



# Algebra 2

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STANDARDS	PAGE REFERENCES
<b>Algebra II PERFORMANCE STANDARDS</b>	
<b>A2:1 Number Sense</b>	
.1 Use estimation to check reasonableness of answers.	The following references can be extended to meet this standard. <b>Student Edition:</b> <i>Real-World Example</i> 315 <i>Study Tip</i> 141, 500, 521
.2 Select appropriate scales when graphing application problems.	The following references can be used during teacher/class discussion to meet this standard. <b>Student Edition:</b> <i>Prerequisite Skills</i> 885
.3 Set an appropriate window when graphing with a graphing calculator.	<b>Student Edition:</b> <i>Graphing Calculator Lab</i> 92, 252, 342, 518, 800, 860 <b>Teacher Wraparound Edition:</b> T 252

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<p><b>.4</b> Estimate an equation for a line or curve that models the scatter plot for a given set of data.</p>	<p><b>Student Edition:</b>  86  <i>Check Your Understanding</i> 88  <i>Exercises</i> 89 #3-#7, 90 #13  <i>H.O.T. Problems</i> 91 #19  <i>Real-World Example</i> 87  <i>Standardized Test Practice</i> 91  <i>Study Guide and Review</i> 109 #36, #38  <b>Teacher Wraparound Edition:</b>  AE 87</p>
<p><b>.5</b> Identify and classify subsets of the complex number system as natural, whole, integer, rational, irrational, real, or imaginary.</p>	<p><b>Student Edition:</b>  11-12, 259, 261  <i>Check Your Understanding</i> 15 #1-#3  <i>Example</i> 12  <i>Exercises</i> 15 #14-#21, 16 #53-#56  <b>Teacher Wraparound Edition:</b>  AE 12; FMC 14, 263</p>
<p><b>.6</b> Determine appropriate domain and range for application problems.</p>	<p><b>Student Edition:</b>  <i>Exercises</i> 100 #44, 242 #34  <i>Real-World Example</i> 239, 398  <i>Study Tip</i> 238  <b>Teacher Wraparound Edition:</b>  AE 398</p>
<p><b>.7</b> Determine restrictions for variables appearing in rational and radical expressions so that the statement will be meaningful.</p>	<p><b>Student Edition:</b>  <i>Example</i> 385, 442  <i>Exercises</i> 447 #34, #35, 448 #53  <i>Standardized Test Practice</i> 443  <i>Study Tip</i> 442  <b>Teacher Wraparound Edition:</b>  AE 385, 443</p>
<p><b>.8</b> Use appropriate units to label solutions of application problems.</p>	<p>The following equation references can be used during teacher/class discussion to meet this standard.  <b>Student Edition:</b>  <i>Check Your Understanding</i> 23 #16  <i>Exercises</i> 24 #42, #43, #58, #59, 25 #60-#66  <i>Real-World Example</i> 22</p>

STANDARDS	PAGE REFERENCES
<b>A2:2 Geometry</b>	
.1 Graph linear functions accurately with pencil and paper given slope- intercept form.	<p>The following references can be extended to include graphing.</p> <p><b>Student Edition:</b> 68, 71, 79 Check Your Understanding 82 #1-#6 Exercises 83 #13-#20, 84 #31-#36</p>
.2 Graph quadratic functions accurately with pencil and paper given vertex form.	<p><b>Student Edition:</b> 286 <i>Check Your Understanding</i> 289 #1-#3 <i>Example</i> 286 <i>Exercises</i> 290 #13-#18 <i>Standardized Test Example</i> 288</p> <p><b>Teacher Wraparound Edition:</b> AE 287; TNT 287</p>
.3 Label a geometric figure using algebraic expressions and write a valid relationship involving the expressions.	<p>The following references include geometric figures and can be expanded to meet this standard.</p> <p><b>Student Edition:</b> <i>Check Your Understanding</i> 371 #7, 425 #4, 453 #17 <i>Example</i> 358, 370 <i>Exercises</i> 274 #57, #60, 353 #36, 354 #50, 367 #42, #44, 413 #36, 447 #37, 454 #50 <i>Get Ready for the Lesson</i> 325, 369 <i>Standardized Test Practice</i> 308 #3, 380 #6</p>
.4 Identify and graph parent functions including constant, linear, quadratic, cubic, absolute value, exponential, logarithmic, and reciprocal.	<p><b>Student Edition:</b> 96, 333, 498, 500, 509 <i>Check Your Understanding</i> 68 #8, #9, 99 #3-#5, 476 #2, #3, #8, #9 <i>Concept Summary</i> 98, 473 <i>Example</i> 68, 97, 236, 474, 475, 498 <i>Exercises</i> 69 #28-#33, 99 #20-#25, 100 #28, #29, #32, 476 #10, #14-#16, #19 <i>Extend</i> 534-535 <i>Key Concept</i> 237</p> <p><b>Teacher Wraparound Edition:</b> AE 68, 97, 237, 474, 475, 499</p>

STANDARDS	PAGE REFERENCES
<p>.5 Transform parent functions using translation, reflection, stretching and/or shrinking.</p>	<p><b>Student Edition:</b>            287, 397, 509  <i>Algebra Lab</i> 394  <i>Concept Summary</i> 287  <i>Example</i> 97  <i>Explore</i> 284-285  <i>Extend</i> 78  <i>Graphing Calculator Lab</i> 73, 97, 399, 499  <i>Study Tip</i> 568</p>
<p>.6 Graph equations having discontinuities such as asymptotes and/or holes.</p>	<p><b>Student Edition:</b>            457, 591, 823  <i>Check Your Understanding</i> 460 #3-#8  <i>Example</i> 459, 498, 593, 825  <i>Exercises</i> 461 #17-#28, 462 #39-#46  <i>Extend</i> 507  <i>Geometry Software Lab</i> 511  <i>Key Concept</i> 457, 458, 591  <b>Teacher Wraparound Edition:</b>            AE 459, 499, 593; FMC 459; I 459; TNT 459</p>
<p>.7 Identify and explain types of symmetry.</p>	<p>The following references can be used during teacher/class discussion to meet this standard.</p> <p><b>Student Edition:</b>            237, 333  <i>Check Your Understanding</i> 249 #1-#3, 290 #8-#10  <i>Example</i> 576, 582  <i>Exercises</i> 249 #14-#19, 290 #27-#32, 299 #17-#20, 577 #13-#15, 586 #9-#12, 595 #8-#11  <i>Study Tip</i> 238</p>
<p>.8 Sketch the graphs of circles, ellipses, hyperbolas, and parabolas given in standard form.</p>	<p><b>Student Edition:</b>            568, 576, 584, 592  <i>Check Your Understanding</i> 571 #2, #3, 577 #7-#9, 586 #5, #6, 595 #4, #5  <i>Concept Summary</i> 598  <i>Example</i> 568, 576, 584, 593  <i>Exercises</i> 571 #11, #13, #14, 578 #20-#25, 587 #18-#21, 595 #16-#21  <b>Teacher Wraparound Edition:</b>            AE 569, 576, 584, 593; FMC 570, 575, 584, 593</p>

STANDARDS	PAGE REFERENCES
<p><b>.9</b> Use the formulas of coordinate geometry including slope, midpoint, distance, and equations of lines from memory.</p>	<p><b>Student Edition:</b>  71, 79, 562, 563  <i>Check Your Understanding</i> 74 #1-#3, 82 #1-#6, 564  <i>Example</i> 71, 80, 562, 563  <i>Exercises</i> 75 #13-#18, 83 #13-#18, 565 #10-#14, #16-#22  <i>Key Concept</i> 71, 79, 80, 562, 563  <i>Standardized Test Example</i> 30, 564  <i>Study Tip</i> 71, 79</p> <p><b>Teacher Wraparound Edition:</b>  AE 72, 80, 563; FMC 72, 81, 563</p>
<p><b>.10</b> Explain the geometric interpretation of real zeros of a function.</p>	<p><b>Student Edition:</b>  246, 334  <i>Key Concept</i> 247  <i>Study Tip</i> 334</p>
<p><b>A2:3 Statistics</b></p>	
<p><b>.1</b> Read and interpret data displayed in a table, chart or graph.</p>	<p><b>Student Edition:</b>  <i>Prerequisite Skills</i> 883-890</p>
<p><b>.2</b> Organize and display data using stem-and-leaf plots, box-and-whisker plots, histograms, and scatter plots.</p>	<p><b>Student Edition:</b>  86  <i>Algebra Lab</i> 88  <i>Check Your Understanding</i> 88  <i>Exercises</i> 89 #3-#6, 90 #12  <i>Extra Practice</i> 894  <i>Prerequisite Skills</i> 888-890</p>
<p><b>.3</b> Determine a line or curve of best fit for a given set of data.</p>	<p><b>Student Edition:</b>  86  <i>Extend</i> 92, 518  <i>Real-World Example</i> 87</p> <p><b>Teacher Wraparound Edition:</b>  AE 87</p>
<p><b>.4</b> Use a regression equation that models a set of data to make predictions.</p>	<p><b>Student Edition:</b>  <i>Extend</i> 92-94</p> <p><b>Teacher Wraparound Edition:</b>  A 94</p>

STANDARDS	PAGE REFERENCES
<p><b>.5</b> Determine the mean, median, mode, and range for a set of data.</p>	<p><b>Student Edition:</b>  717  <i>Check Your Understanding</i> 720 #1  <i>Concept Summary</i> 717  <i>Example</i> 717  <i>Exercises</i> 720 #14, 721 #16, #21  <i>Prerequisite Skills</i> 883-884  <i>Study Guide and Review</i> 748 #22</p>
<p><b>.6</b> Determine the percentile rank of a data point.</p>	<p>This standard can be met by extending the concepts on the following pages.  <b>Student Edition:</b>  724-727</p>
<p><b>.7</b> Explain the difference between percentile and percentage.</p>	<p>This standard can be met by extending the concepts on the following pages.  <b>Student Edition:</b>  724-727</p>
<p><b>.8</b> Calculate the standard deviation for a set of data that is normally distributed.</p>	<p><b>Student Edition:</b>  718  <i>Check Your Understanding</i> 720 #3-#5  <i>Example</i> 718  <i>Exercises</i> 720 #6-#13, 721 #24, 722 #27-#29, 728 #25  <i>Extra Practice</i> 918  <i>Key Concept</i> 718  <i>Study Guide and Review</i> 748 #22  <b>Teacher Wraparound Edition:</b>  FMC 718; TNT 718</p>
<p><b>.9</b> Determine the reasonableness of statistical conclusions applied to real-world situations.</p>	<p>The following references can be used during teacher/class discussion to meet this standard.  <b>Student Edition:</b>  <i>Example</i> 717  <i>Exercises</i> 721, 727, 732  <i>Extra Practice</i> 918-919  <i>Study Guide and Review</i> 748-749  <i>Writing in Math</i> 723, 733</p>

STANDARDS	PAGE REFERENCES
<b>A2:4 Probability</b>	
<p>.1 Explain the difference between combinations and permutations.</p>	<p><b>Student Edition:</b>  690, 692  <i>Key Concept</i> 690, 692  <i>Reading Math</i> 690  <i>Study Tip</i> 692  <b>Teacher Wraparound Edition:</b>  FMC 692</p>
<p>.2 Select and use appropriate formulas to solve problems involving combinations and permutations.</p>	<p><b>Student Edition:</b>  690-692  <i>Check Your Understanding</i> 693  <i>Example</i> 690, 692  <i>Exercises</i> 693-694  <i>Extra Practice</i> 917  <i>Key Concept</i> 690, 692  <i>Mid-Chapter Quiz</i> 716 #5-#8  <i>Mixed Problem Solving</i> 937 #4  <i>Practice Test</i> 751 #1-#3  <i>Study Guide and Review</i> 746 #10-#12  <b>Teacher Wraparound Edition:</b>  AE 691, 692</p>
<p>.3 List all possible outcomes for a particular event.</p>	<p><b>Student Edition:</b>  684  <i>Check Your Understanding</i> 687 #7  <i>Example</i> 684  <i>Exercises</i> 687 #12-#14  <b>Teacher Wraparound Edition:</b>  AE 685; TNT 685</p>
<p>.4 Explain the differences among independent, dependent, and mutually exclusive events.</p>	<p><b>Student Edition:</b>  684, 686, 710  <i>Concept Summary</i> 686  <i>H.O.T. Problems</i> 708 #49, 715 #43  <i>Key Concept</i> 710</p>

STANDARDS	PAGE REFERENCES
<p><b>.5</b> Compute probabilities for simple and compound events.</p>	<p><b>Student Edition:</b>  710  <i>Check Your Understanding</i> 713  <i>Example</i> 711, 712  <i>Exercises</i> 713-714  <i>Extra Practice</i> 918  <i>Key Concept</i> 710, 712  <i>Mid-Chapter Quiz</i> 716 #17-#20  <i>Study Guide and Review</i> 747 #18-#21  <b>Teacher Wraparound Edition:</b>  AE 711, 712; TNT 712</p>
<p><b>.6</b> Solve problems involving conditional probability.</p>	<p><b>Student Edition:</b>  705  <i>Check Your Understanding</i> 706 #4, #5, #7, #9-#11  <i>Example</i> 705, 706  <i>Exercises</i> 707 #21-#27, #30, #33  <i>Extra Practice</i> 917  <i>Mid-Chapter Quiz</i> 716 #14, #15  <i>Study Guide and Review</i> 747 #16, #17  <i>Study Tip</i> 705  <b>Teacher Wraparound Edition:</b>  AE 705, 706</p>
<p><b>.7</b> Explain the difference between experimental probability and theoretical probability.</p>	<p><b>Student Edition:</b>  702  <i>H.O.T. Problems</i> 702 #35-#37  <b>Teacher Wraparound Edition:</b>  AP 702</p>
<p><b>A2:5 Patterns</b></p>	
<p><b>.1</b> Develop a rule for a sequence and represent that rule recursively, explicitly, or verbally.</p>	<p>The following references can be extended to meet this standard.  <b>Student Edition:</b>  622  <i>Check Your Understanding</i> 625 #1, #2  <i>Example</i> 622  <i>Exercises</i> 626 #17-#20  <i>Get Ready for the Lesson</i> 622  <b>Teacher Wraparound Edition:</b>  AE 623; SQ 622</p>

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<p>2 Identify a sequence as arithmetic, geometric, or neither.</p>	<p>The following references can be used during teacher/class discussion to meet this standard.</p> <p><b>Student Edition:</b> 622, 636 <i>Check Your Understanding</i> 625 #1, #2, 639 #1 <i>Exercises</i> 626 #17-#20, 639 #14-#17</p>
<p>.3 Factor polynomial expressions using a variety of patterns including difference of two squares, sum or difference of two cubes, perfect square trinomials, and grouping.</p>	<p><b>Student Edition:</b> 254, 349 <i>Check Your Understanding</i> 256 #4-#6, 353 #1-#8 <i>Concept Summary</i> 254, 349 <i>Example</i> 254, 350 <i>Exercises</i> 256 #17-#20, 353 #4-#23, 354 #42-#47 <i>Prerequisite Skills</i> 877-878</p> <p><b>Teacher Wraparound Edition:</b> AE 254, 350; TNT 350</p>
<p>4 Use Pascal's triangle to find the coefficients for a binomial expansion.</p>	<p><b>Student Edition:</b> 664 <i>Check Your Understanding</i> 667 #1-#3 <i>Example</i> 665 <i>Exercises</i> 667 #11-#16</p>
<p>5 Use the Binomial theorem to find a particular term of a binomial expansion.</p>	<p><b>Student Edition:</b> <i>Check Your Understanding</i> 667 #9, #10 <i>Example</i> 667 <i>Exercises</i> 668 #21-#24, #35-#38 <i>Key Concept</i> 665, 666 <i>Practice Test</i> 679 #20 <i>Study Guide and Review</i> 678 #46, #47</p> <p><b>Teacher Wraparound Edition:</b> AE 667</p>
<p>.6 Determine if two variables vary directly or inversely and, if applicable, find the constant of variation.</p>	<p><b>Student Edition:</b> 465, 467 <i>Example</i> 466, 467 <i>Exercises</i> 469 #14, #16-#24 <i>Extra Practice</i> 908 <i>Key Concept</i> 465, 467 <i>Practice Test</i> 493 #23 <i>Standardized Test Practice</i> 495 #12</p> <p><b>Teacher Wraparound Edition:</b> AE 466, 467; FMC 466; INT 467</p>

STANDARDS	PAGE REFERENCES
<b>A2:6 Algebra</b>	
.1 Determine whether a given relation is a function.	<p><b>Student Edition:</b>            58-59  <i>Check Your Understanding</i> 62 #1-#3, #6-#10  <i>Example</i> 59, 60  <i>Exercises</i> 62 #13-#18, 63 #23-#34, #45, #49, #53  <i>Extra Practice</i> 893  <i>Key Concept</i> 59  <i>Mid-Chapter Quiz</i> 85 #1, #5  <i>Practice Test</i> 111 #1, 32  <i>Study Guide and Review</i> 107 #7-#10, #15</p> <p><b>Teacher Wraparound Edition:</b>            AE 59, 60; FMC 59; INT 59</p>
.2 Identify the domain and range of a function.	<p><b>Student Edition:</b>            58  <i>Check Your Understanding</i> 62 #8, #9  <i>Example</i> 59  <i>Exercises</i> 63 #23, #24, #26, #27, #29-#33</p> <p><b>Teacher Wraparound Edition:</b>            AE 59</p>
.3 Find the inverse of a function if it exists and describe it graphically.	<p><b>Student Edition:</b>            392, 509  <i>Algebra Lab</i> 394  <i>Check Your Understanding</i> 394 #3-#5  <i>Example</i> 392  <i>Exercises</i> 395 #16-#28, #39  <i>Extra Practice</i> 905  <i>Study Guide and Review</i> 431 #17-#22</p> <p><b>Teacher Wraparound Edition:</b>            AE 392</p>

STANDARDS	PAGE REFERENCES
<p><b>.4</b> Add, subtract, multiply, divide, and compose functions, and identify the domain and range of the new function.</p>	<p><b>Student Edition:</b>  385  <i>Check Your Understanding</i> 388  <i>Example</i> 384, 385, 386  <i>Exercises</i> 388-389  <i>Extra Practice</i> 905  <i>Key Concept</i> 384, 385  <i>Mid-Chapter Quiz</i> 407 #1-#8  <i>Practice Test</i> 435 #3-#6  <i>Reading Math</i> 385  <i>Study Guide and Review</i> 431 #10-#16  <b>Teacher Wraparound Edition:</b>  AE 385, 386; FMC 385</p>
<p><b>.5</b> Graph a piece-wise function.</p>	<p><b>Student Edition:</b>  97  <i>Check Your Understanding</i> 99 #7, #8  <i>Example</i> 97, 98  <i>Exercises</i> 99 #26, #27, 100 #37, #38  <i>Graphing Calculator Lab</i> 97  <i>Practice Test</i> 111 #15  <i>Study Guide and Review</i> 110 #43, #44  <i>Study Tip</i> 98  <b>Teacher Wraparound Edition:</b>  AE 97, 98</p>
<p><b>.6</b> Add, subtract, multiply, and use scalar multiplication on matrices.</p>	<p><b>Student Edition:</b>  169, 171, 177  <i>Check Your Understanding</i> 173 #1-#4, #8, #9, 181 #4-#9  <i>Example</i> 169, 170, 171, 178  <i>Exercises</i> 173 #14-#21, 174 #25-#28, 182 #20-#27  <i>Extra Practice</i> 897  <i>Key Concept</i> 169, 171, 178  <i>Mid-Chapter Quiz</i> 193 #5, #6, #8, #9, #14  <i>Practice Test</i> 229 #4, #5  <i>Study Guide and Review</i> 225 #18-#22, 226 #23-#25  <b>Teacher Wraparound Edition:</b>  AE 170, 171, 178; FMC 171</p>

STANDARDS	PAGE REFERENCES
.7 Simplify rational expressions and radicals.	<p><b>Student Edition:</b>  402-404, 442  <i>Check Your Understanding</i> 405, 412 #1-#6, 446, 453  <i>Concept Summary</i> 409  <i>Example</i> 403, 409, 442, 443, 444, 445, 451, 452  <i>Exercises</i> 405, 413 #18-#33, 447, 454  <i>Extra Practice</i> 906-908  <i>Mid-Chapter Quiz</i> 407 #20-#23, 472 #1-#11  <i>Practice Test</i> 493 #1-#6  <i>Study Guide and Review</i> 432 #31-#38, 433 #40-#47, 490</p> <p><b>Teacher Wraparound Edition:</b>  AE 403, 409, 443, 444, 451, 452; FMC 444; TNT 403</p>
.8 Solve problems that contain radicals and rational expressions.	<p><b>Student Edition:</b>  <i>Check Your Understanding</i> 405 #12, 412 #7, #8, 425 #4, 453 #17  <i>Exercises</i> 405 #49, #50, 413 #36, #37, #54-#57, 425 #29, #30, 426 #39, #40, 447 #36, #37, 448 #56-#58, 454 #34, #35, #50-#56</p>
.9 Simplify expressions involving fractional exponents.	<p><b>Student Edition:</b>  415, 417  <i>Check Your Understanding</i> 419 #10-#16  <i>Concept Summary</i> 419  <i>Example</i> 417, 418  <i>Exercises</i> 420 #35-#50  <i>Extra Practice</i> 907  <i>Key Concept</i> 416  <i>Practice Test</i> 435 #20-#23  <i>Standardized Test Example</i> 418  <i>Study Guide and Review</i> 433 #52-#54</p> <p><b>Teacher Wraparound Edition:</b>  AE 417, 418; FMC 416; TNT 417</p>

STANDARDS	PAGE REFERENCES
<p><b>.10</b> Add, subtract, multiply, and divide complex numbers, and simplify the results.</p>	<p><b>Student Edition:</b>  261  <i>Check Your Understanding</i> 264 #16-#21  <i>Example</i> 262, 263  <i>Exercises</i> 264 #34-#41, 265 #57-#65  <i>Extra Practice</i> 900  <i>Mid-Chapter Quiz</i> 267 #19, #21, #22  <i>Practice Test</i> 307 #18, #19  <i>Real-World Example</i> 263  <i>Study Guide and Review</i> 304 #33-#37  <b>Teacher Wraparound Edition:</b>  AE 262, 263</p>
<p><b>.11</b> Solve quadratic equations by factoring, using the quadratic formula, and graphing.</p>	<p><b>Student Edition:</b>  246, 254, 255, 276  <i>Check Your Understanding</i> 249 #1-#11, 256 #7-#12, 281 #1-#8  <i>Concept Summary</i> 280  <i>Example</i> 246, 247, 255, 277, 278  <i>Exercises</i> 249, 250 #20-#29, 256 #21-#30, 257 #33-#40, 281 #15-#30, 282 #40-#45  <i>Extra Practice</i> 900, 901  <i>Key Concept</i> 247, 255, 276  <i>Mid-Chapter Quiz</i> 267 #5, #10-#13  <i>Practice Test</i> 307 #8-#16  <i>Study Guide and Review</i> 303 #15-#18, 304 #23-#28, 305 #44-#46  <i>Study Tip</i> 277, 278  <b>Teacher Wraparound Edition:</b>  AE 247, 255, 277; FMC 248, 255, 277; TNT 278</p>
<p><b>.12</b> Solve quadratic equations that have complex roots.</p>	<p><b>Student Edition:</b>  278  <i>Check Your Understanding</i> 281 #7, #8  <i>Example</i> 278  <i>Exercises</i> 281 #23, #24, 282 #40  <b>Teacher Wraparound Edition:</b>  AE 278</p>

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<p><b>.13</b> Identify the conic sections and use completing the square to rewrite them in standard form.</p>	<p><b>Student Edition:</b>            567, 574, 581, 590  <i>Check Your Understanding</i> 571 #1, 577 #11, #12, 586 #7, #8, 595 #6, #7, 599 #1-#4  <i>Concept Summary</i> 598  <i>Example</i> 568, 576, 585, 594, 598  <i>Exercises</i> 571 #7-#10, 578 #26-#31, 587 #22-#25, 595 #28, #29, 600 #9-#18, 601 #33-#40  <i>Extra Practice</i> 913  <i>Key Concept</i> 568, 574, 584, 593  <i>Mid-Chapter Quiz</i> 589 #7, #8  <i>Study Guide and Review</i> 613 #44-#47  <b>Teacher Wraparound Edition:</b>            AE 568, 576, 585, 594; FMC 570, 575, 584, 591</p>
<p><b>.14</b> Solve problems involving "and" and "or" statements.</p>	<p><b>Student Edition:</b>            41, 42  <i>Example</i> 41, 42  <i>Key Concept</i> 41, 42</p>
<p><b>.15</b> Solve literal equations and formulas for a given variable.</p>	<p><b>Student Edition:</b>  <i>Check Your Understanding</i> 23 #13, #14  <i>Example</i> 21  <i>Exercises</i> 23 #37-#40, 24 #50, #51  <i>Extra Practice</i> 891  <i>Study Guide and Review</i> 51 #35-#38  <b>Teacher Wraparound Edition:</b>            AE 21; AP 21; RWC 21</p>
<p><b>.16</b> Solve a system of three equations in three unknowns using the substitution method and/or addition method.</p>	<p><b>Student Edition:</b>            146  <i>Check Your Understanding</i> 149  <i>Example</i> 146, 147  <i>Exercises</i> 150 #9-#17  <i>Extra Practice</i> 896  <i>Practice Test</i> 157 #14, #15  <i>Study Guide and Review</i> 156 #29-#31  <i>Study Tip</i> 146, 147  <b>Teacher Wraparound Edition:</b>            AE 146, 147; INT 147; TNT 146</p>

STANDARDS	PAGE REFERENCES
<p>.17 Use matrices and a graphing calculator to solve systems of linear equations.</p>	<p><b>Student Edition:</b>  218  <i>Check Your Understanding</i> 220 #4-#7  <i>Example</i> 218  <i>Exercises</i> 220 #14-#23  <i>Extend</i> 223  <i>Extra Practice</i> 899  <i>Graphing Calculator Lab</i> 219  <i>Practice Test</i> 229 #12, #13  <i>Study Guide and Review</i> 228  <i>Study Tip</i> 218  <b>Teacher Wraparound Edition:</b>  AE 218</p>
<p>.18 Solve systems of non-linear equations.</p>	<p><b>Student Edition:</b>  603, 604  <i>Check Your Understanding</i> 606  <i>Example</i> 603, 604, 605  <i>Exercises</i> 606-607  <i>Extra Practice</i> 913  <i>Graphing Calculator Lab</i> 605  <i>Practice Test</i> 615 #19-#21  <i>Study Guide and Review</i> 614  <b>Teacher Wraparound Edition:</b>  AE 604, 605; FMC 604</p>
<p>.19 Use the rational root theorem and the factor theorem to find rational roots of equations of degree three or more.</p>	<p><b>Student Edition:</b>  369, 370  <i>Check Your Understanding</i> 371  <i>Example</i> 369, 370  <i>Exercises</i> 372  <i>Extra Practice</i> 905  <i>Key Concept</i> 369  <i>Practice Test</i> 379 #30-#35  <i>Study Guide and Review</i> 378 #59-#63  <b>Teacher Wraparound Edition:</b>  AE 370, 371; FMC 371; TNT 370</p>

STANDARDS	PAGE REFERENCES
<p><b>.20</b> Use synthetic division to divide a polynomial by a binomial of the form <math>x-a</math>.</p>	<p><b>Student Edition:</b>  327  <i>Check Your Understanding</i> 328 #4-#9  <i>Example</i> 327  <i>Exercises</i> 329 #17-#28  <i>Mid-Chapter Quiz</i> 348 #10, #12, #13  <i>Practice Test</i> 379 #5-#8  <i>Study Guide and Review</i> 375 #21</p> <p><b>Teacher Wraparound Edition:</b>  A 330; AE 327; DI 327; FMC 327</p>
<p><b>.21</b> Solve inequalities using number lines and coordinate planes.</p>	<p><b>Student Edition:</b>  33, 102, 105  <i>Check Your Understanding</i> 37, 104  <i>Example</i> 34, 35, 102, 103  <i>Exercises</i> 37 #10-#24, #33-#44, 104 #10-#21, #29-#34, 105 #35-#38  <i>Extra Practice</i> 892, 895  <i>Practice Test</i> 53 #21-#26, 111 #12-#14  <i>Real-World Example</i> 103  <i>Study Guide and Review</i> 52 #47-#52, 110 #46-#51  <i>Study Tip</i> 35</p> <p><b>Teacher Wraparound Edition:</b>  AE 34, 35, 103</p>
<p><b>.22</b> Represent a series using sigma notation.</p>	<p><b>Student Edition:</b>  631, 652</p> <p><b>Teacher Wraparound Edition:</b>  TNT 632</p>
<p><b>.23</b> Find partial sums of arithmetic and geometric series.</p>	<p><b>Student Edition:</b>  <i>Check Your Understanding</i> 633 #1-#9, #14, #15, 646 #1-#15  <i>Example</i> 630, 632, 644  <i>Exercises</i> 633 #16-#23, 634 #34-#43, 647 #20-#27, #30-#33, #38-#51  <i>Extra Practice</i> 914, 915  <i>Key Concept</i> 630, 644  <i>Mid-Chapter Quiz</i> 656 #6, #7, #11-#16  <i>Study Guide and Review</i> 675 #18-#21, 676 #30-#33</p> <p><b>Teacher Wraparound Edition:</b>  AE 630, 644</p>

STANDARDS	PAGE REFERENCES
<p><b>.24</b> Calculate the sum of an infinite geometric series with <math> r  &lt; 1</math>.</p>	<p><b>Student Edition:</b>  650  <i>Check Your Understanding</i> 653 #1-#4, #6-#9  <i>Example</i> 651, 652  <i>Exercises</i> 653 #13-#27, 654 #35-#40  <i>Extra Practice</i> 915  <i>Key Concept</i> 651  <i>Study Guide and Review</i> 677 #35-#37</p> <p><b>Teacher Wraparound Edition:</b>  AE 651; FMC 651</p>
<p><b>.25</b> Identify, solve, and graph exponential and logarithmic functions.</p>	<p><b>Student Edition:</b>  498, 499, 509, 511  <i>Check Your Understanding</i> 503 #4, #5, 504 #12-#14, 514 #10-#12, 515 #19, #20  <i>Example</i> 498, 501, 510, 512  <i>Exercises</i> 504 #18-#21, 505 #39-#44, 515 #44-#49, 516 #56, #57  <i>Extend</i> 507-508  <i>Extra Practice</i> 909, 910  <i>Graphing Calculator Lab</i> 499, 534-535  <i>Mid-Chapter Quiz</i> 527 #8, #10, #11, #13  <i>Practice Test</i> 557 #9-#13  <i>Study Guide and Review</i> 553  <i>Study Tip</i> 510, 512, 513</p> <p><b>Teacher Wraparound Edition:</b>  AE 499, 501, 510, 512; FMC 500, 511; TNT 501, 510</p>
<p><b>.26</b> Simplify expressions involving logarithms.</p>	<p><b>Student Edition:</b>  520  <i>Check Your Understanding</i> 523, 524 #6, #7  <i>Example</i> 521, 522  <i>Exercises</i> 524 #12-#20  <i>Get Ready for the Lesson</i> 520  <i>Key Concept</i> 520, 521, 522  <i>Study Guide and Review</i> 554 #32-#35  <i>Study Tip</i> 521</p> <p><b>Teacher Wraparound Edition:</b>  AE 521, 522; FMC 522; TNT 521</p>

STANDARDS	PAGE REFERENCES
<p><b>.27</b> Solve equations by applying the properties of logarithms.</p>	<p><b>Student Edition:</b>            520, 523  <i>Check Your Understanding</i> 524 #8-#11  <i>Example</i> 523  <i>Exercises</i> 524 #25-#30, 525 #33-#38  <i>Extra Practice</i> 910  <i>Key Concept</i> 520, 521, 522  <i>Mid-Chapter Quiz</i> 527 #8-#14  <i>Study Guide and Review</i> 554 #36-#38  <b>Teacher Wraparound Edition:</b>            AE 523; FMC 522</p>
<p><b>.28</b> Solve for an unknown exponent using logarithms.</p>	<p><b>Student Edition:</b>            529  <i>Check Your Understanding</i> 531 #5-#8  <i>Example</i> 529  <i>Exercises</i> 532 #22-#27, #44-#52  <i>Extra Practice</i> 910  <i>Practice Test</i> 557 #9, #12  <i>Study Guide and Review</i> 555 #40, #41, #43, #45  <b>Teacher Wraparound Edition:</b>            AE 529</p>
<p><b>.29</b> Apply algebra concepts and skills to solve real world problems.</p>	<p>The following references use quadratic functions to meet this standard.  <b>Student Edition:</b>  <i>Check Your Understanding</i> 241 #11, 249 #13, 264 #15, 272 #5-#7, 281 #9, #10, 290 #11, #12  <i>Exercises</i> 242 #32-#35, #51-#54, 243 #56, #57, 250 #31, #44, #45, 257 #48, #49, 264 #50, #51, 265 #72, 273 #40, #41, 274 #56-#60, 281 #31-#33, 282 #46-#48, 291 #33-#35, #50-#53  <i>Real-World Example</i> 239, 248, 263</p>
<p><b>.30</b> Solve application problems using appropriate technology</p>	<p>The following technology references can be expanded to meet this standard.  <b>Student Edition:</b>  <i>Explore</i> 657  <i>Extend</i> 78, 92-93, 136, 168, 223, 252, 293, 347-348, 464, 507, 518-519, 534-535, 551  <i>Geometry Software Lab</i> 511  <i>Graphing Calculator Lab</i> 36, 342, 399, 719</p>