



Algebra 2

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STANDARDS	PAGE REFERENCES
Grade 7	
I. MATHEMATICAL REASONING	
<p>Apply skills of mathematical representation, communication and reasoning throughout the remaining four content strands.</p>	<p>This standard can be met throughout the textbook. Specific examples are found on the following pages:</p> <p>Student Edition: 81 Example 3, 140-141 Example 3, 217 Example 2, 236 Example 1, 390 #53, 467-468 Example 4, 506 #62, 570-571 Example 4, 608 #49, 827 #40, 845 #39</p> <p><i>Graphing Calculator Lab</i> 92-94, 252, 551 <i>Standardized Test Practice</i> 338 #58, 836 #48</p> <p>Teacher Wraparound Edition: A 283; AA 111; DI 25; PAP 338</p>
III. PATTERNS, FUNCTIONS AND ALGEBRA	
A. Patterns and Functions	
<p>Demonstrate an understanding of rate of change graphically and numerically.</p>	<p>Student Edition: 71-77, 597 #50, 655 #69-#70 <i>Mid-Chapter Quiz</i> 85 #15-#16 <i>Standardized Test Practice</i> 113 #11c <i>Study Guide and Review</i> 108 2-3</p> <p>Teacher Wraparound Edition: AE 72-74</p>

STANDARDS	PAGE REFERENCES
B. Algebra (Algebraic Thinking)	
<p>Apply arithmetic operations in the correct order to generate equivalent algebraic expressions and to solve simple formulas in real-world and mathematical problems.</p>	<p>Student Edition: 14 Example 5, 21 Example 6, 48 #68-#69, 312-317, 321-324, 325-330, 442-449, 451-452 Examples 3-5 <i>Practice Test</i> 379 #1-#6, 493 #1-#6 <i>Standardized Test Practice</i> 380 #1, #4-#6 <i>Study Guide and Review</i> 50-51 #23-#25, #35-#39, 375, 490</p> <p>Teacher Wraparound Edition: AE 21 #6, 313-315, 326-327, 443-446, 452</p>
IV. DATA ANALYSIS, STATISTICS AND PROBABILITY	
A. Data and Statistics	
<p>Represent data and use various measures associated with data to draw conclusions and identify trends.</p>	<p>Student Edition: 86-91, 162-163 Example 1, 717-723 <i>Algebra Lab</i> 734 <i>Graphing Calculator Lab</i> 92-94, 252, 346-347, 518-519 <i>Standardized Test Practice</i> 752 #1-#3 <i>Study Guide and Review</i> 109, 748 12-6</p> <p>Teacher Wraparound Edition: AE 87-88, 163 #1, 718; PAP 91</p>
B. Probability	
<p>Calculate and express probabilities numerically and apply probability concepts to solve real-world and mathematical problems.</p>	<p>Student Edition: 697-702, 703-709, 710-715, 735-739 <i>Mid-Chapter Quiz</i> 716 #9-#21 <i>Practice Test</i> 751 #10-#11, #14, #16-#20 <i>Standardized Test Practice</i> 752-753 #4-#5, #12c <i>Study Guide and Review</i> 746 12-3, 747, 749 12-9</p> <p>Teacher Wraparound Edition: A 709, 739; AE 698-699, 704-706, 711-712, 736; DI 736; PAP 702, 707</p>

STANDARDS	PAGE REFERENCES
Grade 8	
I. MATHEMATICAL REASONING	
<p>Apply skills of mathematical representation, communication and reasoning throughout the remaining four content strands.</p>	<p>This standard can be met throughout the textbook. Specific examples are found on the following pages:</p> <p>Student Edition: 81 Example 3, 140-141 Example 3, 217 Example 2, 236 Example 1, 390 #53, 467-468 Example 4, 506 #62, 570-571 Example 4, 608 #49, 827 #40, 845 #39</p> <p><i>Graphing Calculator Lab</i> 92-94, 252, 551</p> <p><i>Standardized Test Practice</i> 338 #58, 836 #48</p> <p>Teacher Wraparound Edition: A 283; AA 111; DI 25; PAP 338</p>
II. NUMBER SENSE, COMPUTATION AND OPERATIONS	
A. Number Sense	
<p>Use rational and irrational numbers, represented in a variety of ways, to quantify information and to solve real-world and mathematical problems.</p>	<p>This standard can be met throughout the textbook. Specific examples are found on the following pages:</p> <p>Student Edition: 11-17, 138-144, 402-406, 408-414, 415-421, 465-471, 509-517, 544-549, 848-852</p> <p><i>Graphing Calculator Lab</i> 252, 346-347</p> <p>Teacher Wraparound Edition: AE 12-15, 139-140, 403-404, 409-412, 416-418, 466-467, 512-514, 545-547, 849-850</p>
B. Computation and Operation	
<p>Compute fluently and make reasonable estimates with rational and irrational numbers in real-world and mathematical problems. Understand the meanings of the basic operations, including the use of integer exponents and nth roots, and how the operations relate to one another. Appropriately use calculators and other technologies to solve problems.</p>	<p>Student Edition: 6-10, 315 Example 5, 402-406, 408-414, 500 Example 3</p> <p><i>Prerequisite Skill</i> 641 #66-#68, 709 #62-#67, 846 #54-#57</p> <p><i>Quick Check</i> 5 #1-#12, #14-#22</p> <p><i>Standardized Test Practice</i> 55 #11</p> <p><i>Study Guide and Review</i> 50 1-1, 432 7-4, 433 7-5</p> <p>Teacher Wraparound Edition: AE 7-8, 403-404, 409-412; PAP 10</p>

STANDARDS	PAGE REFERENCES
<p>III. PATTERNS, FUNCTIONS AND ALGEBRA</p>	
<p>A. Patterns and Functions</p>	
<p>Understand and describe progressions. Use graphs and tables to solve real-world and mathematical problems.</p>	<p>Student Edition: 622-628, 629-635, 636-641, 643-649, 650-655, 658-662 <i>Algebra Lab</i> 663 <i>Spreadsheet Lab</i> 657 <i>Study Guide and Review</i> 675-677 Teacher Wraparound Edition: A 628, 649; AE 623-625, 630-632, 637-638, 644-646, 651-652, 659-660; PAP 628, 635, 641</p>
<p>B. Algebra (Algebraic Thinking)</p>	
<p>Use algebraic operations to generate equivalent expressions, and use proportional reasoning to solve real-world and mathematical problems. Demonstrate the ability to manipulate an equation by applying arithmetic operations to both sides to maintain equivalence.</p>	<p>Student Edition: 14 Example 5, 21 Examples 6-7, 23-25 #13-#15, #37-#41, #50-#51, #68, 321-324, 325-330, 442-449, 451-452 Examples 3-5, 465-471 <i>Standardized Test Practice</i> 54 #6, 64 #60, 380 #1, #4-#6 <i>Study Guide and Review</i> 50-51 #23-#25, #35-#39, 375 6-2 and 6-3, 490 Teacher Wraparound Edition: A 471; AE 21 #6, 326-327, 443-446, 452, 466-467</p>
<p>IV. DATA ANALYSIS, STATISTICS AND PROBABILITY</p>	
<p>A. Data and Statistics</p>	
<p>Represent data and use various measures associated with data to draw conclusions and identify trends.</p>	<p>Student Edition: 86-91, 162-163 Example 1, 717-723, 724-728, 729-733 <i>Algebra Lab</i> 734 <i>Graphing Calculator Lab</i> 92-94, 252, 346-347, 518-519 <i>Study Guide and Review</i> 109, 748, 749 12-8 Teacher Wraparound Edition: AE 87-88, 718, 725, 730-731; PAP 91, 723</p>

STANDARDS	PAGE REFERENCES
B. Probability	
<p>Calculate and express probabilities numerically and apply probability concepts to solve real-world and mathematical problems.</p>	<p>Student Edition: 697-702, 703-709, 710-715, 735-739 <i>Mid-Chapter Quiz</i> 716 #9-#21 <i>Practice Test</i> 751 #10-#11, #14, #16-#20 <i>Standardized Test Practice</i> 752-753 #4-#5, #12c <i>Study Guide and Review</i> 746 12-3, 747, 749 12-9</p> <p>Teacher Wraparound Edition: A 709, 739; AE 698-699, 704-706, 711-712, 736; DI 736; PAP 702, 707</p>
Grades 9, 10, 11	
I. MATHEMATICAL REASONING	
<p>Apply skills of mathematical representation, communication and reasoning throughout the remaining three content strands.</p>	<p>This standard can be met throughout the textbook. Specific examples are found on the following pages:</p> <p>Student Edition: 81 Example 3, 140-141 Example 3, 217 Example 2, 236 Example 1, 390 #53, 467-468 Example 4, 506 #62, 570-571 Example 4, 608 #49, 827 #40, 845 #39</p> <p><i>Graphing Calculator Lab</i> 92-94, 252, 551 <i>Standardized Test Practice</i> 338 #58, 836 #48</p> <p>Teacher Wraparound Edition: A 283; AA 111; DI 25; PAP 338</p>
II. NUMBER SENSE, COMPUTATION AND OPERATIONS	
A. Number Sense	
<p>Use real numbers, represented in a variety of ways, to quantify information and to solve real-world and mathematical problems.</p>	<p>This standard can be met throughout the textbook. Specific examples are found on the following pages:</p> <p>Student Edition: 11-17, 138-144, 402-406, 408-414, 415-421, 465-471, 509-517, 544-549, 848-852</p> <p><i>Graphing Calculator Lab</i> 252, 346-347</p> <p>Teacher Wraparound Edition: AE 12-15, 139-140, 403-404, 409-412, 416-418, 466-467, 512-514, 545-547, 849-850</p>

STANDARDS	PAGE REFERENCES
B. Computation and Operation	
<p>Appropriately use calculators and other technologies to solve algebraic, geometric, probabilistic and statistical problems.</p>	<p>Student Edition: 297 Example 4, 404 Study Tip, 458 Example 1, 500-501 Example 3 <i>Graphing Calculator</i> 214, 448, 516 <i>Graphing Calculator Lab</i> 92-94, 293, 346-347, 487-488, 534-535, 632, 719, 800 <i>Spreadsheet Lab</i> 168, 657, 758</p> <p>Teacher Wraparound Edition: EA 8, 25</p>
III. PATTERNS, FUNCTIONS AND ALGEBRA	
A. Patterns and Functions	
<p>Represent and analyze real-world and mathematical problems using numeric, graphic and symbolic methods for a variety of functions.</p>	<p>Student Edition: 95-101, 236-243, 286-292, 331-338, 339-345, 397-401, 457-463, 473-478, 498-506, 509-517, 776-783, 799-805, 806-811, 822-828 <i>Graphing Calculator Lab</i> 252, 293, 346-347, 464, 518-519 <i>Reading Math</i> 65</p>
B. Algebra (Algebraic Thinking)	
<p>Solve simple equations and inequalities numerically, graphically, and symbolically. Use recursion to model and solve real-world and mathematical problems.</p>	<p>Student Edition: 18-26, 27-31, 33-39, 41-48, 246-251, 253-258, 268-275, 294-301, 349-355, 422-427, 479-486, 658-662, 861-866 <i>Algebra Lab</i> 663 <i>Graphing Calculator Lab</i> 428-429, 487-488, 507-508, 534-535, 860</p>
IV. DATA ANALYSIS, STATISTICS AND PROBABILITY	
A. Data and Statistics	
<p>Represent data and use various measures associated with data to draw conclusions and identify trends. Understand the effects of display distortion and measurement error on the interpretation of data.</p>	<p>Student Edition: 86-91, 162-163 Example 1, 717-723, 724-728, 729-733, 741-744 <i>Algebra Lab</i> 734, 740 <i>Graphing Calculator Lab</i> 92-94, 252, 346-347, 518-519 <i>Study Guide and Review</i> 109, 748, 749 12-8</p> <p>Teacher Wraparound Edition: A 91; AE 718, 725, 730-731; PAP 723</p>

STANDARDS	PAGE REFERENCES
B. Probability	
<p>Use appropriate counting procedures, calculate probabilities in various ways and apply theoretical probability concepts to solve real-world and mathematical problems.</p>	<p>Student Edition: 684-689, 690-695, 697-702, 703-709, 710-715, 735-739 <i>Standardized Test Practice</i> 752-753 #4-#5, #12c <i>Study Guide and Review</i> 746 12-3, 747, 749 12-9</p> <p>Teacher Wraparound Edition: A 739; AE 685-686, 691-692, 698-699, 704-706, 711-712, 736; DI 736; PAP 707</p>
Grades 11, 12	
I. STATISTICS	
<p>Use tables of the normal distribution and properties of that distribution to make judgments about populations based on random samples from these populations.</p>	<p>Student Edition: 724-728, 733 #30-#31, 739 #42-#44, 744 #34-#35 <i>Study Guide and Review</i> 748 12-7</p> <p>Teacher Wraparound Edition: AE 725</p>
II. ALGEBRA	
<p>Demonstrate facility with a wide range of algebraic operations and use the relationship between coordinate geometry and algebraic equations to solve real-world and mathematical problems.</p>	<p>This standard can be met throughout the textbook. Specific examples are found on the following pages:</p> <p>Student Edition: 14 Example 5, 21 Example 6, 117 Example 3, 124 Example 2, 132 Example 4, 186 Example 1, 315 Example 4, 320-324, 325-330, 358 Example 3, 384-390, 408-414, 442-449, 450-456, 564 Example 3, 604 Example 2</p> <p>Teacher Wraparound Edition: AE 321-322, 326-327, 409-412, 443-446</p>
TRIGONOMETRY & GEOMETRY	
<p>Understand the properties of the standard trigonometric functions and apply them to real-world and mathematical problems, especially geometrical problems. Develop increased mastery of geometric proof methodology.</p>	<p>Student Edition: 759-767, 776-783, 785-792, 793-798, 799-805, 806-811, 822-828, 837-841, 842-846 <i>Study Guide and Review</i> 814-816, 868 14-1, 869</p> <p>Teacher Wraparound Edition: A 798; AE 760-764, 777-781, 786-789, 794-795, 800-802; PAP 798</p>