



Algebra 1

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STANDARDS	PAGE REFERENCES
<p>Core High School Algebra Grade Standards, Supporting Skills, and Examples</p>	
<p>Indicator 1: Use procedures to transform algebraic expressions.</p>	
<p>Standard, Supporting Skills, and Examples</p>	
<p>9-12.A.1.1. Students are able to write equivalent forms of algebraic expressions using properties of the set of real numbers.</p> <ul style="list-style-type: none"> • Evaluate algebraic expressions. • Use laws of exponents. • Use conventional order of operations, including grouping and exponents. 	<p>Student Edition: 10-14, 26-31, 33-37, 390-395, 398-403, 426-431, 434-439, 441-446</p> <p><i>Algebra Lab</i> 425, 432-433</p> <p>Teacher Wraparound Edition: AE 11, 28, 35, 391, 427, 435, 442; FMC 391, 435</p>
<p>Indicator 2: Use a variety of algebraic concepts and methods to solve equations and inequalities.</p>	
<p>9-12.A.2.1. Students are able to use algebraic properties to transform multi-step, single-variable, first-degree equations.</p>	<p>Student Edition: 92-97, 98-103, 105-110, 111-115, 122-128, 132-134, 721, 722, 745</p> <p><i>Algebra Lab</i> 91</p> <p><i>Practice Test</i> 135</p> <p>Teacher Wraparound Edition: A 128; AE 93, 100, 123, 124; GS 99; I 106; T 91; TNT 93</p>

STANDARDS	PAGE REFERENCES
<p>9-12.A.2.2. Students are able to use algebraic properties to transform multi-step, single-variable, first-degree inequalities and represent solutions using a number line.</p>	<p>Student Edition: 308-313, 315-320, 327 #53-#55, 329-333, 341-345, 348, 350, 729, 730 <i>Mid-Chapter Quiz</i> 321 <i>Practice Test</i> 351 Teacher Wraparound Edition: AA 311, 313, 318, 348; AE 309, 310, 331</p>
<p>Indicator 3: Interpret and develop mathematical models.</p>	
<p>9-12.A.3.1. Students are able to create linear models to represent problem situations.</p> <ul style="list-style-type: none"> Calculate and interpret slope. 	<p>Student Edition: 187-195, 196-202, 204-209, 213-218, 220-225, 243, 244, 245, 724, 725, 747 <i>Graphing Calculator Lab</i> 210-211 <i>Practice Test</i> 247 Teacher Wraparound Edition: A 211; AA 216; AE 199, 205, 214, 221; FMC 206, 215</p>
<p>9-12.A.3.2. Students are able to distinguish between linear and nonlinear models.</p>	<p>Student Edition: 187-195, 196-202, 204-209, 470-477, 502-508 <i>Graphing Calculator Lab</i> 197, 210-211, 470, 478-479 <i>Practice Test</i> 247, 521 Teacher Wraparound Edition: A 211, 470; AE 198, 199, 472, 473, 503; FMC 504; PA 199; T 478</p>
<p>Indicator 4: Describe and use properties and behaviors of relations, functions, and inverses.</p>	
<p>9-12.A.4.1. Students are able to use graphs, tables, and equations to represent linear functions.</p>	<p>Student Edition: 204-209, 213-218, 220-225, 236-241, 243, 244, 245 <i>Graphing Calculator Lab</i> 203 <i>Practice Test</i> 247 Teacher Wraparound Edition: A 211; AA 205, 207, 209, 218; AE 205, 206, 215; FMC 206; PA 215;</p>

STANDARDS	PAGE REFERENCES
Core High School Algebra Performance Descriptors	
Advanced	
<p>High school students performing at the advanced level:</p> <ul style="list-style-type: none"> transform algebraic expressions; solve quadratic equations; solve a system of linear equations. 	<p>Student Edition: 253-258, 260-265, 266-270, 272-278, 280-284, 286, 287, 480-485, 486-491, 493-499 <i>Graphing Calculator Lab</i> 259 <i>Practice Test</i> 289</p> <p>Teacher Wraparound Edition: AE 261, 262, 267, 273, 481, 488; FMC 494; PA 254; T 259; TNT 268, 274</p>
Proficient	
<p>High school students performing at the proficient level:</p> <ul style="list-style-type: none"> transform polynomial expressions using real number properties; solve single variable linear equations with integral coefficients; graph linear equations; interpret tables, graphs, and charts to solve problems; create a linear model from a problem context. 	<p>Student Edition: 26-31, 78-84, 85-90, 92-97, 196-202, 204-209, 213-218, 227-233, 236-241 <i>Algebra Lab</i> 77</p> <p>Teacher Wraparound Edition: AA 207; AE 28, 79, 81, 87, 199, 205, 216; P 216</p>
Basic	
<p>High school students performing at the basic level:</p> <ul style="list-style-type: none"> transform linear expressions with integral coefficients using real number properties; solve linear equations of the form $ax + b = c$, where a, b, and c are integers; recognize the graph of a linear equation; graph a line from a table of values. 	<p>Student Edition: 92-97, 98-103, 196-202, 204-209, 213-218, 243 <i>Algebra Lab</i> 91 <i>Graphing Calculator Lab</i> 203, 210-211 <i>Mid-Chapter Quiz</i> 104 <i>Practice Test</i> 247</p> <p>Teacher Wraparound Edition: A 211; AA 197; AE 93, 214; FMC 94; PA 225; T 92</p>

STANDARDS	PAGE REFERENCES
Core High School Geometry Grade Standards, Supporting Skills, and Examples	
Indicator 1: Use deductive and inductive reasoning to recognize and apply properties of geometric figures.	
9-12.G.1.1. Students are able to apply the properties of triangles and quadrilaterals to find unknown parts.	Student Edition: 72 #3, 120 #22, 240 #16, 403 #58, 539 #31-#33, 549-554, 557 #5, 558 #30-#33, 559 #47-#49, 560-565, 569, 570, 609, 704-705, 738, 753 <i>Practice Test</i> 571 <i>Reading Math</i> 314 Teacher Wraparound Edition: AA 554; AE 550, 551, 561, 562, 609; FMC 551
9-12.G.1.2. Students are able to identify and apply relationships among triangles. <ul style="list-style-type: none"> • Definitions and postulates • Similarity theorems • Congruence theorems 	Student Edition: 57 #57, 557 #5, 560-565, 570, 738, 753 #12, 760 #10, 764 #15, 767 #13 <i>Practice Test</i> 571 Teacher Wraparound Edition: A 565; AA 563; AE 561, 562; FMC 562; PA 565
Indicator 2: Use properties of geometric figures to solve problems from a variety of perspectives.	
9-12.G.2.1. Students are able to recognize the relationship between a three-dimensional figure and its two-dimensional representation. <ul style="list-style-type: none"> • Interpret floor plans • Follow instructions for assembly of a product, e.g., “some assembly required.” 	Student Edition: 12 <i>Algebra Lab</i> 365 Teacher Wraparound Edition: A 365; AA 365; AE 12; F 365; T 365
9-12.G.2.2. Students are able to reflect across vertical or horizontal lines, and translate two-dimensional figures. <ul style="list-style-type: none"> • Identify lines of symmetry. • Use the coordinate plane. 	Student Edition: 471-477, 518, 763 #12, 767 #11, 767 #14, 773 #5 <i>Algebra Lab</i> 237 <i>Graphing Calculator Lab</i> 504 Teacher Wraparound Edition: AA 477; AE 473; AL 237; I 474
9-12.G.2.3. Students are able to use proportions to solve problems.	Student Edition: 105-110, 111-115, 133, 560-565, 570, 702-703, 722, 744, 753 <i>Practice Test</i> 135, 571 #25 <i>Reading Math</i> 116 Teacher Wraparound Edition: AA 110; AE 107, 112, 113, 562

STANDARDS	PAGE REFERENCES
Core High School Geometry Performance Descriptors	
Advanced	
<p>High school students performing at the advanced level:</p> <ul style="list-style-type: none"> translate and reflect a figure using the coordinate plane; supply a missing reason and/or statement in a deductive proof. 	<p>Student Edition: 39-44, 471-477, 518, 763 #12, 767 #11, 773 #5 <i>Algebra Lab</i> 237, 365 <i>Graphing Calculator Lab</i> 50 <i>Reading Math</i> 314</p> <p>Teacher Wraparound Edition: A 44; AA 44, 477; AE 41, 473; AL 237; FMC 41; I 474</p>
Proficient	
<p>High school students performing at the proficient level:</p> <ul style="list-style-type: none"> use deductive reasoning and known properties of a geometric figure to find other properties; use proportions to solve problems; translate or reflect a simple figure using the coordinate plane; match a two-dimensional drawing to its three-dimensional counterpart. 	<p>Student Edition: 39-44, 105-110, 111-115, 133, 471-477, 518, 560-565, 570, 702-703, 763 #12, 767 #11, 773 #5 <i>Algebra Lab</i> 237, 365 <i>Graphing Calculator Lab</i> 504 <i>Reading Math</i> 116, 314</p> <p>Teacher Wraparound Edition: A 44, 365; AA 44, 110, 365, 477; AE 41, 107, 112, 113, 473, 562; AL 237; F 365; FMC 41; I 474; T 365</p>
Basic	
<p>High school students performing at the basic level:</p> <ul style="list-style-type: none"> identify a translation or reflection; solve a proportion. 	<p>Student Edition: 105-110, 111-115, 133, 471-477, 518, 560-565, 570, 702-703, 722, 744, 753, 763 #12, 767 #11, 773 #5 <i>Algebra Lab</i> 237 <i>Graphing Calculator Lab</i> 504 <i>Practice Test</i> 135, 571 #25 <i>Reading Math</i> 116</p> <p>Teacher Wraparound Edition: AA 110, 477; AE 107, 112, 113, 473, 562; AL 237; I 474</p>

STANDARDS	PAGE REFERENCES
Core High School Measurement Grade Standards, Supporting Skills, and Examples	
Indicator 1: Apply measurement concepts in practical applications.	
9-12.M.1.1. Students are able to choose appropriate unit label, scale, and precision. <ul style="list-style-type: none"> Determine appropriate scales for histograms, scatterplots, and other graphs. 	Student Edition: 53-58, 121 #40, 227-233, 246, 533 #45-#50, 534 #58-#59, 539 #31-#33, 673-676, 704-705, 706-707, 765-766, 768 <i>Algebra Lab 228</i> <i>Real World Example 167, 591</i> Teacher Wraparound Edition: AE 167, 229; AL 228; DG 55; FMC 591; PA 676
9-12.M.1.2. Students are able to use suitable units when describing rate of change.	Student Edition: 187-195, 202 #59, 225 #51, 243, 533 #49, 544 #47-#49, 628-629, 747 <i>Graphing Calculator Lab 203</i> <i>Real World Example 119, 199, 238</i> Teacher Wraparound Edition: AE 118; 188, 189, 199; FCA 203
9-12.M.1.3. Students are able to use formulas to find perimeter, circumference, and area to solve problems involving common geometric figures. <ul style="list-style-type: none"> Use algebraic expressions with geometric formulas. 	Student Edition: 31 #58-#60, 84 #55-#56, 88 #27, 120 #22-#23, 306 #47, 400, 533 #38, 534 #59, 544 #43-#46, 548 #5-#8, 550, 704-705, 706-707, 746 #14, 764 #20, 764 #22, 773 #8 <i>Real World Example 118</i> Teacher Wraparound Edition: AE 377, 537, 550; RWC 88
Core High School Measurement Performance Descriptors	
Advanced	
High school students performing at the advanced level: <ul style="list-style-type: none"> use dimensional analysis to solve problems; apply indirect measurement methods; represent and solve problems involving volume and surface area. 	Student Edition: 12, 46, 74 #24, 75 #47, 121 #34, 371 #13, 380 #52-#53, 402 #42-#43, 548 #18, 560-565, 605 #47, 708, 744 #1-#2, 745 #1-#4, 750 #13-#14, 764 #18-#22, 768 #16-#19, 773 #6 <i>Algebra Lab 72</i> <i>Real World Example 49</i> Teacher Wraparound Edition: AE 72, 561, 562; AL 72; FMC 562

STANDARDS	PAGE REFERENCES
Proficient	
<p>High school students performing at the proficient level:</p> <ul style="list-style-type: none"> select a suitable unit of measure for problem situations, including rate of change; choose an appropriate scale for a graph; represent and solve problems involving perimeter, circumference, and area. 	<p>Student Edition: 84 #55-#56, 187-195, 227-233, 544 #43-#46, 550, 628-629, 673-676, 704-705, 706-707 <i>Real World Example</i> 118</p> <p>Teacher Wraparound Edition: AE 118, 188, 189, 229, 377, 537; AL 228; FCA 203; RWC 88</p>
Basic	
<p>High school students performing at the basic level:</p> <ul style="list-style-type: none"> recognize a unit of measure that describes a rate of change problem; find circumference and area of circles; find perimeter and area of rectangles and triangles. 	<p>Student Edition: 31 #46, 84 #55-#56, 88 #27, 119 #5-#6, 187-195, 243, 377, 401 #31, 628-629, 704-705, 706-707, 745, 747 <i>Graphing Calculator Lab</i> 203 <i>Real World Example</i> 119, 199, 238</p> <p>Teacher Wraparound Edition: AE 118; 188, 189, 199, 377; FCA 203</p>
<p>Core High School Number Sense Grade Standards, Supporting Skills, and Examples</p>	
<p>Indicator 1: Analyze the structural characteristics of the real number system and its various subsystems. Analyze the concept of value, magnitude, and relative magnitude of real numbers.</p>	
<p>9-12.N.1.1. Students are able to identify multiple representations of a real number.</p> <ul style="list-style-type: none"> Given a real number identify the subset(s) of real numbers to which it belongs. Represent rational and irrational numbers in different forms. 	<p>Student Edition: 46-52, 60, 64, 357, 358-364, 410, 486-491, 493-499, 696-697, 700-701, 719 <i>Graphing Calculator Lab</i> 535</p> <p>Teacher Wraparound Edition: AE 47, 48, 49, 359; FMC 48, 489; I 47, 495</p>
<p>9-12.N.1.2. Students are able to apply the concept of place value, magnitude, and relative magnitude of real numbers.</p> <ul style="list-style-type: none"> Scientific notation Infinitely many solutions Completeness of the real numbers (density, i.e. between any two real numbers is another real number) 	<p>Student Edition: 15-20, 46-52, 62, 294-299, 315-320, 322-327, 329-333, 357, 719 <i>Algebra Lab</i> 300</p> <p>Teacher Wraparound Edition: AE 47, 48, 49; FMC 48; I 47; PA 20, 299; T 515; TNT 17</p>

STANDARDS	PAGE REFERENCES
Indicator 2: Apply number operations with real numbers and other number systems.	
<p>9-12.N.2.1. Students are able to add, subtract, multiply, and divide real numbers including integral exponents.</p>	<p>Student Edition: 6-9, 10-14, 357, 366-373, 536-540, 694-695, 696-697, 698-699, 700-701, 718, 737 <i>Real World Example</i> 49, 621</p> <p>Teacher Wraparound Edition: AE 11, 537; FMC 7, 11, 368</p>
Indicator 3: Develop conjectures, predictions, or estimations to solve problems and verify or justify the results.	
<p>9-12.N.3.1. Students are able to use estimation strategies in problem situations to predict results and to check the reasonableness of results.</p> <ul style="list-style-type: none"> • Use rounding as an estimation strategy. • Use non-routine estimation strategies. 	<p>Student Edition: 227-233, 343 #22, 482-483, 642-648, 750 #7 <i>Algebra Lab</i> 59, 365, 500-501 <i>Real World Example</i> 495</p> <p>Teacher Wraparound Edition: AE 230; ES 482; FMC 643; MEP 229; PA 52; RWC 343; T 365; TNT 230</p>
<p>9-12.N.3.2. Students are able to select alternative computational strategies and explain the chosen strategy.</p> <ul style="list-style-type: none"> • Use properties of numbers that allow operational shortcuts for computational procedures. 	<p>Student Edition: 21-25, 26-31, 62, 63, 697, 717, 718 <i>Mid-Chapter Quiz</i> 32 <i>Practice Test</i> 65</p> <p>Teacher Wraparound Edition: AE 23, 27, 34; FMC 27; PA 25, 31, 37; T 33</p>
<p>Core High School Number Sense Performance Descriptors</p>	
<p>Advanced</p>	
<p>High school students performing at the advanced level:</p> <ul style="list-style-type: none"> • classify a number as real, pure imaginary, or complex; • evaluate numerical expressions using rational exponents; • explain a reasonable solution to a problem. 	<p>Student Edition: 46-52, 60, 64, 410, 529-534, 536-540, 737, 759 #2, 763 #4, 767 #4 <i>Graphing Calculator Lab</i> 535</p> <p>Teacher Wraparound Edition: AA 538, 540; AE 47, 48, 49; 537; FMC 537; PA 540</p>

STANDARDS	PAGE REFERENCES
Proficient	
<p>High school students performing at the proficient level:</p> <ul style="list-style-type: none"> identify the subsets of the set of real numbers to which a given number belongs; evaluate numerical expressions using integral exponents; check reasonableness of a solution to a problem. 	<p>Student Edition: 46-52, 60, 64, 410, 536-540, 737, 759 #2, 763 #4, 767 #4 <i>Graphing Calculator Lab</i> 535</p> <p>Teacher Wraparound Edition: AA 538, 540; AE 47, 48, 49; 537; FMC 537; PA 540</p>
Basic	
<p>High school students performing at the basic level:</p> <ul style="list-style-type: none"> give an example of each of the following: a whole number, an integer, and a rational number; evaluate numerical expressions using whole number exponents. 	<p>Student Edition: 6, 46-52, 60, 64, 358, 359, 363 #60, 410, 540 #50, 759 #2, 763 #4, 767 #4</p> <p>Teacher Wraparound Edition: AE 47, 48, 49</p>
Core High School Statistics & Probability Grade Standards, Supporting Skills, and Examples	
Indicator 1: Use statistical models to gather, analyze, and display data to draw conclusions.	
<p>9-12.S.1.1. Students are able to draw conclusions from a set of data.</p> <ul style="list-style-type: none"> Determine and use appropriate statistical values. Determine which questions can or cannot be answered from a given data set. 	<p>Student Edition: 226-233, 242, 246, 672-676, 714-715, 726, 747 #14-#16, 769-771, 773 #9 <i>Graphing Calculator Lab</i> 234-235, 515-516</p> <p>Teacher Wraparound Edition: A 235, 516; AA 233; AE 228, 229; FMC 229</p>
<p>9-12.S.1.2. Students are able to compare multiple one-variable data sets, using range, interquartile range, mean, mode, and median.</p>	<p>Student Edition: 711-712, 713, 760 #14, 764 #23, 768 #21 <i>Graphing Calculator Lab</i> 234-235</p> <p>Teacher Wraparound Edition: A 235</p>
<p>9-12.S.1.3. Represent a set of data in a variety of graphical forms and draw conclusions.</p> <ul style="list-style-type: none"> Make a scatterplot to draw a regression line and make predictions. Make a box-and-whisker plot to model a set of one-variable data. Make a histogram from a frequency distribution. 	<p>Student Edition: 226-233, 242, 246, 672-676, 711-712, 713, 714-715, 747 #14-#16, 769-771, 773 #9 <i>Graphing Calculator Lab</i> 234-235, 515-516</p> <p>Teacher Wraparound Edition: A 235, 516; AA 233; AE 228, 229; FMC 229</p>

STANDARDS	PAGE REFERENCES
Indicator 2: Apply the concepts of probability to predict events/outcomes and solve problems.	
9-12.S.2.1. Students are able to distinguish between experimental and theoretical probability.	Student Edition: 650-654, 655-662, 663-670, 677-683, 686, 687, 709, 743 <i>Mid-Chapter Quiz</i> 671 <i>Practice Test</i> 689 Teacher Wraparound Edition: AE 651, 652, 656, 657, 664, 679; FMC 651, 665; I 666; TNT 658
9-12.S.2.2. Students are able to predict outcomes of simple events using given theoretical probabilities. <ul style="list-style-type: none"> Determine the sample space of an experiment. 	Student Edition: 642-648, 663-670, 672-676, 685, 686, 687, 709, 743 <i>Mid-Chapter Quiz</i> 671 <i>Practice Test</i> 689 <i>Reading Math</i> 649 Teacher Wraparound Edition: AA 647; AE 643, 644, 673; DI 664; FMC 643; T 663
Core High School Statistics & Probability Performance Descriptors	
Advanced	
High school students performing at the advanced level: <ul style="list-style-type: none"> calculate probability of compound events; determine correlation coefficient in a data set. 	Student Edition: 663-670, 676 #25-#27, 683 #41-#43, 684, 686, 743 <i>Mid-Chapter Quiz</i> 671 <i>Practice Test</i> 689 Teacher Wraparound Edition: A 670; AE 657, 664, 665, 666; FMC 665; I 666; PA 670; RWC 669
Proficient	
High school students performing at the proficient level: <ul style="list-style-type: none"> calculate probability of a simple event and make predictions; answer questions about measures of central tendency and five-number summary based on a given data set; draw a regression line for a scatterplot. 	Student Edition: 227-233, 641, 655-662, 663-670, 709-710, 711-712, 713, 760 #14, 764 #26, 768 #21-#22, 769-771, 773 #10 <i>Graphing Calculator Lab</i> 234-235 Teacher Wraparound Edition: A 235; AA 230, 233; AE 229; FMC 229; MEP 229; PA 233

STANDARDS	PAGE REFERENCES
Basic	
<p>High school students performing at the basic level:</p> <ul style="list-style-type: none"> calculate the probability of a simple event; calculate mean, median, and mode for a data set. 	<p>Student Edition: 641, 655-662, 663-670, 684, 709-710, 711-712, 713, 760 #14, 764 #23, #26, 768 #21-#22, 773 #10</p> <p>Teacher Wraparound Edition: PA 670; T 663; UKL 640G</p>
<p>Advanced High School Algebra Grade Standards, Supporting Skills, and Examples</p>	
<p>Indicator 1: Use procedures to transform algebraic expressions.</p>	
<p>9-12.A.1.1A. Students are able to write equivalent forms of rational algebraic expressions using properties of real numbers.</p>	<p>Student Edition: 426-431, 434-439, 441-446, 447-452, 454-460, 462, 463, 464, 733, 734 <i>Algebra Lab</i> 425, 432-433 <i>Practice Test</i> 465 <i>Reading Math</i> 453</p> <p>Teacher Wraparound Edition: AE 427, 435, 442, 448, 455; FMC 442, 449; I 435</p>
<p>9-12.A.1.2A. Students are able to extend the use of real number properties to expressions involving complex numbers.</p>	<p>See Glencoe <i>Algebra 2</i> © 2008.</p> <p>Student Edition: 259-266, 362-368 <i>Algebra Lab</i> 262</p> <p>Teacher Wraparound Edition: Pre-AP 266</p>
<p>Indicator 2: Use a variety of algebraic concepts and methods to solve equations and inequalities.</p>	
<p>9-12.A.2.1A. Students are able to determine solutions of quadratic equations.</p> <ul style="list-style-type: none"> Use the quadratic formula. Use the discriminant, $b^2 - 4ac$, to describe the nature of the roots. 	<p>Student Edition: 480-485, 486-491, 493-499, 519, 736, 752 #11-#12 <i>Algebra Lab</i> 500-501 <i>Practice Test</i> 521</p> <p>Teacher Wraparound Edition: A 499; AE 481, 494, 496; ES 482; FMC 494; I 495; PA 485</p>
<p>9-12.A.2.2A. Students are able to determine the solution of systems of equations and systems of inequalities.</p>	<p>Student Edition: 260-265, 266-270, 272-278, 280-284, 315-320, 341-345, 348, 350, 727, 728, 729, 730 <i>Graphing Calculator Lab</i> 259, 340</p> <p>Teacher Wraparound Edition: A 340; AE 261, 267, 317, 342, 343; DI 342; FMC 281; PA 345</p>

STANDARDS	PAGE REFERENCES
<p>9-12.A.2.3A. Students are able to determine solutions to absolute value statements.</p>	<p>Student Edition: 322-327, 329-333, 339 #44-#47, 349, 730 <i>Graphing Calculator Lab</i> 328 <i>Practice Test</i> 351</p> <p>Teacher Wraparound Edition: AA 327; AE 323, 330, 331; DI 323; EA 325; T 328; TNT 330</p>
<p>Indicator 3: Interpret and develop mathematical models.</p>	
<p>9-12.A.3.1A. Students are able to distinguish between linear, quadratic, inverse variation, and exponential models.</p>	<p>Student Edition: 155-161, 471-477, 480-485, 502-508, 577-582 <i>Graphing Calculator Lab</i> 162-163, 470, 478-479</p> <p>Teacher Wraparound Edition: AE 156, 472, 473, 503; FMC 473, 482, 504, 579; GIV 578; TNT 474, 503</p>
<p>9-12.A.3.2A. Students are able to create formulas to model relationships that are algebraic, geometric, trigonometric, and exponential.</p>	<p>Student Edition: 70-76, 84 #55-#56, 121 #35, 127 #29-#34, 131, 168 #20, 176 #28, 533 #33, 576 #11, 720, 745 <i>Mid-Chapter Quiz</i> 104</p> <p>Teacher Wraparound Edition: AA 74, 121; AE 72, 73, 167</p>
<p>9-12.A.3.3A. Students are able to use sequences and series to model relationships.</p>	<p>Student Edition: 165-170, 176 #30-32, 179, 195 #68-#71, 724, 746 #12-#13, 772 #4 <i>Practice Test</i> 181 <i>Reading Math</i> 171</p> <p>Teacher Wraparound Edition: AA 170; AE 167; AS 140F; FMC 167; T 165, 166; WAS 166</p>
<p>Indicator 4: Describe and use properties and behaviors of relations, functions, and inverses.</p>	
<p>9-12.A.4.1A. Students are able to determine the domain, range, and intercepts of a function.</p>	<p>Student Edition: 53-58, 149-154, 155-161, 177, 178, 471-477, 480-485, 518, 735, 752 #1-#4</p> <p>Teacher Wraparound Edition: AE 150, 156, 157, 472, 473; FMC 151</p>

STANDARDS	PAGE REFERENCES
<p>9-12.A.4.2A. Students are able to describe the behavior of a polynomial, given the leading coefficient, roots, and degree.</p>	<p>Student Edition: 155-161, 471-477, 480-485, 502-508, 577-582 <i>Graphing Calculator Lab</i> 162-163, 470, 478-479</p> <p>Teacher Wraparound Edition: AA 477; AE 472, 473, 474, 503, 505; FMC 473, 504, 579; GEF 503; GIV 578</p>
<p>9-12.A.4.3A. Students are able to apply transformations to graphs and describe the results.</p> <ul style="list-style-type: none"> • Change coefficients and/or constants. • Graph the inverse of a function. • Graph the inverse of a function. 	<p>Student Edition: 471-477, 502-508, 577-582, 735, 736, 739, 763 #12, 767 #11, 773 #5 <i>Graphing Calculator Lab</i> 162-163, 478-479, 504, 547, 576</p> <p>Teacher Wraparound Edition: A 479, 547; AA 580; AE 474, 504, 578; TNT 474</p>
<p>9-12.A.4.4A. Students are able to apply properties and definitions of trigonometric, exponential, and logarithmic expressions.</p>	<p>See Glencoe <i>Algebra 2</i> © 2008.</p> <p>Student Edition: 498-506, 509-517, 520-526, 528-533, 536-542, 544-550, 837-841, 842-846, 848-852, 853-859</p> <p>Teacher Wraparound Edition: F 500; Pre-AP 506, 517, 523, 533, 846, 859</p>
<p>9-12.A.4.5A. Students are able to describe characteristics of nonlinear functions and relations.</p> <ul style="list-style-type: none"> • Conic sections • Trigonometric functions • Exponential and logarithmic functions 	<p>See Glencoe <i>Algebra 2</i> © 2008.</p> <p>Student Edition: 498-506, 509-517, 520-526, 528-533, 536-542, 544-550, 567-573, 574-579, 581-588, 590-597, 598-602, 837-841, 842-846, 848-852, 853-859 <i>Algebra Lab</i> 569, 580, 585</p>
<p>9-12.A.4.6A. Students are able to graph solutions to linear inequalities.</p>	<p>Student Edition: 294-299, 315-320, 329-333, 334-339, 341-345 <i>Graphing Calculator Lab</i> 309, 340 <i>Mid-Chapter Quiz</i> 321</p> <p>Teacher Wraparound Edition: AA 299, 318, 321; AE 296, 316, 317, 331, 335, 342; FMC 336; GCL 309; T 329</p>

STANDARDS	PAGE REFERENCES
Advanced High School Geometry Grade Standards, Supporting Skills, and Examples	
Indicator 1: Use deductive and inductive reasoning to recognize and apply properties of geometric figures.	
9-12.G.1.1A. Students are able to justify properties of geometric figures.	Student Edition: 24 #35, 37 #44, 44 #45, 52 #66, 39-43, 96 #45, 114 #39, 539 #44, 564 #28 <i>Algebra Lab</i> 38, 45 <i>Reading Math</i> 314, 453 Teacher Wraparound Edition: A 44; AE 40; FMC 41; T 38
9-12.G.1.2A. Students are able to determine the values of the sine, cosine, and tangent ratios of right triangles.	See Glencoe <i>Geometry</i> © 2008. Student Edition: 456-462, 470 #29-#32, 477 #42-#45 <i>Graphing Calculator Lab</i> 455 <i>Mid-Chapter Quiz</i> 463 #10-#16 <i>Practice Test</i> 491 #10-#12 <i>Standardized Test Practice</i> 492 #2 <i>Study Guide and Review</i> 488 8-4 Teacher Wraparound Edition: AE 457-459
9-12.G.1.3A. Students are able to apply properties associated with circles.	See Glencoe <i>Geometry</i> © 2008. Student Edition: 554-561, 563-569, 570-577, 578-586, 588-596, 599-606, 607-613 <i>Practice Test</i> 625 <i>Standardized Test Practice</i> 626-627 #1, #3, #9, #11 <i>Study Guide and Review</i> 621-624 Teacher Wraparound Edition: A 569; AE 555-557, 564-566, 571-573, 579-582, 589-592, 600-602, 608-610; DI 565; PAP 569
9-12.G.1.4A. Students are able to use formulas for surface area and volume to solve problems involving three-dimensional figures.	Student Edition: 12, 74 #24, 75 #47, 121 #34, 371 #13, 380 #52-#53, 402 #42-#43, 548 #18, 605 #47, 708, 744 #1-#2, 745 #1-#4, 750 #13-#14, 764 #21, 768 #18, 773 #6 <i>Algebra Lab</i> 72 <i>Real World Example</i> 49 Teacher Wraparound Edition: AL 72

STANDARDS	PAGE REFERENCES
<p>Indicator 2: Use properties of geometric figures to solve problems from a variety of perspectives.</p>	
<p>9-12.G.2.1A. Students are able to use Cartesian coordinates to verify geometric properties.</p>	<p>Student Edition: 555-559, 570, 572 #2, 573 #12, 582 #46-#48, 738, 753 #10-#11 <i>Practice Test</i> 571</p> <p>Teacher Wraparound Edition: A 559; FMC 556; T 555</p>
<p align="center">Advanced High School Measurement Grade Standards, Supporting Skills, and Examples</p>	
<p>Indicator 1: Apply measurement concepts in practical applications.</p>	
<p>9-12.M.1.1A. Students are able to use dimensional analysis to check answers and determine units of a problem solution.</p>	<p>Student Edition: 46, 49, 124, 402 #48, 553 #43-#47, 592 #8, 592 #24, 594 #39, 597 #7-#8, 754 #1-#3, 764 #17, 768 #16, 773 #7 <i>Real World Example</i> 562, 591, 596</p> <p>Teacher Wraparound Edition: AE 107, 562, 591; FMC 591; TNT 119</p>
<p>9-12.M.1.2A. Students are able to use indirect measurement in problem situations that defy direct measurement.</p>	<p>Student Edition: 549-554, 555-559, 560-565, 570, 572 #5, 753, 760 #10-#11, 767 #12, 773 #7 <i>Practice Test</i> 571</p> <p>Teacher Wraparound Edition: AE 556, 562; PA 559; T 555</p>

STANDARDS	PAGE REFERENCES
Advanced High School Number Sense Grade Standards, Supporting Skills, and Examples	
Indicator 1: Analyze the structural characteristics of the real number system and its various subsystems. Analyze the concept of value, magnitude, and relative magnitude of real numbers.	
9-12.N.1.1A. Students are able to describe the relationship of the real number system to the complex number system.	See Glencoe <i>Algebra 2</i> © 2008. Student Edition: 259-266 <i>Algebra Lab</i> 262 Teacher Wraparound Edition: DI 260; F263
9-12.N.1.2A. Students are able to apply properties and axioms of the real number system to various subsets, e.g., axioms of order, closure.	Student Edition: 21-25, 26-31, 33-37, 46-52, 60, 62, 63, 64, 718, 719 <i>Practice Test</i> 65 Teacher Wraparound Edition: A 52; AA 25; AE 28, 34, 47; FMC 22, 34, 48; TNT 29
Indicator 2: Apply number operations with real numbers and other number systems.	
9-12.N.2.1A. Students are able to add, subtract, multiply, and divide real numbers including rational exponents.	Student Edition: 21-25, 26-31, 528-534, 536-540, 541-546, 568, 696-697, 698-699, 700-701, 718, 737 <i>Graphing Calculator Lab</i> 535 <i>Practice Test</i> 571 Teacher Wraparound Edition: AE 531, 537, 542; TNT 530
Advanced High School Statistics & Probability Grade Standards, Supporting Skills, and Examples	
Indicator 1: Use statistical models to gather, analyze, and display data to draw conclusions.	
9-12.S.1.1A. Students are able to analyze and evaluate the design of surveys and experiments.	Student Edition: 642-648, 654 #26-#28, 684, 685, 742, 755 <i>Practice Test</i> 689 <i>Reading Math</i> 649 Teacher Wraparound Edition: AA 647; AE 643, 644, 645; DI 644; FMC 643; PA 648; RWC 648; T 642

STANDARDS	PAGE REFERENCES
<p>9-12.S.1.2A. Students are able to analyze and evaluate graphical displays of data.</p>	<p>Student Edition: 226-233, 242, 246, 642-648, 672-676, 711-712, 713, 714-715, 747 #14-#16, 769-771, 773 #9 <i>Graphing Calculator Lab</i> 234-235, 515-516 <i>Reading Math</i> 649 Teacher Wraparound Edition: A 235, 516; AA 233; AE 228, 229; FMC 229; PA 648</p>
<p>9-12.S.1.3A. Students are able to compare multiple one-variable data sets, using standard deviation and variance.</p> <ul style="list-style-type: none"> Calculate the standard deviation and variance of a data set. 	<p>See Glencoe <i>Algebra 2</i> © 2008. Student Edition: 717-723 <i>Graphing Calculator Lab</i> 719 Teacher Wraparound Edition: F 718; Pre-AP 723</p>
<p>9-12.S.1.4A. Students are able to describe the normal curve and use it to make predictions.</p>	<p>Student Edition: <i>Graphing Calculator Lab</i> 515-516 Teacher Wraparound Edition: A 516; AA 516; T 515</p>
<p>9-12.S.1.5A. Students are able to use scatterplots, best-fit lines, and correlation coefficients to model data and support conclusions.</p>	<p>Student Edition: 227-233, 241 #38, 246, 726, 747, 769-771, 773 #9 <i>Graphing Calculator Lab</i> 234-235, 515-516 <i>Practice Test</i> 247 Teacher Wraparound Edition: A 516; AA 516; AE 228, 229, 230; F 234; FMC 229; PA 233; TNT 230</p>
<p>Indicator 2: Apply the concepts of probability to predict events/outcomes and solve problems</p>	
<p>9-12.S.2.1A. Students are able to use probabilities to solve problems.</p> <ul style="list-style-type: none"> Compute combinations, permutations. Interpret tables. Create and use tree diagrams. 	<p>Student Edition: 650-654, 655-662, 663-670, 672-676, 677-683, 685-688, 742, 743, 755, 768 #22, 773 #10 <i>Mid-Chapter Quiz</i> 671 <i>Practice Test</i> 689 Teacher Wraparound Edition: AE 656, 664, 673, 678; FMC 656, 657, 665; TNT 658</p>

STANDARDS	PAGE REFERENCES
<p>9-12.S.2.2A. Students are able to determine probability of compound, complementary, independent, and mutually exclusive events.</p>	<p>Student Edition: 663-670, 672-676, 677-683, 685-688, 742, 743, 755, 764 #26, 768 #22, 768 #24, 773 #10 <i>Mid-Chapter Quiz</i> 671 <i>Practice Test</i> 689</p> <p>Teacher Wraparound Edition: AE 664, 665, 666, 673, 678; FMC 665; I 666; T 663</p>
<p>9-12.S.2.3A. Students are able to generate data and use the data to determine empirical (experimental) probabilities.</p>	<p>Student Edition: 677-683, 688, 743, 755 <i>Practice Test</i> 689</p> <p>Teacher Wraparound Edition: AE 678, 679; AL 678; DI 664; PA 680; RWC 683; T 672, 677</p>