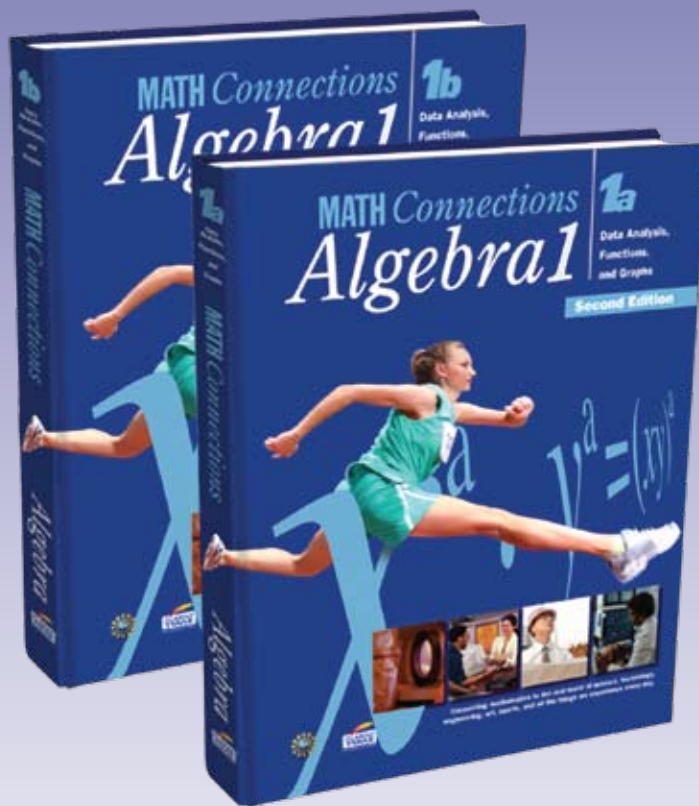
MATH Connections:

Algebra 1, volumes a & b

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www.its-about-time.com

Benchmark Code	Benchmark	Pages or locations where benchmark is directly addressed in major tool	In-Depth / Mentioned
LA.910.1.6.1	The student will use new vocabulary that is introduced and taught directly;	Book 1a: 3, 4, 6, 14, 20, 38, 50, 51, 59, 64, 84, 87, 90, 109, 117, 132, 152, 195, 203, 216, 220, 222, 223, 231, 239, 240, 242, 278, 279, 280, 281, 282, 283, 291, 294, 316, 317, 324, 334, 338, 339, 340, 347, 357, 358, 359, 360 Book 1b: 374, 426, 427, 428, 437, 453, 492, 503, 544, 545, 548, 554, 560, 566, 567, 571, 575, 584, 598, 642, 645, 646, 649, 659, 667, 668	I
LA.910.1.6.2	The student will listen to, read, and discuss familiar and conceptually challenging text;	Prevalent throughout. Some examples: Book 1a: 84, 292, 327, 340, 345, 346 Book 1b: 399, 428, 437, 475, 476, 571, 584	I
LA.910.1.6.5	The student will relate new vocabulary to familiar words;	Book 1a: 3, 4, 6, 14, 16, 20, 24, 35, 36, 38, 44, 54, 59, 63, 64, 79, 80, 87, 90, 95, 97, 99, 100, 108, 109, 110, 120, 152, 186, 189, 190, 195, 197, 203, 216, 220, 222, 223, 229, 230, 239, 240, 242, 303, 307, 324 Book 1b: 426, 427, 428, 453, 496, 503, 535, 539, 541, 545, 566, 567, 620, 642, 645, 659, 667, 668	I
LA.910.3.1.3	The student will prewrite by using organizational strategies and tools (e.g., technology, spreadsheet, outline, chart, table, graph, Venn Diagram, web, story map, plot pyramid) to develop a personal organizational style.	Book 1a: 6, 13, 14, 32, 46, 115, 307, 338, 340, 345, 346 Book 1b: 399, 428, 437 - 559, 571, 584 455 - 457, 460, 465, 466	I
MA.912.A.1.8	Use the zero product property of real numbers in a variety of contexts to identify solutions to equations.	In-depth: Book 1b: 644, 647, 651, 652, 658 - 660, 663 Mentioned: Book 1a: 109, 110, 115	I/M
MA.912.A.2.3	Describe the concept of a function, use function notation, determine whether a given relation is a function, and link equations to functions.	Book 1b: 425 - 524, 615 - 676	I
MA.912.A.2.4	Determine the domain and range of a relation.	Book 1b: pp. 427 - 438, 441, 446, 452, 453, 461, 471, 509, 510, 636	I
MA.912.A.2.13	Solve real-world problems involving relations and functions.	Book 1b: 426 - 440, 447 - 450, 454 - 470, 474 - 405, 508, 509	I
MA.912.A.3.1	Solve linear equations in one variable that include simplifying algebraic expressions.	Book 1a: 112 - 117, 148, 149, 153 - 158, 229 - 245, 247, 250, 254 - 265, 305 - 316, 350 Book 1b: 394 - 399, 414, 415, 536	I
MA.912.A.3.2	Identify and apply the distributive, associative, and commutative properties of real numbers and the properties of equality.	Book 1a: 81, 95 - 112, 117, 122 Book 1b: 389 - 391, 483, 497, 502, 503, 505, 512, 619, 621	I
MA.912.A.3.3	Solve literal equations for a specified variable.	In-depth: Book 1a: 255 - 258 Book 1b: 389 - 392, 404 - 407, 416, 477, 646, 655 - 657, 663 Mentioned: Book 1a: 115, 213, 233	I/M
MA.912.A.3.4	Solve and graph simple and compound inequalities in one variable and be able to justify each step in a solution.	Book 1a: 170 - 180, 196 - 202, 266 Book 1b: 601 - 612	I
MA.912.A.3.5	Symbolically represent and solve multi-step and real-world applications that involve linear equations and inequalities.	Book 1a: 112 - 117, 148, 149, 155, 156, 232 - 234, 240 - 245, 250, 254, 305 - 316, 350 Book 1b: 394 - 399, 414, 415	I
MA.912.A.3.7	Rewrite equations of a line into slope-intercept form and standard form.	Book 1a: 233 - 235, 256 - 258, 264, 265 Book 1b: 386 - 393, 405, 416	I

Benchmark Code	Benchmark	Pages or locations where benchmark is directly addressed in major tool	In-Depth / Mentioned
MA.912.A.3.8	Graph a line given any of the following information: a table of values, the x- and y-intercepts, two points, the slope and a point, the equation of the line in slope-intercept form, standard form, or point-slope form .	Book 1a: 211- 233, 238, 243 - 247, 251, 252, 263, 267 - 276, 320, 321, 333, 338, 357 - 360 Book 1b: 375 - 416	I
MA.912.A.3.9	Determine the slope, x-intercept, and y-intercept of a line given its graph, its equation, or two points on the line.	Book 1a: 207 - 225, 228 230 - 255, 263 - 265, 274, 276, 280, 306, 310, 311, 314, 322, 328, 354 Book 1b: 384, 391, 393 - 400, 405, 416, 471, 473, 476, 510	I
MA.912.A.3.10	Write an equation of a line given any of the following information: two points on the line, its slope and one point on the line, or its graph. Also, find an equation of a new line parallel to a given line, or perpendicular to a given line, through a given point on the new line.	Book 1a: 207 - 211, 223 - 225, 230 - 235, 243 - 247, 250 -254, 263 - 265, 280, 306, 310, 311, 314, 322, 328, 354 Book 1b: 384, 391, 393 - 400, 405, 416, 471, 473, 476, 510	I
MA.912.A.3.11	Write an equation of a line that models a data set, and use the equation or the graph to make predictions. Describe the slope of the line in terms of the data, recognizing that the slope is the rate of change.	Book 1a: 305 - 314, 323 - 346 Book 1b: 408 - 412, 455, 456	I
MA.912.A.3.12	Graph a linear equation or inequality in two variables with and without graphing technology. Write an equation or inequality represented by a given graph.	Book 1a: 211- 233, 238, 243 - 247, 251, 252, 263, 267 - 276, 320, 321, 333, 338, 357 - 360 Book 1b: 375 - 416	I
MA.912.A.3.13	Use a graph to approximate the solution of a system of linear equations or inequalities in two variables with and without technology.	Book 1b: 378 - 400, 406, 407, 411	I
MA.912.A.3.14	Solve systems of linear equations and inequalities in two and three variables using graphical, substitution, and elimination methods.	Book 1b: 377 - 387, 393, 398, 407, 411 - 422	I
MA.912.A.3.15	Solve real-world problems involving systems of linear equations and inequalities in two and three variables.	In-depth: Book 1b: 368, 369, 375 - 393, 401, 402, 406, 407, 414 - 422 Mentioned: Book 1a: 88	I/M
MA.912.A.4.1	Simplify monomials and monomial expressions using the laws of integral exponents.	Book 1a: 135 – 144, 147	I
MA.912.A.4.2	Add, subtract, and multiply polynomials.	Book 1a: 144 Book 1b: 617 – 623, 647, 650, 664, 666, 678 - 680	I
MA.912.A.4.3	Factor polynomial expressions.	Book 1b: 623, 645 - 652, 658, 660, 663, 677, 678, 681,682	I
MA.912.A.4.4	Divide polynomials by monomials and polynomials with various techniques, including synthetic division.	Book 1a: 144 Book 1b: 657	I
MA.912.A.5.1	Simplify algebraic ratios.	Book 1a: 138 – 140, 144, 158 - 161	I
MA.912.A.5.4	Solve algebraic proportions.	Book 1b: 512 - 515	I
MA.912.A.6.1	Simplify radical expressions	Book 1b: 372, 373, 649, 657 - 661, 663 - 665	M
MA.912.A.6.2	Add, subtract, multiply, and divide radical expressions (square roots and higher).	Book 1a: 165 - 166 Book 1b: 372, 373, 649, 657 - 661, 663 - 665	I
MA.912.A.7.1	Graph quadratic equations with and without graphing technology.	In-depth: Book 1b: 627 - 643, 652, 655, 664 - 666, 669, 669 - 675 Mentioned: Book 1a: 221, 225	I/M

Benchmark Code	Benchmark	Pages or locations where benchmark is directly addressed in major tool	In-Depth / Mentioned
MA.912.A.7.2	Solve quadratic equations over the real numbers by factoring and by using the quadratic formula.	In-depth: Book 1b: 644 - 665 Mentioned: Book 1a: 110, 115	I
MA.912.A.7.8	Use quadratic equations to solve real-world problems.	Book 1b: 647, 648, 652, 653, 661, 664 - 666	I
MA.912.A.7.10	Use graphing technology to find approximate solutions of quadratic equations.	Book 1b: 634, 639, 641 - 643, 646 - 649, 659, 681	I
MA.912.A.10.1	Use a variety of problem-solving strategies, such as drawing a diagram, making a chart, guessing- and-checking, solving a simpler problem, writing an equation, working backwards, and creating a table.	Book 1a: 4, 5, 16, 17, 21, 26, 27, 57, 59, 60, 81, 85, 90, 91, 105, 204, 205, 208 - 214, 216, 226, 228, 232, 234, 236, 243, 244, 251, 289, 292, 307, 324 Book 1b: 364 - 373, 384, 401, 452, 459, 481, 482, 487, 494, 528, 547, 548, 557, 564, 572, 587 - 589	I
MA.912.A.10.2	Decide whether a solution is reasonable in the context of the original situation.	Book 1a: 12, 38, 41, 42, 48, 67, 111, 127, 166, 172, 200, 205, 244, 250, 289, 291, 306, 334, 335, 338, 342 Book 1b: 366, 371, 372, 442, 453, 455, 456, 473, 490, 491, 547, 549, 556, 574 - 576, 577, 620, 645, 658	I
MA.912.A.10.3	Decide whether a given statement is always, sometimes, or never true (statements involving linear or quadratic expressions, equations, or inequalities, rational or radical expressions, or logarithmic or exponential functions).	Book 1a: 23, 34, 55 Book 1b: 435, 549, 567, 617, 618, 633, 646	M
MA.912.D.7.1	Perform set operations such as union and intersection, complement, and cross product.	Book 1b: 538 - 549, 568 - 571, 576, 588, 589, 601 - 612, 685, 686	I
MA.912.D.7.2	Use Venn diagrams to explore relationships and patterns and to make arguments about relationships between sets.	Book 1b: 538 - 548, 569 - 571, 588, 589	I
MA.912.G.1.4	Use coordinate geometry to find slopes, parallel lines, perpendicular lines, and equations of lines.	Book 1a: 193, 202, 207 - 228, 230 - 255, 263 - 265, 274, 276, 280, 306, 310, 311, 328 Book 1b: 384, 391, 393, 395, 397, 405, 471, 473, 476, 479	I

OVERALL INSTRUCTIONAL QUALITY The major tool introduces and builds mathematical concepts as a coherent whole. It provides opportunities to students to explore why a mathematical idea is important and in which contexts that mathematical idea can be useful. In other words, the major tool helps students learn the mathematics concepts in depth. Additionally, students are given opportunities to connect conceptual knowledge with procedural knowledge and factual knowledge. Overall, there is an appropriate balance of skill development and conceptual understanding.	IDENTIFY AN EXAMPLE (WITH PAGE NUMBERS OR LOCATION) DEEMED TYPICAL OF THE APPROACH TAKEN IN THE MAJOR TOOL. The Examples can be from Student or Teacher Instructional Material. Slope: Book 1a: 204 - 214
Tasks are engaging and interesting enough that students want to pursue them. Real world problems are realistic and relevant to students' lives.	Functions introduction: Book 1b: 425 - 437
Problem solving is encouraged by the tasks presented to students. Tasks require students to make decisions, determine strategies, and justify solutions.	Graphing lines: Book 1a: 216 - 214
Tasks engage students in communicating mathematical ideas by writing, explaining, drawing, using symbols, talking, listening, and reading for information. Tasks encourage collaboration, discussion, individual accountability, and positive interdependence.	Algorithms and tree diagrams: Book 1b: 363 - 367
Students are given opportunities to create and use representations to organize, record, and communicate their thinking. Tasks promote use of multiple representations and translations among them. Students use a variety of tools to understand a single concept.	Systems of equations: Book 1b: 369, 375 - 380, 386, 401
The mathematics connects to other disciplines such as reading, art, science, and history. Tasks represent mathematical ideas as interconnected and building upon each other.	Book 1a: 246, 247, 292 - 301, 333 - 339 Book 1b: 474 - 480
Tasks require students to make conjectures, justify their thinking, defend their responses by using mathematical arguments, and prove mathematical statements. Students are encouraged to invent and justify solution methods. Students analyze correct and incorrect solution methods.	Simulations: Book 1b: 577 - 584