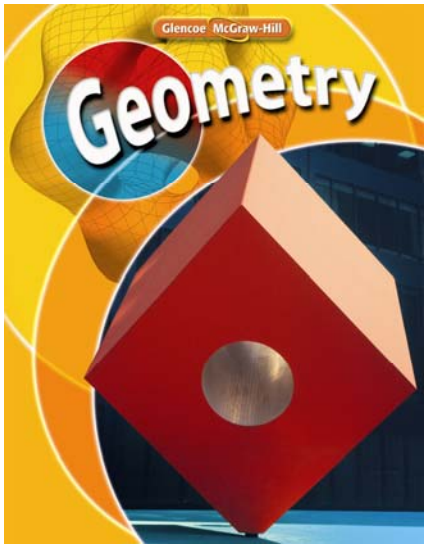
Glencoe

Mathematics
Grade Level Expectations
Grades 9 and 10

Missouri



Geometry

STANDARDS	PAGE REFERENCES
Grade 9	
Number and Operations	
1. Understand numbers, ways of representing numbers, relationships among numbers and number systems	
A. Read, write and compare numbers	
compare and order rational and irrational numbers, including finding their approximate locations on a number line **MA 5 3.3** **IX.a**	**Student Edition:** *Study Tip* 15
B. Represent and use rational numbers	
C. Compose and decompose numbers	
D. Classify and describe numeric relationships	
2. Understand meanings of operations and how they relate to one another	
A. Represent operations	
B. Describe effects of operations	
describe the effects of operations, such as multiplication, division, and computing powers and roots on the magnitude of quantities **MA 4 3.4,4.1** **VIII.i**	**Student Edition:** 5 #6-#9, 778-779

Codes used for Teacher Wraparound Edition pages are the initial caps of headings on that page.

STANDARDS	PAGE REFERENCES
C. Apply properties of operations	
apply properties of exponents (including order of operations) to simplify expressions **MA 4 1.6,1.10** **VIII.c & d**	**Student Edition:** 5 #11-#15, 123 #18, 727 #6-#9, 780, 792-793, 794-795
D. Apply operations on real and complex numbers	
apply operations to real numbers, using mental computation or paper-and-pencil calculations for simple cases and technology for more complicated cases **MA 1,4,5 1.4,3.4** **V.a, VIII.d, IX.6**	**Student Edition:** 5 #6-#9, 778-779, 780, 846 #3
3. Compute fluently and make reasonable estimates	
A. Describe or represent mental strategies	
B. Develop and demonstrate fluency	
C. Compute problems	
apply all operations on real numbers **MA 5 1.10,3.3** **IX.a**	**Student Edition:** 5 #11-#15, 123 #18, 727 #6-#9, 780, 792-793, 794-795
D. Estimate and justify solutions	
judge the reasonableness of numerical computations and their results **MA 1 3.8** **V.a**	**Student Edition:** 19 #48-#51, 20 #56-#58, 22 ex 2, 47 #44-#49, 441 ex 1, 442 ex 2, 444 #4, 445 #34 **Teacher Wraparound Edition:** AE 22, 441, 442
E. Use proportional reasoning	
solve problems involving proportions **MA 1,4 3.3** **V.a, VIII.e**	**Student Edition:** 380 ex 1, 382 ex 4, 383 #8-#11, 384 #30-#34, 385 #35-#36, 389 ex 2, 391 ex 5, 392 #3, 393 #20-#21, 394 #24-#25, 400 ex 3, 401 #12-#13, 408 ex 4, 410 #10 **Teacher Wraparound Edition:** AE 381, 382, 389, 390, 391, 408

STANDARDS	PAGE REFERENCES
Algebraic Relationships	
1. Understand patterns, relations and functions	
A. Recognize and extend patterns	
B. Create and analyze patterns	
generalize patterns using explicitly or recursively defined functions **MA 4 1.6,3.5** **VIII.1.b**	**Student Edition:** 78-82, 90 #56-#61 *Geometry Lab* 320 *Graphing Calculator Lab* 387 **Teacher Wraparound Edition:** AE 79, 80; GL 320; PA 82; T 387; TNT 79
C. Classify objects and representations	
compare and contrast various forms of representations of patterns **MA 4 1.6** **VIII.a & h**	**Student Edition:** 78-82, 90 #56-#61 *Geometry Lab* 320 *Graphing Calculator Lab* 387 **Teacher Wraparound Edition:** AE 79, 80; GL 320; PA 82; T 387; TNT 79
D. Identify and compare functions	
understand and compare the properties of linear and exponential functions (include intercepts) **MA 4 1.6,3.6** **VIII.b & c**	**Student Edition:** 165 ex 1, 167 ex 5 **Teacher Wraparound Edition:** AE 166, 167
E. Describe the effects of parameter changes	
describe the effects of parameter changes on linear functions **MA 4 1.6,4.1** **VIII.i**	**Student Edition:** 159 ex 3, 160 #6, 161 #23-#28, 162 #44, 175 ex 4, 179 #47-#48, 193 #16-#17, 195 #13-#14 *Geometry Lab* 158 *Study Tip* 157 **Teacher Wraparound Edition:** A 163; AE 159, 175; GL 158; TNT 157

STANDARDS	PAGE REFERENCES
2. Represent and analyze mathematical situations and structures using algebraic symbols	
A. Represent mathematical situations	
use symbolic algebra to represent and solve problems that involve linear relationships, including absolute value and recursive relationships **MA 4,6 1.6,3.1** **VIII.c & d, X.h**	**Student Edition:** 77 #9-#14, 112 ex 2, 114 #4, 115 #18, 116 #22-#25, 123 #34-#35, 201 #1-#5, 379 #1-#4, 431 #1-#4, 553 #1-#4, 781-782 **Teacher Wraparound Edition:** AE 112
B. Describe and use mathematical manipulation	
describe and use algebraic manipulations, including factoring and rules of integer exponents **MA 4 3.1,4.1** **VIII.a & d**	**Student Edition:** 5 #11-#15, 123 #18, 727 #6-#9, 780, 792-793, 794-795, 796-797, 846 #9
C. Utilize equivalent forms	
use and solve equivalent forms of equations and inequalities (linear) **MA 4 1.6,3.4** **VIII.d & e**	**Student Edition:** 77 #9-#14, 112 ex 2, 114 #4, 115 #18, 116 #22-#25, 123 #34-#35, 201 #1-#5, 379 #1-#4, 431 #1-#4, 553 #1-#4, 781-782, 783-784 **Teacher Wraparound Edition:** AE 112
D. Utilize systems	
use and solve systems of linear equations with 2 variables **MA 4 1.6** **VIII.b & d**	**Student Edition:** 273 ex 2, 274 #3, 275 #16-#18 *Prerequisite Skills* 788-789 **Teacher Wraparound Edition:** AE 273
3. Use mathematical models to represent and understand quantitative relationships	
A. Use mathematical models	
identify quantitative relationships and determine the type(s) of functions that might model the situation to solve the problem **MA 4 1.6,3.6** **VIII.c**	**Student Edition:** 77 #9-#14, 273 ex 3, 274 #3, 275 #16-#18, 565 ex 3, 567 #9, 670 #19-#22, 843 #9, 847 #17-#18, 851 #19-#20, 856 #8

STANDARDS	PAGE REFERENCES
4. Analyze change in various contexts	
A. Analyze change	
analyze linear functions by investigating rates of change and intercepts **MA 4 1.6,4.1** **VIII.a & c**	**Student Edition:** 156-163, 164 #14-#15, 170 #37-#40, 175 ex 4, 176 #7, 177 #18-#19, 179 #43-#46, 193 #16-#17, 197 #10 *Graphing Calculator Lab* 155 **Teacher Wraparound Edition:** A 163; AE 157, 158, 159, 175
Geometric and Spatial Relationships	
1. Analyze characteristics and properties of two- and three-dimensional geometric shapes and develop mathematical arguments about geometric relationships	
A. Describe and use geometric relationships	
solve problems involving angle relationships (supplementary, complementary angles) and Pythagorean Theorem **MA 2 1.6** **VI.c**	**Student Edition:** 40-47, 57 #57-#58, 66 #40-#41, 71 #26-#29, 73 #16, 74 #5, 77 #16-#17, 196 #4, 197 #7, 440-446 *Geometry Lab* 439 **Teacher Wraparound Edition:** A 47; AE 41, 42, 44, 442, 443; DI 43; PA 42; T 48
B. Apply geometric relationships	
apply geometric properties and relationships, such as similarity, to solve multi-step problems in 2 dimensions **MA 2 3.6** **VI.c**	**Student Edition:** 388-396, 397-403, 404 #11-#13, 414 #36-#60, 422 #39-#40, 425 #12-#13, 426 #15, 427 #6-#8 **Teacher Wraparound Edition:** A 396, 403; AE 389, 390, 391, 398, 399; DI 389, 399; F 398, 390; PA 396, 403
C. Compose and decompose shapes	
2. Specify locations and describe spatial relationships using coordinate geometry and other representational systems	
A. Use coordinate systems	
solve problems related to 2-dimensional objects by finding the distance on a Cartesian plane **MA 2 3.2** **VI.f**	**Student Edition:** 21 ex 1, 22 ex 2, 25 #3-#4, 26 #17-#26, 27 #27-#28, 28 #60, 38 #49-#51, 39 #7-#11, 47 #44-#49, 70 #15-#18, 73 #8-#10, 204 ex 4, 205 #7-#8, 206 #17-#20, 207 #38, 252 ex 3, 253 #6 **Teacher Wraparound Edition:** AE 22, 204, 252

STANDARDS	PAGE REFERENCES
3. Apply transformations and use symmetry to analyze mathematical situations	
A. Use transformations on objects	
represent translations, reflections, rotations, and dilations of objects in the coordinate plane **MA 2 1.10** **VI.b**	**Student Edition:** 497-503, 504-509, 510-517, 518 #10, 524 #38-#41, 525-532, 544 #11-#13, 546 #31-#32, 547 #7-#9, 548 #2, 549 #7 *Geometry Lab* 496 **Teacher Wraparound Edition:** AE 498, 499, 505, 511, 527, 528
B. Use transformations on functions	
translate and reflect linear functions **MA 4 3.1** **VIII,I**	**Student Edition:** *Concept Summary* 499
C. Use symmetry	
4. Use visualization, spatial reasoning and geometric modeling to solve problems	
A. Recognize and draw three-dimensional representations	
draw and use vertex-edge graphs or networks to find optimal solutions **MA 6 3.4** **X.a**	**Student Edition:** 105 ex 1, 108 #8-#10
B. Draw and use visual models	
draw or use visual models to represent and solve problems **MA 2 3.1** **VI.b & i**	**Student Edition:** 629 #16, 632 ex 2, 634 #4, 635 #25-#26, 642 ex 5, 643 #9, 644 #30-#33, 651 ex 2, 653 #3, 654 #24, 657 #16, 659 ex 2, 660 #3, 661 #12-#13, 663 #33, 667 ex 3, 668 ex 3 *Geometry Lab* 630 **Teacher Wraparound Edition:** AE 632, 659

STANDARDS	PAGE REFERENCES
Measurement	
1. Understand measurable attributes of objects and the units, systems and processes of measurement	
A. Determine unit of measurement	
identify and justify appropriate units of measure for velocity **MA 1,2 3.1,4.1** **V.a, VI.d**	See Glencoe's *Algebra 1* © 2008 **Student Edition:** 591 Example 3, 593 #31-#33, 598 #28, #32, #33, 596 Example 3 *Algebra Lab* 500-501
B. Identify equivalent measures	
C. Tell and use units of time	
D. Count and compute money	
2. Apply appropriate techniques, tools and formulas to determine measurements	
A. Use standard or non-standard measurement	
B. Use angle measurement	
solve problems of angle measure, including those involving triangles or other polygons **MA 2 3.1,3.4** **VI.i**	**Student Edition:** 40-47, 57 #57-#58, 66 #40-#41, 71 #26-#29, 73 #16, 74 #5, 77 #16-#17, 196 #4, 197 #7, 440-446 *Geometry Lab* 439 **Teacher Wraparound Edition:** A 47; AE 41, 42, 44, 442, 443; DI 43; PA 42; T 48
C. Apply geometric measurements	
determine the surface area and volume of geometric figures, including cones, spheres, and cylinders **MA 2 1.10,3.4** **VI. i**	**Student Edition:** 686-691, 693-697, 698 #9-#10, 699-705, 706-710, 728-735, 737-742 **Teacher Wraparound Edition:** A 691, 697, 705; AE 687, 688, 694, 700, 701, 707, 708; DI 707; F 695; PA 696

STANDARDS	PAGE REFERENCES
D. Analyze precision	
analyze effects of computation on precision **MA 2 1.7,3.8** **VI.k**	**Student Edition:** 14 ex 3, 17 #5-#6, 18 #16-#21, 19 #48-#51, 20 #56-#58, 69 ex 3 *Study Tip* 16 **Teacher Wraparound Edition:** AE 14; DI 15; PA 14
E. Use relationships within a measurement system	
use unit analysis to solve problems involving rates **MA 4 3.1** **VIII.b**	**Student Edition:** 776-777
Data and Probability	
1. Formulate questions that can be addressed with data and collect, organize and display relevant data to answer them	
A. Formulate questions	
formulate questions, design studies and collect data about a characteristic **MA 3 1.2** **VII.a**	**Student Edition:** *Graphing Calculator Lab* 155, 542 **Teacher Wraparound Edition:** T 542
B. Classify and organize data	
C. Represent and interpret data	
select, create and use appropriate graphical representation of data **MA 6 1.8, 3.6** **X.b**	**Student Edition:** 567 #29-#31, 851 #18, 856 #8
2. Select and use appropriate statistical methods to analyze data	
A. Describe and analyze data	
apply statistical concepts to solve problems **MA 3 1.10,3.4** **VII.g**	**Student Edition:** 77 #9-#14, 273 ex 3, 274 #3, 275 #16-#18, 565 ex 3, 567 #9, 670 #19-#22, 843 #9, 847 #17-#18, 851 #19-#20, 856 #8

STANDARDS	PAGE REFERENCES
B. Compare data representations	
given one-variable quantitative data, display the distribution and describe its shape **MA 3 1.8** **VII.d & I**	**Student Edition:** 77 #9-#14, 273 ex 3, 274 #3, 275 #16-#18, 565 ex 3, 567 #9, 670 #19-#22, 843 #9, 847 #17-#18, 851 #19-#20, 856 #8 *Cross-Curricular Project* 23
C. Represent data algebraically	
given a scatter plot, determine an equation for a line of best fit **MA 3 1.6** **VII.b**	**Student Edition:** 77 #9-#14, 273 ex 3, 274 #3, 275 #16-#18, 565 ex 3, 567 #9, 670 #19-#22, 843 #9, 847 #17-#18, 851 #19-#20, 856 #8 *Cross-Curricular Project* 23
3. Develop and evaluate inferences and predictions that are based on data	
A. Develop and evaluate inferences	
make conjectures about possible relationships between 2 characteristics of a sample on the basis of scatter plots of the data and approximate lines of fit	**Student Edition:** 77 #9-#14, 273 ex 3, 274 #3, 275 #16-#18, 565 ex 3, 567 #9, 670 #19-#22, 843 #9, 847 #17-#18, 851 #19-#20, 856 #8 *Cross-Curricular Project* 23
B. Analyze basic statistical techniques	
4. Understand and apply basic concepts of probability	
A. Apply basic concepts of probability	
construct sample spaces and distributions **MA 3 3.1** **VII.f**	See Glencoe's *Algebra 1* © 2008 **Student Edition:** 642-647, 649, 650-654, 672-676, 687, 690, 714-715, 742-743, 755
B. Use and describe compound events	

STANDARDS	PAGE REFERENCES
Grade 10	
Number and Operations	
1. Understand numbers, ways of representing numbers, relationships among numbers and number systems	
A. Read, write and compare numbers	
B. Represent and use rational numbers	
use real numbers to solve problems **MA 1 3.4** **V.1.a**	**Student Edition:** 5 #11-#15, 123 #18, 727 #6-#9, 780, 792-793, 794-795
C. Compose and decompose numbers	
use a variety of representations to demonstrate an understanding of very large and very small numbers **MA 5 3.6** **IX.a & d**	**Student Edition:** 846 #3, 855 #2
D. Classify and describe numeric relationships	
2. Understand meanings of operations and how they relate to one another	
A. Represent operations	
B. Describe effects of operations	
C. Apply properties of operations	
apply properties of exponents to simplify expressions or solve equations **MA 4 1.6,1.10** **VIII.c & d**	**Student Edition:** 5 #11-#15, 123 #18, 727 #6-#9, 780, 792-793, 794-795
D. Apply operations on real and complex numbers	
apply operations to real numbers, using mental computation or paper-and-pencil calculations for simple cases and technology for more complicated cases **MA 1,4,5 1.4,3.4** **V.a, VIII.d, IX.6**	**Student Edition:** 5 #6-#9, 778-779, 780, 846 #3

STANDARDS	PAGE REFERENCES
3. Compute fluently and make reasonable estimates	
A. Describe or represent mental strategies	
B. Develop and demonstrate fluency	
C. Compute problems	
D. Estimate and justify solutions	
judge the reasonableness of numerical computations and their results **MA 1 3.8** **V.a**	**Student Edition:** 19 #48-#51, 20 #56-#58, 22 ex 2, 47 #44-#49, 441 ex 1, 442 ex 2, 444 #4, 445 #34 **Teacher Wraparound Edition:** AE 22, 441, 442
E. Use proportional reasoning	
solve problems involving proportions **MA 1,4 3.3** **V.a, VIII.e**	**Student Edition:** 380 ex 1, 382 ex 4, 383 #8-#11, 384 #30-#34, 385 #35-#36, 389 ex 2, 391 ex 5, 392 #3, 393 #20-#21, 394 #24-#25, 400 ex 3, 401 #12-#13, 408 ex 4, 410 #10 **Teacher Wraparound Edition:** AE 381, 382, 389, 390, 391, 408
Algebraic Relationships	
1. Understand patterns, relations and functions	
A. Recognize and extend patterns	
B. Create and analyze patterns	
generalize patterns using explicitly or recursively defined functions **MA 4 1.6,3.5** **VIII.1.b**	**Student Edition:** 78-82, 90 #56-#61 *Geometry Lab* 320 *Graphing Calculator Lab* 387 **Teacher Wraparound Edition:** AE 79, 80; GL 320; PA 82; T 387; TNT 79
C. Classify objects and representations	
compare and contrast various forms of representations of patterns **MA 4 1.6** **VIII.a & h**	**Student Edition:** 78-82, 90 #56-#61 *Geometry Lab* 320 *Graphing Calculator Lab* 387 **Teacher Wraparound Edition:** AE 79, 80; GL 320; PA 82; T 387; TNT 79

STANDARDS	PAGE REFERENCES
D. Identify and compare functions	
understand and compare the properties of linear, exponential and quadratic functions (include domain and range) **MA 4 1.6,3.6** **VIII.b & c**	**Student Edition:** 165 ex 1, 167 ex 5 **Teacher Wraparound Edition:** AE 166, 167
E. Describe the effects of parameter changes	
describe the effects of parameter changes on quadratic and exponential functions **MA 4 1.6,4.1** **VIII.i**	See Glencoe's *Algebra 1* © 2008 **Student Edition:** 478-479, 502-508
2. Represent and analyze mathematical situations and structures using algebraic symbols	
A. Represent mathematical situations	
use symbolic algebra to represent and solve problems that involve quadratic relationships, including recursive relationships **MA 4,6 1.6,3.1** **VIII.c & d, X.h**	**Student Edition:** 77 #9-#14, 112 ex 2, 114 #4, 115 #18, 116 #22-#25, 123 #34-#35, 201 #1-#5, 379 #1-#4, 431 #1-#4, 553 #1-#4, 781-782 **Teacher Wraparound Edition:** AE 112
B. Describe and use mathematical manipulation	
describe and use algebraic manipulations, including factoring and rules of integer exponents **MA 4 3.1,4.1** **VIII.a & d**	**Student Edition:** 5 #11-#15, 123 #18, 727 #6-#9, 780, 792-793, 794-795, 796-797, 846 #9
C. Utilize equivalent forms	
use and solve equivalent forms of equations and inequalities (piece-wise and quadratic) **MA 4 1.6,3.4** **VIII.d**	**Student Edition:** 77 #9-#14, 112 ex 2, 114 #4, 115 #18, 116 #22-#25, 123 #34-#35, 201 #1-#5, 379 #1-#4, 431 #1-#4, 553 #1-#4, 781-782, 783-784 **Teacher Wraparound Edition:** AE 112

STANDARDS	PAGE REFERENCES
D. Utilize systems	
use and solve systems of linear equations or inequalities with 2 variables **MA 4 1.6** **VIII.b & d**	**Student Edition:** 273 ex 2, 274 #3, 275 #16-#18 *Prerequisite Skills* 788-789 **Teacher Wraparound Edition:** AE 273
3. Use mathematical models to represent and understand quantitative relationships	
A. Use mathematical models	
identify quantitative relationships and determine the type(s) of functions that might model the situation to solve the problem **MA 4 1.6,3.6** **VIII.c**	**Student Edition:** 77 #9-#14, 273 ex 3, 274 #3, 275 #16-#18, 565 ex 3, 567 #9, 670 #19-#22, 843 #9, 847 #17-#18, 851 #19-#20, 856 #8
4. Analyze change in various contexts	
A. Analyze change	
analyze quadratic functions by investigating rates of change, intercepts and zeros **MA 4 1.6,4.1** **VIII.a & c**	See Glencoe's *Algebra 1* © 2008 **Student Edition:** 471-479, 480-485, 486-492, 493-499, 518-519, 734-735 *Algebra Lab* 500-501
Geometric and Spatial Relationships	
1. Analyze characteristics and properties of two- and three-dimensional geometric shapes and develop mathematical arguments about geometric relationships	
A. Describe and use geometric relationships	
use inductive and deductive reasoning to establish the validity of geometric conjectures, proved theorems and critique arguments made by others **MA 2 3.5** **VI.d**	**Student Edition:** 78 ex 1, 79 ex 3, 80 #5-#6, 81 #25-#30, 82 #38, 92 ex 3, 94 #6-#8, 95 #27-#30, 96 #37-#42, 98 #1-#4, 99-104, 105-109, 110 #1-#3, 111-117, 125 #25-#28, 134 #17-#24, 137 #1-#3, 138 #11 **Teacher Wraparound Edition:** AE 79, 93, 101

STANDARDS	PAGE REFERENCES
B. Apply geometric relationships	
apply relationships among surface areas and among volumes of similar objects **MA 2 3.6** **VI.c & I**	**Student Edition:** 388-396, 397-403, 404 #11-#13, 414 #36-#60, 422 #39-#40, 425 #12-#13, 426 #15, 427 #6-#8 **Teacher Wraparound Edition:** A 396, 403; AE 389, 390, 391, 398, 399; DI 389, 399; F 390, 398; PA 396, 403
C. Compose and decompose shapes	
2. Specify locations and describe spatial relationships using coordinate geometry and other representational systems	
A. Use coordinate systems	
make conjectures and solve problems involving 2-dimensional objects represented with Cartesian coordinates **MA 2 3.6,4.1** **VI.f**	**Student Edition:** 21 ex 1, 22 ex 2, 25 #3-#4, 26 #17-#26, 27 #27-#28, 28 #60, 38 #49-#51, 39 #7-#11, 47 #44-#49, 70 #15-#18, 73 #8-#10, 204 ex 4, 205 #7-#8, 206 #17-#20, 207 #38, 252 ex 3, 253 #6 **Teacher Wraparound Edition:** AE 22, 204, 252
3. Apply transformations and use symmetry to analyze mathematical situations	
A. Use transformations on objects	
use and apply constructions to represent translations, reflections, rotations, and dilations of objects **MA 2 1.10** **VI.b**	**Student Edition:** 497-503, 504-509, 510-517, 518 #10, 524 #38-#41, 525-532, 544 #11-#13, 546 #31-#32, 547 #7-#9, 548 #2, 549 #7 *Geometry Lab* 496 **Teacher Wraparound Edition:** AE 498, 499, 505, 511, 527, 528
B. Use transformations on functions	
translate, dilate and reflect quadratic and exponential functions **MA 4 3.1** **VIII.i**	See Glencoe's *Algebra 1* © 2008 **Student Edition:** 471-476, 478-479, 480-485, 502-508, 517-518 *Graphing Calculator Lab* 478-479, 504

STANDARDS	PAGE REFERENCES
C. Use symmetry	
identify types of symmetries of 2- and 3-dimensional figures **MA 2 1.6,1.10** **VI.f**	**Student Edition:** 500 ex 4, 501 #8-#9, 502 #38-#41, 513 ex 3, 514 #13, 684 #33-#37 **Teacher Wraparound Edition:** AE 500, 512; PA 503, 513
4. Use visualization, spatial reasoning and geometric modeling to solve problems	
A. Recognize and draw three-dimensional representations	
draw representations of 3-dimensional geometric objects using a variety of tools **MA 2 1.4** **VI.a**	**Student Edition:** 680 ex 1, 681 ex 2, 682 ex 3, 683 #10-#23, 684 #28-#32, 691 #41-#43, 697 #37-#38, 698 #1, 733 #16-#18 *Geometry Lab* 728, 737 **Teacher Wraparound Edition:** AE 681, 682; PA 685; T 693
B. Draw and use visual models	
draw or use visual models to represent and solve problems **MA 2 3.1** **VI.b & i**	**Student Edition:** 629 #16, 632 ex 2, 634 #4, 635 #25-#26, 642 ex 5, 643 #9, 644 #30-#33, 651 ex 2, 653 #3, 654 #24, 657 #16, 659 ex 2, 660 #3, 661 #12-#13, 663 #33, 667 ex 3, 668 ex 3 *Geometry Lab* 630 **Teacher Wraparound Edition:** AE 632, 659
Measurement	
1. Understand measurable attributes of objects and the units, systems and processes of measurement	
A. Determine unit of measurement	
B. Identify equivalent measures	
C. Tell and use units of time	
D. Count and compute money	

STANDARDS	PAGE REFERENCES
2. Apply appropriate techniques, tools and formulas to determine measurements	
A. Use standard or non-standard measurement	
B. Use angle measurement	
solve problems of angle measure of parallel lines cut by a transversal **MA 2 3.1,3.4** **VI.f & I**	**Student Edition:** 142-147, 149-154, 192 #9-#12, 195 #1, 196 #4 *Geometry Software Lab* 148 **Teacher Wraparound Edition:** A 154; AE 144, 150, 151; PA 147; T 148; TNT 144
C. Apply geometric measurements	
determine the surface area and volume of geometric figures, including cones, spheres, and cylinders **MA 2 1.10,3.4** **VI.i**	**Student Edition:** 686-691, 693-697, 698 #9-#10, 699-705, 706-710, 728-735, 737-742 **Teacher Wraparound Edition:** A 691, 697, 705; AE 687, 688, 694, 700, 701, 707, 708; DI 707; F 695; PA 696
D. Analyze precision	
analyze effects of computation on precision **MA 2 1.7, 3.8** **VI.k**	**Student Edition:** 14 ex 3, 17 #5-#6, 18 #16-#21, 19 #48-#51, 20 #56-#58, 69 ex 3 *Study Tip* 16 **Teacher Wraparound Edition:** AE 14; DI 15; PA 14
E. Use relationships within a measurement system	
Data and Probability	
1. Formulate questions that can be addressed with data and collect, organize and display relevant data to answer them	
A. Formulate questions	
formulate questions, design studies and collect data about a characteristic **MA 3 1.2** **VII.a**	**Student Edition:** *Graphing Calculator Lab* 155, 542 **Teacher Wraparound Edition:** T 542
B. Classify and organize data	

STANDARDS	PAGE REFERENCES
C. Represent and interpret data	
select, create and use appropriate graphical representation of data **MA 6 1.8,3.6** **X.b**	**Student Edition:** 567 #29-#31, 851 #18, 856 #8
2. Select and use appropriate statistical methods to analyze data	
A. Describe and analyze data	
apply statistical concepts to solve problems and distinguish between a statistic and a parameter **MA 3 1.10,3.4** **VII.g**	**Student Edition:** 77 #9-#14, 273 ex 3, 274 #3, 275 #16-#18, 565 ex 3, 567 #9, 670 #19-#22, 843 #9, 847 #17-#18, 851 #19-#20, 856 #8 *Cross-Curricular Project* 23
B. Compare data representations	
given one-variable quantitative data, display the distribution and describe its shape **MA 3 1.8** **VII.d & i**	**Student Edition:** 77 #9-#14, 273 ex 3, 274 #3, 275 #16-#18, 565 ex 3, 567 #9, 670 #19-#22, 843 #9, 847 #17-#18, 851 #19-#20, 856 #8 *Cross-Curricular Project* 23
C. Represent data algebraically	
display and analyze bivariate data where one variable is categorical and the other is numerical **MA 3 1.6** **VII.e**	**Student Edition:** 77 #9-#14, 273 ex 3, 274 #3, 275 #16-#18, 565 ex 3, 567 #9, 670 #19-#22, 843 #9, 847 #17-#18, 851 #19-#20, 856 #8 *Cross-Curricular Project* 23
3. Develop and evaluate inferences and predictions that are based on data	
A. Develop and evaluate inferences	
describe how sample statistics reflect the values of population parameters and use sampling distributions as the basis for informal inference **MA 3 3.5** **VII.a**	See Glencoe's *Algebra 1* © 2008 **Student Edition:** 642-648, 672-676, 677-682, 685-686, 689, 742, 755

STANDARDS	PAGE REFERENCES
B. Analyze basic statistical techniques	
4. Understand and apply basic concepts of probability	
A. Apply basic concepts of probability	
describe the concepts of sample space and probability distribution **MA 3 4.1** **VII.e**	See Glencoe's *Algebra 1* © 2008 **Student Edition:** 642-647, 649, 672-676, 687, 690, 714-715, 742-743, 755
B. Use and describe compound events	
use and describe the concepts of conditional probability and independent events **MA 6 1.10,4.1** **X.d**	**Student Edition:** 587 #19, 665-671, 674 #23-#25, 675 #11-#13, 847 #19