



# MathMatters 3

An Integrated Program

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## STANDARDS

## PAGE REFERENCES

**Process Standard A:** Students will develop their ability to solve problems by engaging in developmentally appropriate opportunities where there is a need to use various approaches to investigate and understand mathematical concepts in order to:

- **Formulate their own problems**
- **Find solutions to problems from everyday situations**
- **Develop and apply strategies to solve a variety of problems**
- **Integrate mathematical reasoning, communication and connections**

- Generalize solutions and apply previous knowledge to new problem solving situations

The following references use the concept of irregular shapes to meet this standard.

**Student Edition:**

*Chapter Assessment* 237 #17

*Chapter Review* 235 #21-#24

*Practice Exercises* 217

*Problem* 216

*Review and Practice Your Skills* 218 #12-#16

*Try These Exercises* 216

**Annotated Teacher's Edition:**

CE 217; GS 216; QA 217

STANDARDS	PAGE REFERENCES
<ul style="list-style-type: none"> <li>Determine an efficient strategy, verify, interpret, and evaluate the results with respect to the original problem</li> </ul>	<p><b>Student Edition:</b>  <i>Chapter Review</i> 638 #34, #35  <i>Practice Exercises</i> 634-635  <i>Problem Solving Strategies</i> 634</p> <p><b>Annotated Teacher's Edition:</b>  GS 634; QA 635; TT 635</p>
<ul style="list-style-type: none"> <li>Apply problem solving strategies until a solution is found or it is clear that no solution exists</li> </ul>	<p>The following references use the concept of systems of equations to meet this standard.</p> <p><b>Student Edition:</b>  258, 259  <i>Example</i> 258, 259, 264, 265, 268, 269  <i>Practice Exercises</i> 260-261, 266-267, 270-271  <i>Review and Practice Your Skills</i> 262 #31-#42, 272  <i>Try These Exercises</i> 260, 266, 270, 536 #9</p> <p><b>Annotated Teacher's Edition:</b>  CE 259, 265, 269</p>
<ul style="list-style-type: none"> <li>Interpret and solve a variety of mathematical problems by paraphrasing</li> </ul>	<p><b>Student Edition:</b>  <i>Are You Ready</i> 5  <i>Math Works</i> 33, 81, 113</p>
<ul style="list-style-type: none"> <li>Identify necessary and extraneous information</li> </ul>	<p>The following references can be used during teacher/class discussion to meet this standard.</p> <p><b>Student Edition:</b>  <i>Chapter Assessment</i> 143 #16  <i>Chapter Review</i> 142 #33, #34  <i>Practice Exercises</i> 139  <i>Problem</i> 138  <i>Try These Exercises</i> 139</p> <p><b>Annotated Teacher's Edition:</b>  CE 139; QA 139</p>
<ul style="list-style-type: none"> <li>Check the reasonableness of a solution</li> </ul>	<p>The following references use the concept of systems of equations to meet this standard.</p> <p><b>Student Edition:</b>  <i>Example</i> 258, 264, 268, 269  <i>Problem Solving Tip</i> 265</p> <p><b>Annotated Teacher's Edition:</b>  TT 635</p>

STANDARDS	PAGE REFERENCES
<ul style="list-style-type: none"> <li>Apply technology as a tool in problem solving situations</li> </ul>	<p><b>Student Edition:</b> 30 <i>Chapter Review</i> 44 #43, #44 <i>Practice Exercises</i> 31 <i>Problem</i> 30 <i>Review and Practice Your Skills</i> 32 #19-#28 <i>Try These Exercises</i> 31</p> <p><b>Annotated Teacher's Edition:</b> CE 31; DI 30; QA 31</p>
<ul style="list-style-type: none"> <li>Apply combinations of proven strategies and previous knowledge to solve non-routine problems</li> </ul>	<p><b>Student Edition:</b> <i>Practice Exercises</i> 217, 634-635 <i>Problem</i> 216 <i>Try These Exercises</i> 216</p> <p><b>Annotated Teacher's Edition:</b> CE 217; EL 217; QA 217, 635</p>
<p><b>Process Standard B: Students will develop their ability to communicate mathematically by solving problems where there is a need to obtain information from the real world through reading, listening, and observing in order to:</b></p>	
<ul style="list-style-type: none"> <li><b>Translate information into mathematical language and symbols</b></li> <li><b>Process information mathematically</b></li> <li><b>Present results in written, oral, and visual formats</b></li> <li><b>Discuss and exchange ideas about mathematics as a part of learning</b></li> <li><b>Read a variety of fiction and nonfiction texts to learn about mathematics</b></li> <li><b>Use mathematical notation to communicate and explain problems</b></li> </ul>	
<ul style="list-style-type: none"> <li>Use a variety of techniques to solve mathematical problems</li> </ul>	<p><b>Student Edition:</b> <i>Extended Practice Exercises</i> 85 #16, 89 #19 <i>Practice Exercises</i> 93 #6, 121 #8, 509 #40 <i>Try These Exercises</i> 28 #16</p>
<ul style="list-style-type: none"> <li>Evaluate written and oral presentations in mathematics</li> </ul>	<p><b>Student Edition:</b> <i>Practice Exercises</i> 8 #16, 37 #44, 184 #13-#18, 208 #16, 222 #11, 227 #16, 257 #22, 299 #33, 405 #10, 433 #21, 456 #4-#6, 491 #38, 582 #15 <i>Try These Exercises</i> 22 #9, 166 #8</p>

STANDARDS	PAGE REFERENCES
<ul style="list-style-type: none"> <li>Model and explain mathematical relationships using oral, written, graphic, and algebraic methods</li> </ul>	<p><b>Student Edition:</b>  <i>Extended Practice Exercises</i> 181 #26-#28  <i>Practice Exercises</i> 8 #16, 13 #30, 19 #32, 111 #24, 232 #13, 278 #17, 319 #8, 413 #10, 475 #42, 522 #14, #16  <i>Try These Exercises</i> 275 #6, 470 #14</p>
<ul style="list-style-type: none"> <li>Communicate and evaluate mathematical thinking based on the use of definitions, properties, rules, and symbols in problem solving</li> </ul>	<p><b>Student Edition:</b>  <i>Extended Practice Exercises</i> 157 #12, 175 #29, 257 #24, 451 #21, #22  <i>Practice Exercises</i> 8 #16, 19 #32, 41 #34, 55 #22, 127 #11, 190 #15, 222 #11, 399 #25, 429 #32, 443 #10, 527 #20  <i>Try These Exercises</i> 106 #4, 110 #9, 484 #12</p>
<ul style="list-style-type: none"> <li>Use everyday language, both orally and in writing, communicate strategies and solutions to problems using appropriate mathematical language</li> </ul>	<p><b>Student Edition:</b>  <i>Extended Practice Exercises</i> 59 #34, 75 #37, 79 #35, 117 #30-#35, 131 #27-#30, 215 #27, 341 #18  <i>Practice Exercises</i> 121 #8, 167 #21, 227 #16, 251 #24, 261 #16, 266 #13, 284 #13, 303 #9, 319 #10, 387 #18, 405 #15, 547 #25  <i>Try These Exercises</i> 22 #11, 31 #5, 64 #6, 204 #10, 340 #5, 388 #3</p>
<p><b>Process Standard C:</b> Students will develop their ability to reason mathematically by solving problems where there is a need to investigate mathematical ideas and construct their own learning in all content areas in order to:</p>	
<ul style="list-style-type: none"> <li><b>Reinforce and extend their logical reasoning abilities</b></li> <li><b>Reflect on, clarify, and justify their thinking</b></li> <li><b>Ask questions to extend their thinking</b></li> <li><b>Use patterns and relationships to analyze mathematical situations</b></li> <li><b>Determine relevant, irrelevant, and/or sufficient information to solve mathematical problems</b></li> </ul>	
<ul style="list-style-type: none"> <li>Recognize and apply deductive and inductive reasoning</li> </ul>	<p><b>Student Edition:</b>  134  <i>Build Understanding</i> 124, 134  <i>Example</i> 124, 125, 134, 135  <i>Extra Practice</i> 671, 672  <i>Practice Exercises</i> 126  <i>Reading Math</i> 135  <i>Review and Practice Your Skills</i> 132 #1-#8  <i>Try These Exercises</i> 126</p> <p><b>Annotated Teacher's Edition:</b>  CE 125; EL 127; FG 124, 125; QA 126</p>

STANDARDS	PAGE REFERENCES
<ul style="list-style-type: none"> <li>Review and refine the assumptions and steps used to derive conclusions in mathematical arguments</li> </ul>	<p>The following references use deductive reasoning to meet this standard.</p> <p><b>Student Edition:</b>  <i>Build Understanding</i> 134  <i>Example</i> 134, 135  <i>Practice Exercises</i> 136-137  <i>Reading Math</i> 135  <i>Try These Exercises</i> 136</p> <p><b>Annotated Teacher's Edition:</b>  CE 135; TT 134</p>
<ul style="list-style-type: none"> <li>Make and test conjectures about algebraic and geometric properties based on mathematical principles</li> </ul>	<p>The following geometric references can be extended to meet this standard.</p> <p><b>Student Edition:</b>  <i>Build Understanding</i> 104, 124  <i>Example</i> 105, 106  <i>Extended Practice Exercises</i> 107 #19, #20  <i>Practice Exercises</i> 107</p>
<ul style="list-style-type: none"> <li>Justify the validity of an argument</li> </ul>	<p>The following page references can be used during teacher/class discussion to meet this standard.</p> <p><b>Student Edition:</b>  134-137, 154-157, 170-171</p>
<ul style="list-style-type: none"> <li>Construct a valid argument</li> </ul>	<p><b>Student Edition:</b>  <i>Example</i> 134, 135, 156  <i>Practice Exercises</i> 136-137, 156-157  <i>Try These Exercises</i> 136, 156</p> <p><b>Annotated Teacher's Edition:</b>  AA 135; CE 135; QA 136</p>

STANDARDS	PAGE REFERENCES
<p><b>Process Standard D:</b> Students will develop the ability to make mathematical connections by solving problems where there is a need to view mathematics as an integrated whole in order to:</p>	
<ul style="list-style-type: none"> <li>• <b>Link new concepts to prior knowledge</b></li> <li>• <b>Identify relationships between content strands</b></li> <li>• <b>Integrate mathematics with other disciplines</b></li> <li>• <b>Allow the flexibility to approach problems in a variety of ways within and beyond the field of mathematics</b></li> </ul>	
<ul style="list-style-type: none"> <li>• Use mathematical ideas from one area of mathematics to explain an idea from another area of mathematics</li> </ul>	<p>The following references use the Pythagorean Theorem to meet this standard.</p> <p><b>Student Edition:</b>  <i>Are You Ready</i> 519 #17-#24  <i>Build Understanding</i> 430, 544  <i>Example</i> 545  <i>Practice Exercises</i> 432  <i>Try These Exercises</i> 432</p> <p><b>Annotated Teacher’s Edition:</b>  CE 545; DI 431; TT 544</p>
<ul style="list-style-type: none"> <li>• Explain the relationship between concepts and procedures</li> </ul>	<p>The following references use the concept of proportions to meet this standard.</p> <p><b>Student Edition:</b>  <i>Build Understanding</i> 296, 300, 306  <i>Example</i> 300, 301, 306  <i>Practice Exercises</i> 298, 302-303, 309  <i>Problem Solving Tip</i> 297</p> <p><b>Annotated Teacher’s Edition:</b>  TT 301</p>
<ul style="list-style-type: none"> <li>• Use the connections among mathematical topics to develop multiple approaches to problems</li> </ul>	<p><b>Student Edition:</b>  <i>Build Understanding</i> 358  <i>Example</i> 74, 362  <i>Extended Practice Exercises</i> 361 #31, 365 #37, #38  <i>Practice Exercises</i> 75 #33, 373  <i>Problem</i> 372  <i>Try These Exercises</i> 74 #9, 373</p> <p><b>Annotated Teacher’s Edition:</b>  CE 73</p>

STANDARDS	PAGE REFERENCES
<ul style="list-style-type: none"> <li>Apply mathematical thinking and modeling to solve problems that arise in other disciplines, such as rhythm in music and motion in science</li> </ul>	<p><b>Student Edition:</b>  <i>Example</i> 206, 306, 307, 431, 436, 455, 535  <i>Extended Practice Exercises</i> 37 #47, 537 #45  <i>Practice Exercises</i> 28 #30, 111 #25, 205 #28, 208 #13, 214 #16, 217 #5, #7, 223 #16, #17, 226 #10, 227 #15, #17, #18, 232 #10, 233 #7, 299 #28, 457 #16-#18, 564 #14, 630 #16, 634 #4-#8  <i>Try These Exercises</i> 204 #9, 216 #1</p>
<ul style="list-style-type: none"> <li>Identify, explain, and apply mathematics in everyday life</li> </ul>	<p><b>Student Edition:</b>  <i>Extended Practice Exercises</i> 59 #35, 485 #46, #47  <i>Practice Exercises</i> 55 #18-#20, 257 #21, 303 #11, #15, 409 #6-#10, 475 #41, #51, #52  <i>Try These Exercises</i> 408, 432 #4, #5</p>
<b>Grade 12</b>	
<b>1.0 Numbers, Number Sense, and Computation</b>	
<p><b>Content Standard 1.0</b> Students will accurately calculate and use estimation techniques, number relationships, operation rules, and algorithms; they will determine the reasonableness of answers and the accuracy of solutions to solve problems, communicate, reason, and make connections within and beyond the field of mathematics.</p> <p><b>At a minimum, students will maintain previous skills and attain the following:</b></p>	
<p>1.12.6 Determine an approximate value of radical and exponential expressions using a variety of methods.</p>	<p><b>Student Edition:</b>  34  <i>Are You Ready</i> 425 #19-#30  <i>Example</i> 35, 427  <i>Practice Exercises</i> 36 #19-#27, 428  <i>Try These Exercises</i> 36 #4-#8, #10, #14, 428  <b>Annotated Teacher's Edition:</b>  CE 35; FG 35; TT 427</p>

STANDARDS	PAGE REFERENCES
<p>1.12.7 Solve mathematical problems involving exponents and roots.</p>	<p><b>Student Edition:</b> 34-35, 427 <i>Are You Ready</i> 425 #19-#30 <i>Chapter Assessment</i> 45 #23-#28 <i>Chapter Review</i> 44 #45-#50, 458 #11-#16 <i>Example</i> 35, 36, 427, 428 <i>Extra Practice</i> 664, 693 <i>Practice Exercises</i> 36-37, 428-429 <i>Review and Practice Your Skills</i> 434 #1-#36, 435 #45-#60 <i>Try These Exercises</i> 36, 428</p> <p><b>Annotated Teacher's Edition:</b> CE 35, 427; FG 35</p>
<p>Perform addition, subtraction, and scalar multiplication on matrices.</p>	<p><b>Student Edition:</b> <i>Build Understanding</i> 358, 362 <i>Chapter Assessment</i> 377 #6-#10 <i>Chapter Review</i> 376 #21-#28 <i>Check Understanding</i> 359 <i>Example</i> 358, 359, 362, 363 <i>Extra Practice</i> 688-689 <i>Practice Exercises</i> 360-361, 364-365 <i>Problem Solving Tip</i> 364 <i>Review and Practice Your Skills</i> 366 <i>Standardized Test Practice</i> 378 #10 <i>Technology Note</i> 358, 360, 363 <i>Try These Exercises</i> 360, 364</p> <p><b>Annotated Teacher's Edition:</b> CE 359, 363; EL 364; QA 360</p>
<p>1.12.8 Identify and apply real number properties to solve problems.</p>	<p><b>Student Edition:</b> <i>Build Understanding</i> 10 <i>Chapter Review</i> 42 #17-#21 <i>Check Understanding</i> 11 <i>Example</i> 11, 12 <i>Extra Practice</i> 662 <i>Practice Exercises</i> 12-13 <i>Review and Practice Your Skills</i> 14 #16-#38, 15 #49-#54 <i>Try These Exercises</i> 12</p> <p><b>Annotated Teacher's Edition:</b> CE 11; QA 12</p>

STANDARDS	PAGE REFERENCES
<b>2.0 Patterns, Functions, and Algebra</b>	
<p><b>Content Standard 2.0</b> Students will use various algebraic methods to analyze, illustrate, extend, and create numerous representations (words, numbers, tables, and graphs) of patterns, functions, and algebraic relations as modeled in practical situations to solve problems, communicate, reason, and make connections within and beyond the field of mathematics.</p> <p><b>At a minimum, students will maintain previous skills and attain the following:</b></p>	
<p>2.12.1 Use algebraic expressions to identify and describe the <math>n^{\text{th}}</math> term of a sequence.</p>	<p>See Glencoe's <i>Algebra 2</i> © 2008 <b>Student Edition:</b> 624-627</p>
<p>2.12.2 Isolate any variable in given equations, inequalities, proportions, and formulas to use in mathematical and practical situations.</p>	<p>See Glencoe's <i>Algebra 2</i> © 2008 <b>Student Edition:</b> 21-25</p>
<p>2.12.3 Add, subtract, multiply, and factor 1<sup>st</sup> and 2<sup>nd</sup> degree polynomials connecting the arithmetic and algebraic processes.</p>	<p><b>Student Edition:</b> 468-469 <i>Build Understanding</i> 468, 472, 478 <i>Chapter Assessment</i> 513 #1-#24 <i>Chapter Review</i> 510, 511 #27-#42 <i>Example</i> 469, 472, 473, 478, 479, 482, 483 <i>Extra Practice</i> 696-697 <i>Practice Exercises</i> 470-471, 474-475, 480, 484 <i>Review and Practice Your Skills</i> 476-477, 486-487 <i>Try These Exercises</i> 470, 474, 480, 483 <b>Annotated Teacher's Edition:</b> CE 469, 473, 479, 483; DI 469; PE 471, 481, 484; TT 472</p>
<p>Simplify algebraic expressions, including exponents and radicals.</p>	<p><b>Student Edition:</b> <i>Are You Ready</i> 466 #11-#22 <i>Example</i> 427 <i>Practice Exercises</i> 428 #19-#30 <i>Try These Exercises</i> 428 #9-#14 <b>Annotated Teacher's Edition:</b> CE 427</p>

STANDARDS	PAGE REFERENCES
<p>2.12.4 Determine the domain and range of functions, including linear, quadratic, and absolute value, algebraically and graphically.</p>	<p><b>Student Edition:</b> 56 <i>Chapter Assessment</i> 97 #2 <i>Chapter Review</i> 94 #15, #16 <i>Example</i> 57, 63 <i>Extra Practice</i> 666 <i>Practice Exercises</i> 59 #18-#20 <i>Review and Practice Your Skills</i> 60 #34, #35 <i>Try These Exercises</i> 58 #9, #10 <b>Annotated Teacher's Edition:</b> CE 57, 63</p>
<p>Solve absolute value equations and inequalities both algebraically and graphically.</p>	<p>See Glencoe's <i>Algebra 2</i> © 2008 <b>Student Edition:</b> 27-30, 43-47, 96-100</p>
<p>2.12.5 Solve systems of two linear equations algebraically and graphically and verify solutions (with and without technology).</p>	<p><b>Student Edition:</b> <i>Build Understanding</i> 258, 264, 268 <i>Chapter Assessment</i> 289 #10-#17 <i>Chapter Review</i> 287 #26-#33, 288 #34-#37 <i>Example</i> 258, 259, 264, 265, 268, 269 <i>Practice Exercises</i> 260-261, 266-267, 270-271 <i>Review and Practice Your Skills</i> 262 #31-#39, 263 #60-#62, 272 <i>Technology Note</i> 258 <i>Try These Exercises</i> 260, 266, 270 <b>Annotated Teacher's Edition:</b> CE 259, 265, 269; FG 265</p>
<p>2.12.6 Solve mathematical and practical problems involving linear and quadratic equations with a variety of methods, including discrete methods (with and without technology).</p>	<p><b>Student Edition:</b> <i>Example</i> 74, 245, 532 <i>Extended Practice Exercises</i> 69 #45, 495 #42, 501 #54, 509 #44 <i>Math Works</i> 497 <i>Practice Exercises</i> 69 #30, 75 #33, 247 #38-#41, 495 #34, 501 #44, 533 #20-#24 <i>Try These Exercises</i> 74 #9</p>

STANDARDS	PAGE REFERENCES
<b>3.0 Measurement</b>	
<p><b>Content Standard 3.0</b> Students will use appropriate tools and techniques of measurement to determine, estimate, record, and verify direct and indirect measurements to solve problems, communicate, reason, and make connections within and beyond the field of mathematics.</p> <p><b>At a minimum, students will maintain previous skills and attain the following:</b></p>	
<p>3.12.1 Estimate and convert between customary and metric systems.</p>	<p>See Glencoe's <i>Algebra 2</i> © 2008 <b>Student Edition:</b> 315-319</p>
<p>3.12.2 Justify, communicate, and differentiate between precision, error, and tolerance in practical problems.</p>	<p><b>Student Edition:</b> <i>Build Understanding</i> 202 Also see Glencoe's <i>Pre-Algebra</i> © 2008 <b>Student Edition:</b> 614</p>
<p>3.12.3 Select and use appropriate measurement tools, techniques, and formulas to solve problems in mathematical and practical situations.</p>	<p><b>Student Edition:</b> 105, 108 <i>Are You Ready</i> 200-201 <i>Example</i> 108 <i>Practice Exercises</i> 111 #11-#14 <i>Try These Exercises</i> 110 #1-#6</p>
<p>3.12.4 Interpret and apply consumer data presented in charts, tables, and graphs to make informed financial decisions related to practical applications.</p>	<p>The following pages can be used during teacher/class discussion to meet this standard. <b>Student Edition:</b> 89, 269, 270, 285, 373, 447, 501, 582</p>
<p>3.12.5 Determine the measure of unknown dimensions, angles, areas, and volumes using relationships and formulas to solve problems.</p>	<p><b>Student Edition:</b> <i>Example</i> 110, 206, 207, 224, 225, 230, 231 <i>Extended Practice Exercises</i> 117 #30-#35, 209 #23-#25, 233 #23-#25 <i>Practice Exercises</i> 111 #15, #16, 116 #10-#25, 121 #9-#14, 208-209, 217, 226-227, 232-233 <i>Problem</i> 216 <i>Review and Practice Your Skills</i> 112 #29-#31, 210 #19-#27, 218 #12-#16, 228 #12-#17 <i>Try These Exercises</i> 110 #7, #8, 116 #4, #5, 120, 208, 216, 226, 232</p>

STANDARDS	PAGE REFERENCES
<b>4.0 Spatial Relationships, Geometry, and Logic</b>	
<b>Content Standard 4.0</b> Students will identify, represent, verify, and apply spatial relationships and geometric properties to solve problems, communicate, and make connections within and beyond the field of mathematics.	
<b>At a minimum, students will maintain previous skills and attain the following:</b>	
<p>4.12.1 Identify and use the parts of a circle to solve mathematical and practical problems.</p>	<p><b>Student Edition:</b> 441, 448, 449 <i>Build Understanding</i> 440 <i>Chapter Assessment</i> 461 #9-#17 <i>Chapter Review</i> 459 #27-#32, 460 #36-#41 <i>Example</i> 440, 441, 448, 449, 450 <i>Extra Practice</i> 694-695 <i>Practice Exercises</i> 443, 450-451 <i>Review and Practice Your Skills</i> 444 #17-#24, 452 #7-#17 <i>Try These Exercises</i> 442, 450 <b>Annotated Teacher's Edition:</b> CE 441, 449; FG 449; QA 450</p>
<p>Identify and apply properties of interior and exterior angles of polygons to solve mathematical and practical problems.</p>	<p><b>Student Edition:</b> 120 <i>Chapter Review</i> 141 #23-#27 <i>Example</i> 120 <i>Practice Exercises</i> 121 #9-#14 <i>Review and Practice Your Skills</i> 122 #18-#25 <i>Try These Exercises</i> 120</p>
<p>4.12.2 Apply properties of similarity through right triangle trigonometry to find missing angles and sides.</p>	<p><b>Student Edition:</b> 317 <i>Chapter Assessment</i> 331 #14-#16 <i>Chapter Review</i> 330 #32-#34 <i>Example</i> 318 <i>Extra Practice</i> 685 <i>Practice Exercises</i> 319 <i>Review and Practice Your Skills</i> 324 #1-#10 <i>Standardized Test Practice</i> 332 #10 <i>Try These Exercises</i> 318 <b>Annotated Teacher's Edition:</b> CE 317; FG 320</p>

STANDARDS	PAGE REFERENCES
<p>4.12.5 Determine the slope of lines using coordinate geometry and algebraic techniques.</p>	<p><b>Student Edition:</b>  <i>Build Understanding</i> 244  <i>Example</i> 244, 245  <i>Extra Practice</i> 679  <i>Practice Exercises</i> 246 #15-#18, #25-#30  <i>Review and Practice Your Skills</i> 252 #1-#9, 253 #52-#55  <i>Try These Exercises</i> 246 #1-#3  <b>Annotated Teacher's Edition:</b>            CE 245</p>
<p>Identify parallel, perpendicular, and intersecting lines by slope.</p>	<p><b>Student Edition:</b>            119  <i>Chapter Review</i> 287 #17, #18  <i>Example</i> 248, 249  <i>Extra Practice</i> 680  <i>Practice Exercises</i> 250-251  <i>Review and Practice Your Skills</i> 252 #46-#51  <i>Try These Exercises</i> 250  <b>Annotated Teacher's Edition:</b>            CE 245; DI 249</p>
<p>Graph linear equations and find possible solutions to those equations using coordinate geometry.</p>	<p><b>Student Edition:</b>  <i>Chapter Review</i> 95 #21-#23  <i>Example</i> 62, 63, 64  <i>Extra Practice</i> 666  <i>Practice Exercises</i> 65  <i>Review and Practice Your Skills</i> 70 #1-#9, 71 #56-#58  <i>Try These Exercises</i> 64  <b>Annotated Teacher's Edition:</b>            CE 63; FG 63; QA 64</p>
<p>Find possible solution sets of systems of equations whose slopes indicate parallel, perpendicular, or intersecting lines.</p>	<p><b>Student Edition:</b>  <i>Example</i> 258, 259  <i>Practice Exercises</i> 260-261  <i>Review and Practice Your Skills</i> 262 #31-#39  <i>Try These Exercises</i> 260  <b>Annotated Teacher's Edition:</b>            CE 259</p>

STANDARDS	PAGE REFERENCES
<p>4.12.6 Solve problems using complementary and supplementary angles, congruent angles, vertical angles, angles formed when parallel lines are cut by a transversal and angles in polygons.</p>	<p><b>Student Edition:</b> 109-110, 115, 120 <i>Chapter Assessment</i> 143 #7, #8, #10-#12 <i>Chapter Review</i> 141 <i>Example</i> 110, 116, 120 <i>Practice Exercises</i> 111 #15, #16, 116 #13-#15, 121 <i>Review and Practice Your Skills</i> 112 #29-#33, 122 #5-#8, #18-#25 <i>Try These Exercises</i> 110 #7, #8, 116 #5, 120 <b>Annotated Teacher's Edition:</b> CE 431; EL 432</p>
<p>4.12.7 Apply the Pythagorean Theorem and its converse in mathematical and practical situations.</p>	<p><b>Student Edition:</b> <i>Build Understanding</i> 430 <i>Chapter Review</i> 458 #17-#20 <i>Example</i> 431 <i>Extended Practice Exercises</i> 433 #25 <i>Extra Practice</i> 693 <i>Practice Exercises</i> 432-433 <i>Review and Practice Your Skills</i> 434 #37-#44 <i>Standardized Test Practice</i> 462 #6, #20, #21 <i>Try These Exercises</i> 432 <b>Annotated Teacher's Edition:</b> CE 431; EL 432</p>
<p>4.12.8 Solve problems by drawing and/or constructing geometric figures to demonstrate geometric relationships.</p>	<p><b>Student Edition:</b> <i>Practice Exercises</i> 209 #19-#21, 451 #18</p>
<p>4.12.9 Formulate, evaluate, and justify arguments using inductive and deductive reasoning in mathematical and practical situations.</p>	<p><b>Student Edition:</b> <i>Build Understanding</i> 124, 134 <i>Example</i> 124, 125 <i>Practice Exercises</i> 126-127 <i>Reading Math</i> 135 <i>Review and Practice Your Skills</i> 132 #1-#8 <i>Try These Exercises</i> 126 <b>Annotated Teacher's Edition:</b> CE 125; FG 124, 125; QA 126</p>

STANDARDS	PAGE REFERENCES
<b>5.0 Data Analysis</b>	
<p><b>Content Standard 5.0</b> Students will collect, organize, display, interpret, and analyze data to determine statistical relationships and probability projections to solve problems, communicate, reason, and make connections within and beyond the field of mathematics.</p> <p><b>At a minimum, students will maintain previous skills and attain the following:</b></p>	
<p>5.12.1 Organize statistical data through the use of tables, graphs, and matrices (with and without technology).</p>	<p><b>Student Edition:</b> 49 <i>Build Understanding</i> 82 <i>Example</i> 82, 83, 86, 87 <i>Practice Exercises</i> 84-85, 88-89 <i>Try These Exercises</i> 84, 88 <b>Annotated Teacher's Edition:</b> CE 83, 87; DI 82</p>
<p>5.12.2 Select and apply appropriate statistical measures in mathematical and practical situations.</p>	<p><b>Student Edition:</b> <i>Example</i> 82, 83, 406, 407, 408, 412, 413 <i>Practice Exercises</i> 84-85, 409, 413-414 <i>Try These Exercises</i> 84, 408 <b>Annotated Teacher's Edition:</b> CE 83; EL 83; QA 84, 408</p>
<p>5.12.3 Distinguish between a sample and a census.</p>	<p>The following reference can be extended during teacher/class discussion to include census. <b>Student Edition:</b> <i>Build Understanding</i> 82</p>
<p>Identify sources of bias and their effect on data representations and statistical conclusions.</p>	<p>The following references can be used during teacher/class discussion to meet this standard. <b>Student Edition:</b> <i>Chapter Review</i> 96 #53, #54 <i>Practice Exercises</i> 93 <i>Problem</i> 92 <i>Try These Exercises</i> 92 <b>Annotated Teacher's Edition:</b> CE 93; EL 93; QA 93</p>
<p>Use the shape of a normal distribution to compare and analyze data from a sample.</p>	<p><b>Student Edition:</b> <i>Extended Practice Exercises</i> 415 #21-#24</p>

STANDARDS	PAGE REFERENCES
<p>5.12.4 Apply permutations and combinations to mathematical and practical situations, including the Fundamental Counting Principle.</p>	<p><b>Student Edition:</b>  <i>Build Understanding</i> 402  <i>Chapter Assessment</i> 419 #5, #6  <i>Chapter Review</i> 417 #29-#31  <i>Example</i> 402, 403, 404  <i>Extra Practice</i> 691  <i>Practice Exercises</i> 404-405  <i>Review and Practice Your Skills</i> 410 #1-#24, 411 #37-#40  <i>Standardized Test Practice</i> 421 #18  <i>Try These Exercises</i> 404  <b>Annotated Teacher's Edition:</b>  CE 403; EL 402, 403; TT 404</p>
<p>5.12.5 Determine the probability of an event with and without replacement using sample spaces.</p>	<p><b>Student Edition:</b>  <i>Build Understanding</i> 396  <i>Chapter Review</i> 417 #25-#28  <i>Check Understanding</i> 397  <i>Example</i> 396, 397  <i>Extra Practice</i> 691  <i>Mid-Chapter Quiz</i> 401 #9-#12  <i>Practice Exercises</i> 398  <i>Review and Practice Your Skills</i> 400 #30-#44, 401 #56-#61  <i>Try These Exercises</i> 398  <b>Annotated Teacher's Edition:</b>  CE 397; DI 397; FG 398; QA 398</p>
<p>Design, conduct, analyze, and effectively communicate the results of multi-stage probability experiments.</p>	<p>The following simulation references can be expanded to meet this standard.  <b>Student Edition:</b>  <i>Practice Exercises</i> 389  <i>Problem</i> 388  <i>Try These Exercises</i> 388  <b>Annotated Teacher's Edition:</b>  TT 388, 389</p>

STANDARDS	PAGE REFERENCES
<p>5.12.6 Design, construct, analyze, and select an appropriate type of graphical representations to communicate the results of a statistical experiment.</p>	<p><b>Student Edition:</b>  <i>Example</i> 406, 407, 408  <i>Extended Practice Exercises</i> 409 #13-#15  <i>Practice Exercises</i> 409, 414 #11-#17, 447  <i>Problem</i> 446  <i>Try These Exercises</i> 408, 447</p>
<p>Formulate and justify inferences based on a valid data sample.</p>	<p>The following page references can be expanded to meet this standard.  <b>Student Edition:</b>  <i>Build Understanding</i> 82, 86  <i>Extended Practice Exercises</i> 85 #16, 89 #19, #20  <i>Practice Exercises</i> 88 #12, 89 #15-#18  <i>Think About It</i> 82</p>