

**GLENCOE CORRELATION**  
**IMPACT MATHEMATICS**  
**ALGEBRA AND MORE FOR THE MIDDLE GRADES**  
**COURSES 1, 2, and 3**  
**DELAWARE**  
**Performance Indicators**

PERFORMANCE INDICATORS	PAGE REFERENCES		
	IMPACT MATHEMATICS COURSE 1	IMPACT MATHEMATICS COURSE 2	IMPACT MATHEMATICS COURSE 3
<b>STANDARD #1: Students will develop their ability to SOLVE PROBLEMS by engaging in developmentally appropriate problem-solving opportunities in which there is a need to use various approaches to investigate and understand mathematical concepts; to formulate their own problems; to find solutions to problems from everyday situations; to develop and apply strategies to solve a wide variety of problems; and to integrate mathematical reasoning, communication and connections.</b>			
Through the investigation of meaningful problems, individually or in cooperative groups while using appropriate technology, all students in grades K-10 will be able to:			
1.01 persist and solve problems from start to finish;	SE: 230-233, 451-454 <i>On Your Own Exercises</i> 457 #1-4 <i>Lab Investigation</i> 563-564	SE: 18-21, 147-149, 152-156, 156-159, 273-275 <i>Lab Investigation</i> 388-391 <i>On Your Own Exercises</i> 26 #28-34, 160-162	SE: 10-11, 25-26, 110, 180-181, 260-261, 402-403 <i>Example</i> 215 <i>Lab Investigation</i> 159-161, 502-503 TG: AL T445
1.02 investigate and build their understanding of mathematical content;	SE: 571-572, 576-578, 586-589, 589-591 <i>Lab Investigation</i> 88-89, 433-435 TG: <i>Try It Out</i> T88, T433	SE: 54-55, 130-131 <i>Lab Investigation</i> 119-121, 203-205, 220-222	SE: 6-11, 53, 91, 110, 230 <i>Review &amp; Self-Assessment</i> 64-65 <i>Think &amp; Discuss</i> 49 TG: AL T201 SS T11 T T31
1.03 formulate problems from everyday and mathematical situations;	SE: 430-432, 604-607, 608-612 <i>Lab Investigation</i> 88-89, 433-435 <i>On Your Own Exercises</i> 615-619	SE: 134-135, 694-696 <i>Lab Investigation</i> 119-121, 203-205 <i>On Your Own Exercises</i> 590-595, 652-659 <i>Share &amp; Summarize</i> 607	SE: 101, 337, 380, 423, 470-471, 498, 526-527 <i>Lab Investigation</i> 159-161 <i>Think &amp; Discuss</i> 170, 245

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1.04 develop and apply strategies to solve problems;	SE: 451-454, 589-591 <i>Lab Investigation</i> 88-89, 433-435, 563 TG: <i>Lab Investigation</i> T563	SE: 18-21, 79-80, 80-82, 82-83 <i>Lab Investigation</i> 203-205 <i>On Your Own Exercises</i> 84-90	SE: 10, 51-55, 191, 241-248, 374-375, 412 <i>Lab Investigation</i> 219 <i>Think &amp; Discuss</i> 24, 156, 432 TG: OSA T156
1.05 interpret results with respect to the original problem;	SE: 377-379, 430-432, 451- 454, 586-589, 589-591 <i>Lab Investigation</i> 433-435	SE: 92-93, 94-96, 116-119, 130-131, 131-134, 134- 135 <i>Lab Investigation</i> 119-121, 203-205, 608-609	SE: 8, 55, 94, 180-181, 438 <i>Explore</i> 146, 260 <i>Lab Investigation</i> 219-222 <i>Share &amp; Summarize</i> 77 TG: OSA T444
1.06 generalize strategies and solutions to new problem situations.	SE: 571-573, 574-576, 576- 578, 586-589, 589-591 <i>Lab Investigation</i> 268-269	SE: 385-387, 395-397, 489- 491, 588-589, 694-695, 697-699	SE: 26, 31-32, 76, 90-91, 156- 158, 214-218, 257-258, 516-517 <i>Think &amp; Discuss</i> 84 TG: D T84
<b>STANDARD #2: Students will develop their ability to COMMUNICATE MATHEMATICALLY by solving problems in which there is a need to obtain information from the real world through reading, listening and observing; to translate this information into mathematical language and symbols; to process this information mathematically; and to present results in written, oral and visual formats.</b>			
Through the investigation of meaningful problems, individually or in cooperative groups while using appropriate technology, all students in grades K-10 will be able to:			
2.01 model real-world situations using oral, written, concrete, pictorial, graphical and algebraic methods;	SE: 200, 201-203, 466-471 <i>On Your Own Exercises</i> 292-299, 423 #5B <i>Share &amp; Summarize</i> 291, 486, 498, 630 <i>Lab Investigation</i> 324-326, 396-398	SE: 409-411, 585-587 <i>Lab Investigation</i> 42-45, 388-391, 608-609 <i>Share &amp; Summarize</i> 412, 414, 587, 589 TG: AL T398	SE: 74-75, 90-91, 156-158, 437, 469-471, 587 <i>Explore</i> 108-109 <i>Share &amp; Summarize</i> 92, 193

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	IMPACT MATHEMATICS COURSE 1	IMPACT MATHEMATICS COURSE 2	IMPACT MATHEMATICS COURSE 3
2.02 use reading, listening, viewing, speaking and writing to explain and develop mathematical ideas;	SE: 143-145, 370-372 <i>Explore</i> 142, 182 <i>Think &amp; Discuss</i> 162 <i>On Your Own Exercises</i> 123-126, 327-334, 565-569	SE: 451-453, 454-455, 521-524, 588-589, 697-699 <i>Share &amp; Summarize</i> 587	SE: 230, 371, 381, 433 <i>Think &amp; Discuss</i> 197, 242, 447, 448, 602 TG: D T241
2.03 use mathematical notation and language to describe and discuss real-world situations;	SE: 252-255, 261-264, 278-282, 286-291 <i>On Your Own Exercises</i> 292-299	SE: 92-93, 94-96, 130-131, 131-134, 134-135 <i>Lab Investigation</i> 119-121, 608-609 <i>On Your Own Exercises</i> 136-140	SE: 191, 197, 226, 492 TG: AL T488 AM T457 I T226 OSA T148, T391
2.04 read mathematics with understanding;	SE: 143-145, 370-372 <i>Explore</i> 142, 182 <i>Think &amp; Discuss</i> 162	SE: 454-455, 521-524, 588-589, 697-699 <i>Share &amp; Summarize</i> 587	SE: 11, 24-25, 132, 154-155, 433, 548 <i>Explore</i> 70 <i>Lab Investigation</i> 159-161 <i>Share &amp; Summarize</i> 554 <i>Think &amp; Discuss</i> 400
2.05 develop common understandings of mathematical ideas and use generalizations discovered through investigations to formulate definitions;	SE: 43, 50-54, 436-439, 469, 486 <i>In Your Own Words</i> 67 <i>Share &amp; Summarize</i> 442 <i>Just the Facts</i> 468, 488 <i>Remember</i> 474	SE: 301-305, 362-364, 368-370, 450-453, 585-587	SE: 4, 7, 495 <i>Share &amp; Summarize</i> 148, 492 TG: AL T218 D T7, T401 OSA T25, T378
2.06 ask questions to clarify the problem situation.	SE: 29-31, 586-589, 589-591 <i>Share &amp; Summarize</i> 35	SE: 34-36, 56-58, 362-364, 676-678, 678-680	SE: 117-118, 132, 191, 383, 514 <i>Share &amp; Summarize</i> 392 <i>Think &amp; Discuss</i> 242 TG: D T378 OSA T230 TD T176

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<b>STANDARD #3 Students will develop their ability to REASON MATHEMATICALLY by solving problems in which there is a need to investigate significant mathematical ideas in all content areas; to justify their thinking; to reinforce and extend their logical reasoning abilities; to reflect on and clarify their own thinking; to ask questions to extend their thinking; and to construct their own learning.</b>			
Through the investigation of meaningful problems, individually or in cooperative groups while using appropriate technology, all students in grades K-10 will be able to use inductive and deductive reasoning to:			
3.01 formulate and test conjectures;	SE: 391-393, 394-395 <i>Share &amp; Summarize</i> 320 <i>Lab Investigation</i> 396-397, 433-435 <i>On Your Own Exercises</i> 594-597	SE: 134-135, 694-696 <i>Lab Investigation</i> 121 #9-11 <i>Just the Facts</i> 125 <i>Share &amp; Summarize</i> 397, 403, 412	SE: 128-130, 131-133, 134-135, 137, 143, 193, 204, 380, 414 <i>Share &amp; Summarize</i> 130
3.02 draw and then justify conclusions;	SE: 29-31, 32-35, 282-286, 286-291, 320-323, 592-593 <i>On Your Own Exercises</i> 36-42	SE: 130-131, 131-134, 134-135, 385-387 <i>Lab Investigation</i> 119-121 <i>On Your Own Exercises</i> 136-140	SE: 75, 132, 392, 402, 415, 433, 440 <i>Lab Investigation</i> 96-97 TG: AL T75 D T418
3.03 construct and follow logical arguments;	SE: 282-286, 286-291, 317-318, 320-323 <i>On Your Own Exercises</i> 292-299	SE: 385-387, 541-542, 548-551, 585-587, 588-589 <i>Lab Investigation</i> 551-553 <i>On Your Own Exercises</i> 590-595	SE: 53, 128-130, 131-133, 134-135 <i>Explore</i> 127 <i>Share &amp; Summarize</i> 130, 133 TG: AM T127 D T133 TT T131
3.04 use properties, models, known facts, and relationships to explain and defend their thinking.	SE: 4-9, 32-35, 316-318, 343-345, 377-379, 390-393, 592-593 <i>Lab Investigation</i> 433-435 <i>On Your Own Exercises</i> 594-597	SE: 59-63 <i>Think &amp; Discuss</i> 37, 192, 243, 269 <i>Share &amp; Summarize</i> 149, 263, 275, 397 TG: T&D T32	SE: 52-54, 74, 78-79, 126, 239 <i>Lab Investigation</i> 366-367 <i>Share &amp; Summarize</i> 55, 403 <i>Think &amp; Discuss</i> 51, 358

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	IMPACT MATHEMATICS COURSE 1	IMPACT MATHEMATICS COURSE 2	IMPACT MATHEMATICS COURSE 3
<b>STANDARD #4 Students will develop their ability to make MATHEMATICAL CONNECTIONS by solving problems in which there is a need to view mathematics as an integrated whole and to integrate mathematics with other disciplines, while allowing the flexibility to approach problems, from within and outside mathematics, in a variety of ways.</b>			
Through the investigation of meaningful problems, individually or in cooperative groups while using appropriate technology, all students in grades K-10 will be able to:			
4.01 make connections linking conceptual and procedural knowledge;	SE: <i>Share &amp; Summarize</i> 291, 305, 345, 349, 486 <i>Think &amp; Discuss</i> 344, 486	SE: 273-275, 385-387, 402-403 <i>Think &amp; Discuss</i> 269 <i>On Your Own Exercises</i> 277-278 #11-15, 405-407 #10-15	SE: 27, 156, 179, 374-375 <i>Example</i> 378 <i>Explore</i> 46 <i>Lab Investigation</i> 36-37 <i>Share &amp; Summarize</i> 86 <i>Think &amp; Discuss</i> 117, 226
4.02 integrate mathematical problem-solving with other curricular areas;	SE: 430-432 <i>On Your Own Exercises</i> 296 #9, 299 #14, 328 #2-4, 6-7, 9, 446 #14, 15, 18, 19, 21	SE: 94-96, 97, 134-135, 650-651 <i>Lab Investigation</i> 119-121, <i>In Your Own Words</i> 125 <i>On Your Own Exercises</i> 48 #12-13, #18, 126 # 17, 186 #18	SE: 81, 90-91, 122, 238, 389, 397, 441, 479 <i>Lab Investigation</i> 159-161, 318-321
4.03 use connections among mathematical topics;	SE: 436-439, 451-454, 455-456 <i>On Your Own Exercises</i> 457-459	SE: 34-36, 37-42, 368-370, 410-411, 645-647, 648-649, 650-651 TG: AM T411	SE: 63, 88, 105, 205, 239, 280, 401, 411-412, 441 <i>Think &amp; Discuss</i> 156
4.04 use various representations of the same concept;	SE: 131-134, 134-136, 234-236, 236-239, 439-442	SE: 18-21, 54-55, 56-58, 396-397, 398-401, 402-403 <i>Share &amp; Summarize</i> 545	SE: 25, 54, 72, 103, 114, 120, 147, 180-181 <i>Explore</i> 46, 70-71
4.05 make connections from manipulative solutions to algorithmic solutions to technological solutions;	SE: 200 #1-7, 419-421, 427-428 #18-19 <i>Lab Investigation</i> 164-165, 324-326, 396-398, 525-527 <i>On Your Own Exercises</i> 582 #19, 631 #3	SE: 200-202 <i>Lab Investigation</i> 42-45, 388-391 TG: T201	SE: 30, 55, 331, 401, 418, 439 <i>Explore</i> 46 <i>Lab Investigation</i> 36-37, 270-274 TG: D T30

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	IMPACT MATHEMATICS COURSE 1	IMPACT MATHEMATICS COURSE 2	IMPACT MATHEMATICS COURSE 3
4.06 determine the reasonableness of a mathematical solution as it applies in a real-world situation.	SE: 104-105, 128-131, 215-216 # 25-28, 233	SE: 385-387, 541-542 <i>Lab Investigation</i> 388-391 <i>On Your Own Exercises</i> 392-393	SE: 389, 402, 423, 453, 469, 482, 558, 582-584, 613-615 <i>Think &amp; Discuss</i> 400
<b>STANDARD #5 Students will develop an understanding of ESTIMATION, MEASUREMENT, and COMPUTATION by solving problems in which there is a need to measure to a required degree of accuracy by selecting appropriate tools and units; to develop computing strategies and select appropriate methods of calculation from among mental math, paper and pencil, calculators or computers; to use estimating skills to approximate an answer and to determine the reasonableness of results.</b>			
Through the investigation of meaningful problems, individually or in cooperative groups while using appropriate technology, all students in grades 6-8, building upon the K-5 expectations, will be able to:			
5.60 estimate and then measure angles, circumference, volume and surface area to the degree of accuracy required using standard and nonstandard units;	SE: 117-119, 472-476, 482-485, 515-517, 518-521, 522-524 <i>On Your Own Exercises</i> 597 #29	SE: 451-453, 454-455, 497-498, 499-500, 501-504, <i>Explore</i> 471 TG: AL T452 SA T452	SE: 189, 341, 513 <i>Lab Investigation</i> 366-367 <i>Share &amp; Summarize</i> 172 <i>Think &amp; Discuss</i> 51
5.61 convert measurement units within the same system;	SE: 17-18, 117-119, 123 #12-21, 141 #54-57 <i>On Your Own Exercises</i> 111 #52-55	SE: 4, 37-42, 134-135, 231, 244 # 2-3, 261 <i>Lab Investigation</i> 119-121	SE: 276, 338 <i>Lab Investigation</i> 160
5.62 apply ratios, proportions and percents to real life situations;	SE: 227-230, 234-236, 261-264, 264-267	SE: 454-455, 456-460, 461-463, 482-484, 521-524, 527-529, 529-531, 540-542, 548-551, 568-571	SE: 7, 9, 25, 172, 331, 617 TG: AL T331, T333
5.63 compute circumference; areas of triangles, parallelograms, trapezoids, and circles; and surface area and volume of cylinders, triangular and rectangular prisms and pyramids;	SE: 482-485, 486-489, 494-498, 514-517, 518-521, 522-524 <i>Lab Investigation</i> 58-60, 525-527 <i>On Your Own Exercises</i> 330 #5, 490-493, 528-535	SE: 110-112, 112-116, 116-119, 134-135, 482-484, 485-488, 499-500, 501-504 <i>On Your Own Exercises</i> 175 #73, 492-495	SE: 23, 62, 72, 255, 369, 499-501, 535, 564 <i>Explore</i> 362 <i>Think &amp; Discuss</i> 358

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	IMPACT MATHEMATICS COURSE 1	IMPACT MATHEMATICS COURSE 2	IMPACT MATHEMATICS COURSE 3
5.64 apply order of operations;	SE: 19-22 <i>On Your Own Exercises</i> 25 #7-14 <i>Remember</i> 412	SE: 4-9, 13-18, 18-21, 152-156 <i>On Your Own Exercises</i> 69 #16-19	SE: 153, 177, 268, 433-435 <i>Example</i> 267 <i>Share &amp; Summarize</i> 155, 158 <i>Think &amp; Discuss</i> 156 TG: D T158 T T155
5.65 choose and explain an appropriate method for calculating an answer in a given situation;	SE: 104-105, 200 #1-7, 204-206 <i>Lab Investigation</i> 164-165, 324-326, 525-527 <i>Explore</i> 514	SE: 134-135, 385-387 <i>Lab Investigation</i> 388-391 <i>On Your Own Exercises</i> 392 #8-10 <i>Share &amp; Summarize</i> 397	SE: 50, 52, 173, 177, 180, 233, 247, 307, 493 TG: D T201
5.66 use multiple computational procedures with rational numbers;	SE: 104-105, 128-131, 157-160, 161-163, 172-175, 178-181, 182-185, 185-188	SE: 13-18, 18-21, 37-42, 192-195, 588-589, 629-631 <i>Lab Investigation</i> 551-553	SE: 132 <i>Example</i> 153, 412 <i>Share &amp; Summarize</i> 35, 50, 172 TG: AL T445 AM T364 D T154 TT T170
5.67 determine if an estimate is an over-estimate or an under-estimate.	SE: 104-105, 128-131 <i>On Your Own Exercises</i> 215-216 #25-28	SE: 385-387, 541-542 <i>Lab Investigation</i> 388-391 <i>On Your Own Exercises</i> 392-393	SE: 125, 625

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	IMPACT MATHEMATICS COURSE 1	IMPACT MATHEMATICS COURSE 2	IMPACT MATHEMATICS COURSE 3
<b>STANDARD #6 Students will develop NUMBER SENSE by solving problems in which there is a need to represent and model real numbers verbally, physically and symbolically; to use operations with understanding; to explain the relationships between numbers; to apply the concept of a unit; and to determine the relative magnitude of real numbers.</b>			
Through the investigation of meaningful problems, individually or in cooperative groups while using appropriate technology, all students in grades 6-8, building upon the K-5 expectations, will be able to:			
6.60 connect physical, verbal and symbolic representations of rational numbers;	SE: 32-35, 97-98, 113-117, 120-122, 134-136, 143-145, 236-239	SE: 216-217, 222-227, 228-230, 231-233, 234-235 <i>Lab Investigation 220-222</i> <i>On Your Own Exercises 236-239</i> TG: T248	SE: 27, 156, 179, 374-375 <i>Example 378</i> <i>Explore 46</i> <i>Lab Investigation 36-37</i> <i>Share &amp; Summarize 86</i> <i>Think &amp; Discuss 117, 226</i>
6.61 apply multiple representations of numbers: integers, fractions, decimals, percents, exponents, and scientific notation;	SE: 79-81, 99-101, 128-130, 131-133, 134-136, 143-145, 236-239, 498-503, 504-507	SE: 146-149, 149-152, 152-156, 179-182, 196-199, 200-202, 286-287, 562-565 <i>On Your Own Exercises 51 #30</i> <i>Lab Investigation 220-222</i>	SE: 149, 152, 200-202, 203-208, 438 TG: AL T201 D T148, T152, T200
6.62 model integer representations using manipulatives;	SE: 143-145 <i>On Your Own Exercises 146-147 #1-13</i>	SE: 218-219, 222-227, 228-230, 255-258 <i>Lab Investigation 220-222</i> <i>On Your Own Exercises 236-237</i>	SE: 74-75, 104, 434-435 <i>Example 494</i> <i>Explore 4-5</i> <i>Lab Investigation 475-477, 545-546</i>
6.63 demonstrate an understanding of order relations for rational numbers;	SE: 102-103, 120-122, 143-145, 236-239 <i>On Your Own Exercises 124 #24-26, 146-147</i>	SE: 218-219, 222-227 <i>Lab Investigation 220-222</i> <i>On Your Own Exercises 30 #55-56, 51 #30, 90 #22-27, 418 #44-46</i>	SE: 147, 150, 207, 223-233, 238, 405, 464 <i>Example 232</i> <i>Think &amp; Discuss 400</i>

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	IMPACT MATHEMATICS COURSE 1	IMPACT MATHEMATICS COURSE 2	IMPACT MATHEMATICS COURSE 3
6.64 examine the relative effect of operations on rational numbers;	SE: 154-157, 157-160, 161-163, 172-175, 175-177, 182-185, 185-188, 198-201, 201-203 <i>Lab Investigation</i> 164-165	SE: 222-227, 228-230, 243-244, 248-249 <i>On Your Own Exercises</i> 30 #57-62, 51 #19-22, 73 #56-61, 236-240	SE: 78, 148, 389, 411, 414-417 <i>Think &amp; Discuss</i> 200 TG: AL T201 D T413 I T226 OSA T412
6.65 use various forms of "one" to demonstrate the equivalence of fractions.	SE: 99-101 <i>On Your Own Exercises</i> 106-107 #8-21, 127 #38-41	SE: 543-545 <i>Share &amp; Summarize</i> 460 <i>On Your Own Exercises</i> 466 #7-10	SE: 207, 405, 407 <i>Example</i> 404 <i>Think &amp; Discuss</i> 403 TG: AM T403 D T405
<b>STANDARD #7 Students will develop an understanding of ALGEBRA by solving problems in which there is a need to progress from the concrete to the abstract using physical models, equations and graphs; to generalize number patterns; and to describe, represent and analyze relationships among variable quantities.</b>			
Through the investigation of meaningful problems, individually or in cooperative groups while using appropriate technology, all students in grades 6-8, building upon the K-5 expectations, will be able to:			
7.60 represent situations with tables, graphs, verbal rules, and equations; and describe the interrelationships of the representations;	SE: 411-414, 414-418, 419-421, 430-432 <i>On Your Own Exercises</i> 422-429, 459 #8-10	SE: 54-55, 56-58, 301-305, 305-308, 309-311, 321-325, 326-328, 328-329 <i>Lab Investigation</i> 312-313 <i>On Your Own Exercises</i> 314-319	SE: 34, 59, 67, 77, 79, 80, 91, 121, 132, 207
7.61 model and solve real-world and mathematical problems using algebraic methods;	SE: 15-18, 439-442, 574-578 <i>Lab Investigation</i> 433-435, 563-564	SE: 348-350, 353 <i>On Your Own Exercises</i> 357-360 #10, 15, 17, 372 #11	SE: 17, 34, 52-53, 58, 81, 120, 142, 238, 241, 251
7.62 evaluate algebraic expressions and formulas for given values of the variable;	SE: 419-421, 431-432, 436-439, 439-442, 451-454, 455-456 <i>On Your Own Exercises</i> 443-448	SE: 4-5, 4-9, 10-13, 13-18, 32-33, 34-36, 56-58 <i>On Your Own Exercises</i> 22-30, 46-50	SE: 123, 125, 132-133, 189, 192 <i>Lab Investigation</i> 219

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	IMPACT MATHEMATICS COURSE 1	IMPACT MATHEMATICS COURSE 2	IMPACT MATHEMATICS COURSE 3
7.63 solve linear equations using concrete, informal, and formal methods;	SE: 559-560, 560-562, 570-573, 574-578 <i>Lab Investigation</i> 563-564	SE: 37-42, 362-364, 365-368, 385-387, 395-397, 398-401, 410-411 <i>Lab Investigation</i> 388-391 <i>On Your Own Exercises</i> 392-393	SE: 6-9, 13-15, 16-19, 31-35, 42-44, 49-50 <i>Explore</i> 4-5, 46 <i>Share &amp; Summarize</i> 12
7.64 solve proportions;	The concept of proportion is used on the following pages. SE: 100-102, 124-126, 195, 199, 205-206	SE: 540-542, 543-545, 545-548, 566-568, 585-587 <i>On Your Own Exercises</i> 554-559	SE: 7-11, 16-17, 64, 113-115, 121, 139 TG: D T10
7.65 solve linear inequalities and non-linear equations using informal methods.	SE: 586-588, 589-591, 592-593 <i>Lab Investigation</i> 563-564 <i>Review &amp; Self-Assessment</i> 599 #1-10	SE: 231-233 <i>On Your Own Exercises</i> 240 #55	SE: 74-77, 110, 230-231, 232-233 <i>Explore</i> 70-71 <i>Lab Investigation</i> 96-97 <i>Share &amp; Summarize</i> 92, 234
<b>STANDARD #8 Students will develop SPATIAL SENSE and an understanding of GEOMETRY by solving problems in which there is a need to recognize, construct, transform, analyze properties of, and discover relationships between, geometric figures.</b>			
Through the investigation of meaningful problems, individually or in cooperative groups while using appropriate technology, all students in grades 6-8, building upon the K-5 expectations, will be able to:			
8.60 identify, describe, compare and classify two and three dimensional figures;	SE: 42-46, 46-49, 50-53, 54-57, 466-471, 472-476, 515-517 <i>Lab Investigation</i> 58-60 <i>On Your Own Exercises</i> 61-68	SE: 91-93, 94-96, 109, 112-116, 131-134, 134-135, 187 #20 <i>On Your Own Exercises</i> 136-139, <i>Review &amp; Self-Assessment</i> 141-143 <i>Remember</i> 187	SE: 76, 291, 297, 299, 311, 329, 337 <i>Explore</i> 339 TG: AL T291 AM T295
8.61 use a compass and straight edge as tools for basic geometric constructions;	SE: 470-471, 486-489, 495-497 <i>Lab Investigation</i> 58-60 <i>On Your Own Exercises</i> 477-480 <i>Explore</i> 494	SE: 456-460, 461-463, 471-473, 473-474, 475 <i>On Your Own Exercises</i> 465 #5-6	SE: 613-614 <i>Explore</i> 329 <i>Share &amp; Summarize</i> 308 TG: AL T290, T291, T306 D T315

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	IMPACT MATHEMATICS COURSE 1	IMPACT MATHEMATICS COURSE 2	IMPACT MATHEMATICS COURSE 3
8.62 investigate and discover geometric relationships through the use of manipulatives, constructions and computer graphic software;	SE: 42-46, 46-49, 50-54, 54-57 <i>Lab Investigation</i> 58-60 <i>On Your Own Exercises</i> 61-68	SE: 450-453, 454-455, 461-463, 471-473, 473-474, 475, 482-484, 498-500 <i>On Your Own Exercises</i> 464-469 <i>Lab Investigation</i> 476-477	SE: 293, 302-303, 309, 316, 331, 348 <i>Example</i> 332 <i>Lab Investigation</i> 318-321 <i>Share &amp; Summarize</i> 291
8.63 create models of nets of three dimensional figures such as a cube, rectangular prism, cylinder and square pyramid;	SE: <i>Lab Investigation</i> 58-60 TG: AL T59	SE: 129-131, 131-134, 134-135 <i>On Your Own Exercises</i> 136-139 <i>Review &amp; Self-Assessment</i> 141 #2-3	See <i>Course 2</i> pages 129-140.
8.64 visualize and draw orthographic projections;	SE: <i>Lab Investigation</i> 58-60 TG: AL T59	SE: 80-82, 82-83, 91-93, 94-96, 97 <i>On Your Own Exercises</i> 84-89, 100-107	SE: 295-296, 298, 299, 315, 336-337
8.65 discover and apply geometric properties and relationships such as congruence, similarity, parallelism, perpendicularity and symmetry;	SE: 42-46, 46-49, 50-54, 54-57, 466-471 <i>Lab Investigation</i> 58-60 <i>On Your Own Exercises</i> 61-68	SE: 450-453, 454-455, 461-463, 471-473, 473-474 <i>On Your Own Exercises</i> 464-469 <i>Lab Investigation</i> 476-477	SE: 289-291, 294-295, 295-296, 298, 322-323, 349 TG: AL T304
8.66 apply geometric properties and relationships to make conjectures.	SE: 54-57, 472-476, 536-540 <i>Lab Investigation</i> 58-60 <i>On Your Own Exercises</i> 61-68	SE: 129-130, 131-134, 134-135 <i>Lab Investigation</i> 119-121, 476-477	SE: 130, 135, 294 <i>Share &amp; Summarize</i> 304 <i>Think &amp; Discuss</i> 302 TG: AL T291 D T304

PERFORMANCE INDICATORS	PAGE REFERENCES		
	IMPACT MATHEMATICS COURSE 1	IMPACT MATHEMATICS COURSE 2	IMPACT MATHEMATICS COURSE 3
<b>STANDARD #9 Students will develop an understanding of STATISTICS AND PROBABILITY by solving problems in which there is a need to collect, appropriately represent, and interpret data; to make inferences or predictions; to present convincing arguments; and to model mathematical situations to determine the probability.</b>			
Through the investigation of meaningful problems, individually or in cooperative groups while using appropriate technology, all students in grades 6-8, building upon the K-5 expectations, will be able to:			
9.60 collect, organize, describe, and make predictions with data;	SE: 320-323, 377-379 <i>Lab Investigation</i> 396-397 <i>On Your Own Exercises</i> 399-401	SE: 676-678, 678-680, 692-694, 697-699 <i>On Your Own Exercises</i> 700-707	SE: 547-550, 551-554, 555-557 <i>Share &amp; Summarize</i> 554, 572 <i>Think &amp; Discuss</i> 565 TG: AL T546 AM T567 D T583 OSA T545
9.61 construct and describe displays of data such as stem-and-leaf plots, scatter plots, box plots, and circle graphs;	SE: 230-233, 346-349, 350-352, 366-369 <i>On Your Own Exercises</i> 380-388 <i>Review &amp; Self-Assessment</i> 402-407	SE: 685 #4, 710-714, 714-717 <i>On Your Own Exercises</i> 687 #6, 674 #14, 718-722 <i>Review &amp; Self-Assessment</i> 727 #5-6	SE: 30, 551, 558, 563, 567, 569 <i>Lab Investigation</i> 546 TG: AM T567 D T30, T557
9.62 make and evaluate arguments that are based on data analysis;	SE: 317-318, 319-320, 320-323, 343-345 <i>Lab Investigation</i> 324-326	SE: 676-678, 678-680, 692-694, 697-699 <i>On Your Own Exercises</i> 700-707	SE: 558-559, 563, 567, 569, 571, 607 <i>Lab Investigation</i> 545 TG: D T545, T584
9.63 calculate and use mean, median, mode and range to interpret data;	SE: 370-372, 373-376, 394-395 <i>On Your Own Exercises</i> 380-388 <i>Lab Investigation</i> 396-398 <i>Review &amp; Self-Assessment</i> 402-407	SE: 694-696, 710-714 <i>Remember</i> 703, 711 <i>On Your Own Exercises</i> 31 #67, 703 #11-12 <i>Review &amp; Self-Assessment</i> 727 #5-6	SE: 45, 53, 518-520 TG: D T53 OSA T53

PERFORMANCE INDICATORS	PAGE REFERENCES		
	IMPACT MATHEMATICS COURSE 1	IMPACT MATHEMATICS COURSE 2	IMPACT MATHEMATICS COURSE 3
9.64 analyze a sample to make inferences about a population;	SE: 224-225, 608-612, 621-622, 639-642, 643-645 <i>Lab Investigation</i> 613-614 <i>On Your Own Exercises</i> 615-618	SE: 676-678, 678-680, 692-694, 694-696, 697-699, 709 <i>On Your Own Exercises</i> 700-707	SE: 559, 563, 566, 569, 584-585, 602-604, 607, 615 <i>Lab Investigation</i> 546
9.65 compare and make predictions based on theoretical and experimental probabilities;	SE: 605-607, 608-612, 620-622, 623-624, 624-625, 626-630	SE: 666-668, 668-671, 676-678, 678-680, 680-682, 683-685 <i>On Your Own Exercises</i> 672-674, 686-690	SE: 560, 566-567, 571-572, 587-588, 607, 613-615 <i>Example</i> 553 TG: D T571
9.66 construct a sample space to determine theoretical probabilities.	SE: 605-607, 608-612, 620-622, 623-624, 624-625, 626-630 <i>On Your Own Exercises</i> 615-618, 631-636	SE: 676-678, 678-680, 680-682, 683-685, 692-694, 697-699 <i>On Your Own Exercises</i> 686-690	SE: 547-550, 558, 560, 573 <i>Share &amp; Summarize</i> 550 <i>Think &amp; Discuss</i> 565 TG: D T547 I T565 OSA T566 SS T550
<b>STANDARD #10 Students will develop an understanding of PATTERNS, RELATIONSHIPS AND FUNCTIONS by solving problems in which there is a need to recognize and extend a variety of patterns; and to analyze, represent, model and describe real-world functional relationships.</b>			
Through the investigation of meaningful problems, individually or in cooperative groups while using appropriate technology, all students in grades 6-8, building upon the K-5 expectations, will be able to:			
10.60 recognize, analyze, create, extend, describe and generalize a wide variety of patterns and relationships;	SE: 4-9, 14-18, 28-31, 32-35, 42-45, 134-136, 410-413, 414-418	SE: 644-647, 648-649, 650-651 <i>On Your Own Exercises</i> 652-658 <i>Review &amp; Self-Assessment</i> 662-63 #5-6	SE: 74-77, 110-115, 118-119, 130, 562, 613-615 <i>Explore</i> 146 <i>Lab Investigation</i> 546 <i>Think &amp; Discuss</i> 117 TG: D T551

PERFORMANCE INDICATORS	PAGE REFERENCES		
	IMPACT MATHEMATICS COURSE 1	IMPACT MATHEMATICS COURSE 2	IMPACT MATHEMATICS COURSE 3
10.61 analyze functional relationships to explain how a change in one quantity results in a change in another;	SE: 28-31, 32-35, 410-414, 414-418, 419-421, 560-562 <i>On Your Own Exercises</i> 36-40, 442-449	SE: 362-364, 365-368, 368-370 <i>On Your Own Exercises</i> 371-376 <i>Review &amp; Self-Assessment</i> 380 #6-9	SE: 74-75, 80, 454, 488-489 <i>Lab Investigation</i> 502-503 <i>Share &amp; Summarize</i> 492, 500-501, 527 <i>Think &amp; Discuss</i> 489 TG: D T77
10.62 identify geometric patterns and relationships;	SE: 42-46, 46-49, 50-54, 54-57 <i>Lab Investigation</i> 58-60 <i>On Your Own Exercises</i> 61-68	SE: 91-93, 94-96, 109, 112-116, 131-134, 134-135, 187 #20 <i>On Your Own Exercises</i> 136-139, <i>Review &amp; Self-Assessment</i> 141-143 <i>Remember</i> 187	SE: 63, 74-77, 78-79, 130, 135 <i>Lab Investigation</i> 36-37, 96-97, 318-321
10.63 detect patterns and functions from statistical data;	SE: 4-9, 14-18, 28-31, 32-35, 42-45, 410-413, 414-418, 419-421 <i>On Your Own Exercises</i> 10-12, 36-41	SE: 680-682, 683-685 <i>On Your Own Exercises</i> 686-690	SE: 602-604, 605-607, 608-612, 616-622, 624, 638-641, 645, 652-658 <i>Think &amp; Discuss</i> 605
10.64 use a calculator and computer software to explore number patterns and mathematical relationships;	SE: 20 #6 <i>On Your Own Exercises</i> 25 #15d, 448 #20	SE: 345-347, 348-350, 351-353 <i>On Your Own Exercises</i> 354-360 <i>Review &amp; Self-Assessment</i> 379 #2-5	SE: 74, 76-77, 79, 515-517, 519-522, 526-527 TG: AL T85, T546 OSA T77
10.65 use patterns and functions to represent and solve problems.	SE: 15-18, 439-442, 574-578 <i>Lab Investigation</i> 433-435, 563-564	SE: 348-350, 353 <i>On Your Own Exercises</i> 357-360 #10, 15,17, 372 #11	SE: 495, 498-499, 507, 510, 526-527, 533 <i>Lab Investigation</i> 546 TG: D T498

## Codes Used for TG Codes

### **Course 1**

AL Access for All Learners

### **Course 2**

AL Access for All Learners  
AM About the Mathematics  
SA On the Spot Assessment  
T&D Think & Discuss

### **Course 3**

AL Access for all Learners  
AM About the Mathematics  
D Develop  
I Introduce  
OSA On the Spot Assessment  
SS Simple Strategies  
T Troubleshooting  
TD Think & Discuss  
TT Tips from Teachers