

A Correlation of

SCOTT FORESMAN ■ ADDISON WESLEY

Mathematics

to the

**Pennsylvania
Mathematics Assessment
Anchors**

Grades 3-6



O/M-166

Introduction

This document demonstrates the high degree of success students will achieve when using **Scott Foresman – Addison Wesley Mathematics** in meeting the objectives of the *Pennsylvania Mathematics Assessment Anchors*. Correlation page references are to the Teacher Edition. Lessons in the Teacher Edition contain facsimile pages of the Student Edition and other components.

Scott Foresman – Addison Wesley Mathematics was carefully developed to reflect the specific needs of students and teachers at every grade level, while maintaining an overall primary goal: to have math make sense from every perspective. This program is based on scientific research that describes how children learn mathematics well and on classroom-based evidence that validates proven reliability.

● Reaching All Learners

Scott Foresman – Addison Wesley Mathematics addresses the needs of every student through structured instruction that makes concepts easier for students to grasp. Lessons provide step-by-step examples that show students how to think about and solve the problem. Built-in leveled practice in every lesson allows the teacher to customize instruction to match students' abilities. Reaching All Learners, featured in the Teacher Edition, helps teachers meet the diverse needs of the classroom with fun and stimulating activities that are easy to incorporate directly into the lesson plan.

● Test Prep

Scott Foresman - Addison Wesley Mathematics builds understanding through connections to prior knowledge, math strands, other subjects and the real world. It provides practice for maximum results and offers assessment in a variety of ways. Besides carefully placed reviews at the end of each Section, an important Test Prep strand runs throughout the program. Writing exercises prepare students for open-ended and short-or extended-response questions on state and national tests. Spiral review in a test format help students keep their test-taking skills sharp.

● Priority on problem solving:

Problem-solving instruction is systematic and explicit. Reading connections help children with problem-solving skills and strategies for math. Reading for Math Success encourages students to use the reading skills and strategies they already know to solve math problems.

● Instructional Support

In the Teacher Edition, the Lesson Planner provides an easy, at-a-glance planning tool. It identifies objectives, math understandings, focus questions, vocabulary, and resources for each lesson in the chapter. Professional Development at the beginning of each chapter in the Teacher Edition includes a Skills Trace as well as Math Background and Teaching Tips for each section in the chapter.

Ancillaries help to reach all learners with practice, problem solving, hands-on math, language support, assessment and teacher support. Technology resources for both the student and the teacher provide a whole new dimension to math instruction by helping to create motivating and engaging lessons.

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**Scott Foresman – Addison Wesley Mathematics
to the
Pennsylvania Mathematics Assessment Anchors
Grade Three**

M3.A Numbers and Operations

ASSESSMENT ANCHOR

M3.A.1 Demonstrate an understanding of numbers, ways of representing numbers, relationships among numbers and number systems.

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
M3.A.1.1 Apply place-value concepts and numeration to counting, ordering, grouping and equivalency. <i>Reference: 2.1.3.C, 2.1.3.F, 2.11.3.A</i>	3.A.1.1.1 Match the word name with the appropriate whole number (up through 9,999).	SE/TE: 2, 4B, 4-5, 6A-B, 6-7, 8A-B, 8-9, 10B, 10-11, 12B, 12-13, 16, 17, 18A, 20, 44, 50, 53, 56-57, 60-61, 105
	M3.A.1.1.2 Differentiate between an even and odd number.	SE/TE: 24-26, 51, 258, 276B, 276-277, 669
	M3.A.1.1.3 Compare two whole numbers using greater than (>), less than (<) or equal to (=) (up through 9,999).	SE/TE: 12B, 18A-B, 18-21, 22-23, 34, 35, 44B, 45, 53, 57-58, 61, 97, 125, 168A-B, 168-169, 172, 173, 175, 177, 178-179, 181, 185, 189, 195, 287, 291, 305, 359, 397, 416, 445, 651
	M3.A.1.1.4 Order a set of whole numbers from least to greatest or greatest to least (up through 9,999; limit sets to no more than four numbers).	SE/TE: 22A-B, 22-23, 27, 31, 34, 35, 48, 53, 54, 58, 62, 71, 90A, 191, 282A, 328A, 471, 720

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
	M3.A.1.1.5 Match a symbolic representation of numbers to appropriate whole numbers (e.g., place value blocks, 7 hundreds, 4 tens and 8 ones, etc).	SE/TE: 6A-B, 6-7, 8A-B, 8-9, 10A-B, 10-11, 12A-B, 12-13, 16, 17, 18-21, 22B, 24B, 25, 41, 44B, 44, 50, 52-53, 54, 56-57, 60, 101, 103, 104A, 128A-B, 128-131, 132A, 132-133, 135, 143, 144, 145, 146A-B, 146-147, 148, 150B, 150, 152, 156, 167, 169, 178-179, 180, 186, 282B, 358, 373, 629
M3.A.1.2 Use fractions to represent quantities as part of a whole. Reference: 2.1.3.D	M3.A.1.2.1 Match the fraction to the appropriate drawing or part of a set.	SE/TE: 498A-B, 498-501, 502A-B, 502-503, 504A-B, 504-505, 506A-B, 506-509, 510A-B, 510-511, 512A-B, 512-513, 514, 515, 516A-B, 516-517, 518A-B, 518-519, 520A-B, 520-521, 522A-B, 522-525, 526-527, 530, 531, 533, 542B, 542-543, 547, 548, 550-551, 552, 554-555, 558-559, 562
M3.A.1.3 Count, compare and make change using a collection of coins and one-dollar bills. Reference: 2.1.3.E	M3.A.1.3.1 Count a collection of bills and coins less than \$5.00 (penny, nickel, dime, quarter, dollar).	SE/TE: 36A-B, 36-39, 40A-B, 40-41, 42A, 46, 47, 49, 51, 53, 55, 59, 63, 66A, 86A, 96A, 143, 146B, 162A-B, 162-165
	M3.A.1.3.2 Compare total values of combinations of coins less than \$5.00 (penny, nickel, dime, quarter, dollar).	SE/TE: 36B, 38, 42A, 46, 47, 53, 123, 162A, 165, 166A
	M3.A.1.3.3 Make change for an amount up to \$5.00 with no more than \$2.00 change given (penny, nickel, dime, quarter, dollar).	SE/TE: 40A-B, 40-41, 42A, 46, 47, 51, 53, 55, 59, 63, 66A, 69, 89, 111, 112, 117, 121, 157, 162A, 163-165, 180, 304, 312, 391, 404A, 486

ASSESSMENT ANCHOR

M3.A.2 Understand the meanings of operations, use operations and understand how they relate to each other.

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
M3.A.2.1 Understand various meanings of operations and the relationship between them. <i>Reference: 2.1.3.K, 2.2.3.C, 2.5.3.C</i>	M3.A.2.1.1 Understand the relationship between operations or arrays. Represent multiplication as repeated addition. Demonstrate the inverse relationship between addition and subtraction using fact families.	SE/TE: 70A-B, 70-71, 72A, 73, 78, 79, 102B, 110, 112-113, 116, 120, 258J, 258-259, 260A-B, 260-261, 262A-B, 262-265, 267, 274, 275, 276A-B, 276-279, 280A-B, 280-281, 286B, 286-287, 288A-B, 292B, 294A-B, 300, 302-303, 304, 306-307, 309, 310-311, 314I, 314, 316A-B, 316-317, 318A-B, 318-319, 320A-B, 320-323, 324A-B, 324-327, 328B, 329, 342, 348A, 357, 358, 360-361, 369, 377, 384A-B, 384-385, 386A-B, 386-387, 388A-B, 388-389, 390B, 390-391, 392A-B, 392-393, 394, 395, 396A-B, 401, 403, 408A-B, 412, 414-415, 416, 419-420, 423, 626A-B, 626-629, 630A, 663, 670, 671

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
	<p>M3.A.2.1.2 Choose the correct operation(s) to solve a word problem (no more than 2 operations using +, - and/or x).</p>	<p>SE/TE: 14A-B, 14-15, 16, 17, 51, 61, 63, 64-65, 68-69, 70B, 71, 76B, 76-77, 78, 79, 81, 82A, 104B, 108-109, 111, 112-113, 114-115, 117, 119, 121, 124, 126A, 126-127, 128, 130, 132, 134, 136-137, 143, 145, 147, 148B, 148-149, 151, 152A-B, 152, 154-155, 157, 159, 162A-B, 162-165, 166A, 167, 170-171, 173, 178-179, 180-181, 186-188, 260B, 260, 264, 265, 266A-B, 266-267, 273, 274, 276, 278-279, 280B, 280-281, 283, 284B, 284-285, 286A, 287, 290-291, 293, 294A-B, 294-295, 296, 297, 300-301, 302-303, 304-305, 306, 308, 310-314, 315, 317, 319, 320-323, 324B, 324, 326, 329, 334-335, 338B, 338-339, 341, 343, 346A-B, 346-347, 348A-B, 348-349, 350, 351, 352-353, 355, 356-357, 358-359, 362-363, 364-367, 368J, 368-369, 370A, 370-371, 372A, 372-373, 374A-B, 374-377, 380A, 384-385, 388-389, 390-391, 392A-B, 392-393, 395, 396A, 397, 398, 400-401, 402B, 403, 404A-B, 405, 406B, 409, 411, 412-413, 414-415, 416, 418-421, 422-424, 431, 439, 473, 496, 517, 518, 520B, 535, 544, 563, 589, 572-575, 599, 607, 610-611, 629, 631, 635, 640-641, 649, 656A-B, 656-657, 665, 666, 668, 673, 674-677, 683, 721</p>

ASSESSMENT ANCHOR**M3.A.3 Compute accurately and fluently and make reasonable estimates.**

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
M3.A.3.1 Solve problems using addition, subtraction and multiplication (straight computation and word problems). <i>Reference: 2.1.3.L, 2.2.3.B</i>	M3.A.3.1.1 Solve single- and double- digit addition and subtraction problems with regrouping in vertical and horizontal form.	SE/TE: 64-65, 66A-B, 66-69, 70A-B, 70-71, 72A-B, 72-73, 74-75, 76A-B, 76-77, 78, 79, 80A-B, 80-81, 82A-B, 82-85, 92, 93, 94A-B, 94-95, 96A-B, 96-97, 101, 103, 104A-B, 106, 107, 108-109, 110-111, 112-113, 114, 116-119, 120-123, 124I-J, 124-125, 126A-B, 126-127, 128A-B, 128-131, 132A-B, 132-135, 136A-B, 136-137, 143, 144, 145, 147, 148A-B, 148-149, 150A-B, 150-151, 152A-B, 152-155, 156A-B, 156-157, 158, 159, 165, 166A-B, 166-167, 169, 170A-B, 172-173, 176-177, 178-179, 182-185, 186-189, 195, 248, 273, 283, 304, 329, 335, 339, 345, 358, 368, 401, 403, 427, 449, 453, 486, 537, 539, 631, 637

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
	M3.A.3.1.2 Solve problems involving multiplication through the 9’s tables through 9×5.	SE/TE: 258I-J, 260A-B, 260-261, 262A-B, 262-265, 267, 274, 275, 276A-B, 276-279, 280A-B, 280-281, 282A-B, 282-283, 286A-B, 286-287, 288A-B, 288-291, 292A-B, 292-293, 296, 297, 300-301, 302-303, 304, 306-309, 310-313, 314I-J, 314-315, 316A-B, 316-317, 318A-B, 318-319, 320A-B, 320-323, 324A-B, 324-327, 328A-B, 328-329, 335, 336, 337, 340-341, 342A-B, 342-343, 345, 348A-B, 350, 351, 352-353, 354-355, 356-357, 358, 360-363, 364-367, 369, 370A-B, 370-371, 372A-B, 372-373, 384A-B, 384-385, 386A-B, 386-387, 388A-B, 388-389, 390A-B, 390-391, 392A-B, 392-393, 394, 395, 396A-B, 396-397, 402A-B, 402-403, 408, 409, 412-413, 414-415, 418-421, 422-425, 443, 449, 473, 610-611, 670
M3.A.3.2 Use estimation skills to arrive at conclusions. <i>Reference: 2.2.3.E</i>	M3.A.3.2.1 Estimate sums and differences of quantities; round 2-digit numbers to the nearest 10, and 3 digit numbers to the nearest 100, before computing (limit to two numbers).	SE/TE: 64I-J, 86A-B, 86-89, 90A-B, 90-91, 92, 93, 95, 98A-B, 98-101, 102, 104B, 105, 106, 107, 109, 111, 112-113, 114, 118, 122-123, 125, 127, 131, 152A, 160A-B, 160-161, 165, 182-185, 189

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
	M3.A.3.2.2 Round whole numbers to the nearest ten, hundred or thousand (no higher than 9000).	SE/TE: 28A-B, 28-31, 32A, 34, 35, 36A, 39, 50, 53, 54, 58, 62, 64I-J, 65, 86A-B, 86-89, 90A-B, 90-91, 92, 93, 95, 98A-B, 98-100, 102, 104B, 105, 106, 107, 111, 112-113, 114, 118, 122-123, 127, 131, 152A, 160A, 575

M3.B Measurement

ASSESSMENT ANCHOR

M3.B.1 Demonstrate an understanding of measurable attributes of objects and figures, and the units, systems and processes of measurement.

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
M3.B.1.1 Determine or calculate time and elapsed time. Reference: 2.3.3.C, 2.3.3.D	M3.B.1.1.1 Tell time (analog) to the minute.	SE/TE: 180, 190, 192A-B, 192-195, 196A-B, 196-197, 198A, 202, 203, 242-243, 246-247, 250, 254, 416, 600
	M3.B.1.1.2 Find elapsed time to increments of 5 minutes (limited to 2 adjacent hours).	SE/TE: 180, 190I, 198A-B, 198-199, 201, 202, 203, 238A-B, 242-243, 244, 246-247, 250, 254, 267, 455, 486, 552, 668, 687, 699
	M3.B.1.1.3 Identify times of the day and night as AM and PM.	SE/TE: 192B, 193-195, 197, 198B, 198-199, 201, 202, 203, 238A-B, 244, 247, 250, 254, 455, 486, 552, 668, 687, 699, 700B

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
<p>M3.B.1.2 Use the attributes of length, area, volume and weight of objects. <i>Reference: 2.3.3.A, 2.3.3.E</i></p>	<p>M3.B.1.2.1 Select an appropriate unit and/or tool for the attribute being measured.</p>	<p>SE/TE: 54, 114, 180, 248, 304, 358, 416, 426J, 464A-B, 464-467, 468A-B, 468-471, 472A-B, 472-473, 476B, 476-477, 478, 479, 480-481, 483, 485, 491, 495, 496J, 497, 524-525, 532A-B, 532-533, 534A-B, 534-535, 536A-B, 536-537, 538A-B, 538-539, 540, 543, 544, 545, 546-547, 549, 550-551, 552, 556-557, 560-561, 563, 582A-B, 582-583, 584A-B, 584-587, 588, 590-591, 592, 593, 594-595, 597, 604-605, 607-609, 636, 668, 680A-B, 680-683, 684A-B, 684-685, 690A-B, 690-693, 694A-B, 694-695, 696A-B, 696-697, 698, 699, 710A-B, 710-711, 716-717, 718-719, 720, 722-724, 726-728</p>
	<p>M3.B.1.2.2 Compare and/or order objects according to length, area, volume or weight.</p>	<p>SE/TE: 238B, 305, 358, 470-471, 496J, 536B, 539, 542B, 542-543, 561, 562J, 582B, 585, 678I, 682, 693, 694A-B, 694-695, 698, 718, 722, 726</p>

ASSESSMENT ANCHOR

M3.B.2 Apply appropriate techniques, tools and formulas to determine measurements.

<p>Pennsylvania Assessment Anchors</p>	<p>Eligible Content</p>	<p>Scott Foresman – Addison Wesley Mathematics</p>
<p>M3.B.2.1 Determine the measurement of objects with non-standard and standard units. <i>Reference: 2.3.3.B, 2.3.3.F</i></p>	<p>M3.B.2.1.1 Use a ruler (provided) to measure to the nearest 1/2 inch or centimeter.</p>	<p>SE/TE: 496J, 532A-B, 532-533, 534A-B, 534-535, 536A-B, 536-537, 538A-B, 544, 545, 549, 551, 556-557, 560-561, 563, 582A-B, 582-583, 584A-B, 587, 590, 592, 593, 597, 604, 608</p>
	<p>M3.B.2.1.2 Find the perimeter of a figure drawn and labeled (with the same units throughout).</p>	<p>SE/TE: 114, 358, 426J, 464A-B, 464-467, 468B, 471, 475, 476B, 476, 478, 479, 480-481, 485, 486, 491, 495, 533, 552, 600, 636B, 668</p>
	<p>M3.B.2.1.3 Find the area of a figure drawn on a grid (only full grid blocks inside the figure).</p>	<p>SE/TE: 426J, 468A-B, 468-471, 472A, 473, 474A-B, 475, 476A-B, 476-477, 478, 479, 480-481, 483, 485, 486, 491, 495, 496I</p>
<p>M3.B.2.2 Estimate measurements of familiar objects. <i>Reference: 2.3.3.G</i></p>	<p>M3.B.2.2.1 Match the object with its approximate measurement (all measurements given must be of the same system, e.g., about how tall is a soda pop can? 5 inches, 5 feet, 5 yards, etc.).</p>	<p>SE/TE: 238B, 305, 358, 496J, 535, 560, 562J, 582B, 582-583, 585, 592, 593, 599, 600, 609, 668, 678I, 682, 693, 694</p>

M3.C Geometry

ASSESSMENT ANCHOR

M3.C.1 Analyze characteristics and properties of two- and three- dimensional geometric shapes and demonstrate understanding of geometric relationships.

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
<p>M3.C.1.1 Identify and/or describe two- and three-dimensional objects. <i>Reference: 2.9.3.A</i></p>	<p>M3.C.1.1.1 Name/ identify/describe geometric shapes in two dimensions (circle, square, rectangle, triangle, pentagon, hexagon, octagon).</p>	<p>SE/TE: 54, 114, 180, 248, 304, 358, 426I-J, 426-427, 431, 432A-B, 432-433, 435, 437, 446A-B, 446-449, 450A-B, 450-453, 454A-B, 454-455, 456A-B, 456-459, 460A-B, 460-461, 462, 463, 464A-B, 464-467, 468A-B, 468-471, 472A-B, 473, 474A-B, 474-475, 476A-B, 476-477, 478, 479, 480-481, 482-483, 484-485, 486, 489-491, 493-495, 501, 552, 587, 600, 639, 668, 720</p>
	<p>M3.C.1.1.2 Name/ identify geometric shapes in three dimensions (sphere, cube, cylinder, cone, pyramid, rectangular prism).</p>	<p>SE/TE: 54, 114, 248, 358, 426I, 426, 428A-B, 428-431, 432A-B, 432-433, 434, 436, 439, 440, 441, 472A-B, 472-473, 474A-B, 474-475, 476A, 478, 479, 482-483, 484-485, 486, 488, 491, 492, 495, 501, 552, 600, 639</p>
<p>M3.C.1.2 Identify/draw right angles and right triangles. <i>Reference: 2.10.3.A, 2.10.3.B</i></p>	<p>M3.C.1.2.1 Identify/draw right angles and right triangles formed by line segments, in geometric figures, on a geoboard, and/or in real-world objects.</p>	<p>SE/TE: 444A-B, 444-445, 450A-B, 451-453, 454A-B, 454-455, 458-459, 462, 463, 482, 489, 493</p>

ASSESSMENT ANCHOR**M3.C.2 Identify and/or apply concepts of transformations or symmetry.**

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
M3.C.2.1 Apply the concepts of transformations and symmetry. <i>Reference: 2.9.3.E, 2.9.3.F, 2.9.3.H</i>	M3.C.2.1.1 Recognize a translation (slide), reflection (flip) or rotation (turn) of a simple two-dimensional figure.	SE/TE: 456A-B, 456-459, 462, 463, 483, 485, 490, 494
	M3.C.2.1.2 Identify/draw a line of symmetry in a two-dimensional figure.	SE/TE: 460A-B, 460-461, 467, 477, 483, 484, 490, 494
	M3.C.2.1.3 Identify symmetrical two-dimensional shapes.	SE/TE: 460A-B, 460-461, 467, 477, 483, 484, 490, 494

M3.D Algebraic Concepts**ASSESSMENT ANCHOR****M3.D.1 Demonstrate an understanding of patterns, relations and functions.**

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
M3.D.1.1 Recognize, describe, or extend a variety of patterns. <i>Reference: 2.8.3.A, 2.11.3.D</i>	M3.D.1.1.1 Extend or find a missing element in a pattern of numbers or shapes (pattern must show 3 repetitions – if multiples are used, limit to 2, 3 or 5).	SE/TE: 8A-B, 8-9, 24A-B, 24-27, 51, 52, 55, 58, 115, 135, 147, 174, 180, 191, 249, 259, 277, 280-281, 282, 286, 288, 299, 301, 303, 305, 307-308, 311, 319, 330-331, 332A-B, 332-335, 336, 337, 339, 340A-B, 340-341, 344A-B, 344-345, 350, 351, 352-353, 354-355, 356-357, 359, 361-363, 364-365,

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
	(continued)	401, 402A-B, 402-403, 417, 443, 464B, 492, 505, 553, 601, 609, 612A-B, 612-615, 618A-B, 618-621, 641, 669, 685, 695
	M3.D.1.1.2 Identify/ describe the rule for a pattern shown (pattern must show 3 repetitions – if multiples are used, limit to 2, 3 or 5).	SE/TE: 8A-B, 8-9, 24A-B, 24-27, 51, 52, 55, 58, 115, 135, 147, 174, 180, 191, 249, 259, 277, 280-281, 282, 286, 288, 299, 301, 303, 305, 307-308, 311, 319, 330-331, 332A-B, 332-335, 336, 337, 339, 340A-B, 340-341, 344A-B, 344-345, 350, 351, 352-353, 354-355, 356-357, 359, 361-363, 364-365, 401, 402A-B, 402-403, 417, 443, 464B, 492, 505, 553, 601, 609, 612A-B, 612-615, 618A-B, 618-621, 641, 669, 685, 695
M3.D.1.2 Demonstrate simple function rules. Reference: 2.8.3.I	M3.D.1.2.1 Determine the missing element in a function table (functions may use +, - or x; allowable multiples are 2, 3 or 5; tables must have 3 INs and 3 OUTs listed).	SE/TE: 24B, 115, 270A-B, 270-273, 274, 275, 276A, 279, 291, 299, 300, 303, 305, 307, 311, 332A, 344A-B, 344-345, 346A, 348B, 350, 351, 352-353, 354, 356-357, 359, 363, 367, 399, 417, 553, 609, 616B, 669, 685, 695, 721

ASSESSMENT ANCHOR

M3.D.2 Represent and/or analyze mathematical situations using numbers, symbols, words, tables and/or graphs.

<p>Pennsylvania Assessment Anchors</p>	<p>Eligible Content</p>	<p>Scott Foresman – Addison Wesley Mathematics</p>
<p>M3.D.2.1 Create/ model expressions, equations and inequalities to match a problem situation. <i>Reference: 2.8.3.D</i></p>	<p>M3.D.2.1.1 Create or match a story to a given combination of symbols (+, −, ×, <, >, =) and numbers.</p>	<p>SE/TE: 181, 265, 266A-B, 266-267, 273, 274, 276, 280-281, 283, 284B, 284-285, 286A, 287, 290, 293, 297, 301, 302-303, 305, 306, 310-311, 315, 319, 320-323, 324B, 324, 343, 346A-B, 346-347, 348B, 350, 351, 356-357, 390-391, 392-393, 395, 404A-B, 404-405, 406-407, 409, 410, 413, 414-415, 425, 431, 439, 473, 487, 656, 677</p>
	<p>M3.D.2.1.2 Choose the number sentence that matches a given story (one operation, + or − only).</p>	<p>SE/TE: 181, 258I, 265, 266A-B, 266-267, 273, 274, 276, 280-281, 283, 284B, 284-285, 286A, 287, 290, 293, 297, 301, 302-303, 305, 306, 310-311, 315, 319, 320-323, 324B, 324, 343, 346A-B, 346-347, 348B, 350, 351, 356-357, 390-391, 392-393, 395, 404A-B, 404-405, 406-407, 409, 410, 413, 414-415, 425, 431, 439, 473, 487, 656, 677</p>

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
M3.D.2.2 Determine the missing number or symbol in a number sentence. <i>Reference: 2.8.3.B, 2.8.3.</i>	M3.D.2.2.1 Find a missing number that makes a number sentence true (1-digit or 2-digit numbers up to 18 using +, - or x through 9 x 5).	SE/TE: 18A, 27, 55, 60, 70-71, 73, 74-75, 76A-B, 76-77, 78, 79, 89, 96-97, 104B, 111, 112-113, 115, 116, 119, 120, 123, 168-169, 172, 173, 175, 249, 265, 287, 293, 305, 308-310, 313, 359, 385, 415, 417, 419, 421, 423, 487, 614, 629, 655, 721
	M3.D.2.2.2 Identify the missing symbol (+, -, =, <, >) that makes a number sentence true.	SE/TE: 19-21, 23, 34, 35, 36A, 57, 61, 125, 169, 172, 173, 181, 210, 287, 297, 397, 633, 651, 669

M3.E Data Analysis and Probability

ASSESSMENT ANCHOR

M3.E.1 Formulate or answer questions that can be addressed with data and/or organize, display, interpret or analyze data.

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
M3.E.1.1 Answer questions based on data shown on tables, charts, bar graphs or pictographs. <i>Reference: 2.6.3.B, 2.7.3.D, 2.11.3.B</i>	M3.E.1.1.1 Analyze data shown on tables, charts, bar graphs or pictographs using the concepts of largest, smallest, most often, least often and middle.	SE/TE: 20, 84, 95, 115, 160-161, 181, 204-206, 208A-B, 208-211, 212A-B, 212-215, 216-217, 222A-B, 222-223, 224, 225, 226A-B, 226-227, 228A-B, 228-231, 232A-B, 232-233, 234-235, 236A-B, 236-237, 238-239, 240, 241, 243, 245, 246-247, 249, 251-

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
	(continued)	253, 255-257, 261, 268-269, 270A-B, 270-273, 274, 275, 276B, 279, 280A, 285, 305, 312, 347, 359, 376, 400, 417, 487, 553, 570, 591, 601, 617, 654, 669
	M3.E.1.1.2 Describe, interpret and/or answer questions based on data shown in tables, charts, bar graphs and pictographs.	SE/TE: 20, 23, 28, 76, 81, 84, 95, 115, 130, 134, 142, 160-161, 181, 197, 204A-B, 204-207, 208A-B, 208-211, 212A-B, 212-215, 216-217, 222A-B, 222-223, 224, 225, 226A-B, 226-227, 228A-B, 228-231, 232A-B, 232-233, 234-235, 236A-B, 236-237, 238-239, 240, 241, 243, 245, 246-247, 249, 251-253, 255-257, 261, 268-269, 270A-B, 270-273, 274, 275, 276B, 279, 280A, 285, 305, 308, 311, 312, 347, 359, 376, 397, 400, 417, 487, 553, 570, 574, 591, 601, 616B, 617, 620, 639, 654, 669
M3.E.1.2 Organize or display data using tables, charts, bar graphs or pictographs. <i>Reference: 2.6.3.A, 2.7.3.C</i>	M3.E.1.2.1 Graph data or complete a graph given the data (bar graph or pictograph – grid is provided).	SE/TE: 181, 208A-B, 208-211, 212A-B, 212-215, 216-217, 218A-B, 218-221, 222A-B, 222-223, 224, 225, 226A-B, 226-227, 228A-B, 228-231, 232A-B, 232-233, 236A-B, 236-237, 253, 256-257, 261, 270A, 276A, 280A, 591

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
	M3.E.1.2.2 Translate information from one type of display to another (e.g., convert tally chart to bar graph). Limit to tally charts, bar graphs, tables and pictographs.	SE/TE: 181, 204A-B, 204-207, 208A-B, 208-211, 212A-B, 212-215, 216-217, 218A-B, 218-221, 222A-B, 222-223, 224, 225, 226A-B, 226-227, 228A-B, 228-231, 232A-B, 232-233, 236A-B, 236-237, 240, 241, 245, 247, 253, 256-257, 270A, 280A, 591

ASSESSMENT ANCHOR

M3.E.3 Understand and/or apply basic concepts of probability or outcomes.

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
M3.E.3.1 Predict and/or measure the likelihood of events. <i>Reference: 2.7.3.A</i>	M3.E.3.1.1 Make a prediction based on data or chance.	SE/TE: 181, 209, 229-230, 233, 272, 359, 553, 601, 617, 678J, 700A-B, 700-701, 702A-B, 702-703, 704A-B, 704-707, 708A-B, 712, 713, 717, 718-719, 721, 725, 729
	M3.E.3.1.2 Determine the likelihood of an event (more/most likely, less/least likely, equally likely or impossible).	SE/TE: 181, 359, 553, 601, 678J, 700A-B, 700-701, 702A-B, 702-703, 704A-B, 704-707, 708A-B, 712, 713, 717, 718-719, 721, 725, 729

**Scott Foresman – Addison Wesley Mathematics
to the
Pennsylvania Mathematics Assessment Anchors
Grade Four**

4A. Numbers and Operations

ASSESSMENT ANCHOR

4A.1 Demonstrate an understanding of numbers, ways of representing numbers, relationships among numbers and number systems

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
4A.1.1 Use models and/or words to represent quantities as decimals, fractions and mixed numbers	4A.1.1.1 Match/construct drawings, diagrams or models to the correct decimal, fraction or mixed number – no simplification necessary	SE/TE: 28A-B, 28-29, 30A-B, 30-31, 34A-B, 34-37, 42, 43, 47, 48-49, 54-55, 58-59, 498I-J, 499, 500A-B, 500-501, 502A-B, 502-503, 504A-B, 504-507, 508A-B, 508-509, 510, 514, 515, 516A-B, 516-519, 520A-B, 520-521, 522A-B, 522-523, 524A-B, 524-527, 528, 529, 530A-B, 530-533, 534A-B, 534-535, 536A-B, 537, 538A-B, 538-539, 540A-B, 540-541, 542, 543, 544-545, 546-547, 548-549, 550, 552-555, 556-559, 560, 562A-B, 564A-B, 564, 567, 568A-B, 568, 573, 574B, 574, 577, 578A, 578, 581, 563, 622I-J, 622-623, 624A-B, 624-627, 628A-B, 628-629, 630A-B, 630-631, 632A-B, 632-633, 634, 635, 636A-B, 636-637, 638A-B, 638-

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
	(continued)	641, 642A-B, 642-645, 650, 651, 653, 660, 665, 670, 672, 674-675, 676-677, 678-679, 680, 682-684, 687, 703, 711, 723, 725, 726
	4A.1.1.2 Match the standard number form to the word form of decimal numbers (through the hundredths place)	SE/TE: 622, 624-625, 628A-B, 628-629, 630A, 630, 634, 635, 642B, 674, 676, 678, 682
	4A.1.1.3 Write whole numbers in expanded, standard and/or word form through 6 digits (example of standard to expanded form: 43,076 = 40,000+3000+70+6)	SE/TE: 2, 4A-B, 4-7, 8B, 8-9, 10A-B, 10-11, 14, 15, 16A-B, 18, 22B, 40A-B, 46, 48-49, 52-53, 56, 71, 85, 244, 354, 550, 589
4A.1.2 Compare quantities and magnitudes of numbers	4A.1.2.1 Locate/identify fractions or decimals on a number line (decimals through hundredths place, fraction denominators to 10ths – do not mix fractions and decimals)	SE/TE: 504A-B, 504-507, 508-509, 514, 515, 524A, 525, 530B, 534-535, 538B, 539, 540B, 546, 550, 552, 556, 628, 630-631, 632-633, 683
	4A.1.2.2 Compare and/or order whole numbers through 6 digits and amounts of money to \$100 (limit sets for ordering, to no more than 4 numbers)	SE/TE: 3, 16A-B, 16-19, 20A, 21, 26, 27, 48-49, 50, 53, 57, 71, 112, 134, 149, 178, 244, 302, 354, 422, 691, 725

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
4A.1.3 Develop and/or apply number theory concepts to represent numbers in various ways	4A.1.3.1 Find/identify/list factors of a given number through 10	SE/TE: 124-125, 134, 136B, 146A, 402A-B, 402-403, 405, 407, 411, 414, 415, 419, 420-421, 427, 430, 467
	4A.1.3.2 Find/identify/list multiples of a number, where the multiples do not exceed 100	SE/TE: 128A-B, 128-131, 136A, 174, 255A-B, 255-256, 314A-B, 314-315, 406A-B, 406-407, 423, 427

ASSESSMENT ANCHOR

4A.2. Understand meanings of operations, use operations and understand how they relate to each other

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
4A.2.1 Use operations to solve problems (may include word problems)	4A.2.1.1 Solve problems involving all operations with whole numbers, and/or explain the solution (limit to two-step problems; e.g., multiply then add – single digit multipliers and divisors)	SE/TE: 60I, 61, 62A-B, 62-63, 64A-B, 64-67, 71, 74, 75, 76A-B, 76-79, 80A-B, 80-81, 82A-B, 82-85, 86A-B, 86-87, 92, 93, 94A-B, 94-95, 96A-B, 96-97, 99, 101, 104, 105, 107, 108-109, 110-111, 112, 114-116, 118-120, 122I-J, 124A-B, 124-127, 128A-B, 128-131, 132A-B, 132-135, 136A-B, 136-137, 143, 144, 145, 148A-B, 148-149, 150A-B, 150-151, 152A-B, 152-53, 154A-B, 154-155, 158, 159, 174-175, 176-177, 178, 180-183, 184-187, 254I-J, 254-255, 256A-B, 256-257, 262A-B, 262-263, 264A-B, 264-267, 268, 269, 270A-B, 270-273, 274A-B, 274-275, 281, 282A-B, 282-283, 284, 285, 286A-B, 286-287, 288A-B, 288-289, 294, 295, 300-301, 304-307,

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
	(continued)	308-311, 312I-J, 313, 314A-B, 314-315, 320A-B, 320-325, 330, 331, 332A-B, 332-335, 336A-B, 336-337, 338A-B, 338-339, 340A-B, 340-341, 346, 347, 352-353, 356-359, 360-363, 364I-J, 366A-B, 366-367, 372A-B, 372-373, 374A-B, 374-377, 378, 379, 380A-B, 380-383, 384A-B, 384-385, 386A-B, 386-389, 390A-B, 390-391, 392A-B, 392-393, 399, 400, 401, 402A-B, 402-403, 404A, 404-405, 406A-B, 406-407, 408A-B, 408-411, 414, 415, 418-419, 420-421, 424-427, 428-431
	4A.2.1.2 Solve problems involving addition, subtraction or multiplication with decimals through the tenths or money to the cent and/or explain the solution (in multiplication, one multiplier must be a single-digit whole number e.g., \$2.75 x 4) Limit to 2-step problems.	SE/TE: 77-78, 81, 84-85, 87, 92, 93, 101, 107, 110-111, 115-116, 119, 286A-B, 286-287, 289, 294, 295, 298, 30-301, 302, 307, 311, 340A-B, 340-341, 346, 347, 350, 352-353, 354, 359, 363, 623, 638A-B, 638-641, 642A-B, 642-645, 650, 651, 653, 672, 674-675, 679-680, 683-684, 705

ASSESSMENT ANCHOR

4A.3. Compute accurately and fluently and make reasonable estimates

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
4A.3.1 Apply rounding and/or estimation strategies to solve problems	4A.3.1.1 Round whole numbers (including whole dollar amounts) to the nearest ten, hundred, thousand, ten-thousand or hundred-thousand	SE/TE: 20A-B, 20-21, 22A, 23, 26, 27, 29, 46, 48-49, 50, 53, 57, 67, 68A-B, 68-71, 72A, 72-73, 74, 76A, 76-77, 108, 115-116, 118-119
	4A.3.1.2 Round amounts of money to the nearest dollar	SE/TE: 77, 83, 108, 118, 286, 632B, 636A
	4A.3.1.3 Estimate the answer to addition, subtraction and multiplication problems using whole numbers through 6 digits. (For multiplication, no more than 2 digits X 1 digit, excluding powers of 10)	SE/TE: 68A-B, 68-71, 72A-B, 72-73, 74, 75, 76A, 76-77, 79, 82-83, 108, 111, 114-115, 118-119, 254I, 258A-B, 258-261, 263, 296-297, 298-299, 300-301, 304-305, 308-309, 313, 315, 316A-B, 316-319, 323, 330, 331, 335, 339, 340A-B, 352-353, 354, 356, 360, 365, 422
4A.3.2 Compute using fractions or decimals (written vertically or horizontally – straight computation only)	4A.3.2.1 Solve addition or subtraction problems involving decimals (through hundredths)	SE/TE: 77-78, 81, 84-85, 87, 92, 93, 101, 107, 110-111, 115-116, 119, 623, 638A-B, 638-640, 642A-B, 642-645, 648A, 650, 651, 653, 672, 674-675, 679-680, 683-684, 703
	4A.3.2.2 Solve addition or subtraction problems with fractions with like denominators (denominators to 10, no simplifying necessary)	SE/TE: 560I, 560, 562A-B, 562-563, 564A-B, 564-567, 568A-B, 568-571, 572, 573, 574A-B, 574-577, 578A-B, 578, 581, 583, 586, 587, 595, 599, 608, 610-611, 612, 614-615, 618-619

4B. Measurement

ASSESSMENT ANCHOR

4B.1. Demonstrate an understanding of measurable attributes of objects and figures, and the units, systems and processes of measurement

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
4B.1.1 Determine time and/or calculate elapsed time	4B.1.1.1 Match/construct analog time (a picture of a clock), to the same time written in digital	SE/TE: 190A-B, 190-191, 195
	4B.1.1.2 Identify time (analog or digital) as the amount of minutes before and/or after the hour (e.g., 2:50 is the same as 10 minutes before 3:00; quarter past six is the same as 6:15)	SE/TE: 190A-B, 190-191, 195
	4B.1.1.3 Calculate the elapsed time, to the minute, in a given situation (limited to 2 adjacent hours)	SE/TE: 196A-B, 196-197, 198A-B, 198-199, 201, 202, 203, 234A, 234-235, 240, 244, 246, 250, 443, 488, 593, 612, 676
	4B.1.1.4 Determine the beginning and/or ending time, given the elapsed time (limited to 2 adjacent hours)	SE/TE: 196A-B, 196-197, 198A-B, 198-199, 201, 202, 203, 234A, 234-235, 240, 244, 246, 250, 443, 488, 593, 612, 676
4B.1.2 Convert linear measurements within the same system	4B.1.2.1 Convert linear measurements within the same system to the unit immediately above or below the given unit (using only the units below – no combined units) <ul style="list-style-type: none"> ▪ Metric using mm, cm, m, km ▪ Customary using in, ft, yd 	SE/TE: 560J, 588B, 588, 596B, 596-599, 600B, 601, 602B, 602-603, 604, 605, 606, 609, 611, 617, 621, 652B, 652-653, 658A-B, 658-661, 666B, 667, 668, 669, 680-681, 685

ASSESSMENT ANCHOR

4B.2. Apply appropriate techniques, tools and formulas to determine measurements

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
4B.2.1 Select and/or use appropriate tools and/or attributes for measuring quantities	4B.2.1.1 Use or read a ruler (provided) to measure to the nearest 1/4 inch or millimeter	SE/TE: 588A-B, 588-589, 590A-B, 590-591, 593, 604, 605, 609, 610, 612, 616, 620, 622J, 652A-B, 652-653, 666B, 669, 673
	4B.2.1.2 Find the perimeter of a square or rectangle with only two sides labeled (same units)	SE/TE: 422, 432J, 464A-B, 464-467, 468B, 468, 470-471, 472-473, 474A-B, 474, 477, 478A-B, 480, 481, 483, 485, 487, 493, 496-497
	4B.2.1.3 Know the difference between perimeter and area and when each is appropriate to use	SE/TE: 422, 432J, 464A-B, 464-467, 468A-B, 468-471, 472-473, 474A-B, 474, 477, 478A-B, 480, 481, 482-483, 485, 487, 488, 493, 496-497
4B.2.2 Estimate measurements of figures	4B.2.2.1 Make reasonable estimates of weights, lengths and capacities of familiar objects	SE/TE: 45, 588-589, 591, 592B, 592, 594A-B, 594, 600A-B, 600-601, 604, 607, 611, 617, 621, 623, 652B, 654A, 654, 656A, 669, 674, 676
	4B.2.2.2 Estimate the area of an irregular figure shown on a grid	SE/TE: 468

4C. Geometry

ASSESSMENT ANCHOR

4C.1 Analyze characteristics and properties of two- and three- dimensional geometric shapes and demonstrate understanding of geometric relationships

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
4C.1.1 Identify/describe the basic properties of geometric figures in two or three dimensions	4C.1.1.1 Identify/classify/compare two- dimensional figures (circle, triangle, square, parallelogram, trapezoid, rhombus, rectangle, pentagon, hexagon, octagon)	SE/TE: 302, 342B, 432I-J, 434A-B, 434-437, 438A-B, 438-439, 443, 444A-B, 444-447, 448A-B, 448-449, 450, 451, 452A-B, 452-455, 456A-B, 456-457, 458A-B, 458-459, 460A-B, 460-461, 462, 463, 464A-B, 464-467, 468A-B, 468-471, 472, 474A-B, 474-475, 477, 478A-B, 478-479, 480, 481, 482-483, 484-485, 486-487, 488, 490-493, 494-497, 676, 726
	4C.1.1.2 Classify three-dimensional figures (cube, rectangular prism and pyramid) and/or identify the characteristics (faces, edges and vertices)	SE/TE: 354, 432, 434A-B, 434-437, 439, 450, 451, 460A-B, 460-461, 473, 474B, 475, 476A-B, 476-477, 478-479, 480, 481, 484-485, 486-487, 490, 492-493, 494, 496-497, 550, 676, 726
	4C.1.1.3 Draw/identify right triangles	SE/TE: 444A, 445-447, 491, 494
4C.1.2 Represent and/or use properties or relationships of points, lines, line segments, rays and angles	4C.1.2.1 Identify points, lines, line segments or rays	SE/TE: 440A-B, 440-443, 484, 486, 488, 490, 494
	4C.1.2.2 Identify parallel and perpendicular lines	SE/TE: 440A-B, 441-442, 447, 484, 486, 490, 494
	4C.1.2.3 Visually classify angles as acute, obtuse or right	SE/TE: 440-443, 444A, 445-447, 484, 486, 490, 494

ASSESSMENT ANCHOR**4C.2. Identify and /or apply concepts of transformations and symmetry**

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
4C.2.1 Apply the concepts of reflection and symmetry	4C.2.1.1 Identify and/or draw the reflection (flip) of a two-dimensional figure	SE/TE: 452A-B, 452-455, 462, 463, 485, 486-487, 491, 495, 676
	4C.2.1.2 Identify or create figures that have one, two or no lines of symmetry	SE/TE: 456A-B, 456-457, 459, 462, 463, 467, 478B, 478-479, 485, 486-487, 492, 495

ASSESSMENT ANCHOR**4C.3 Locate and describe relationships using the coordinate plane**

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
4C.3.1 Locate points on a simple grid	4C.3.1.1 Match or plot the ordered pair with the appropriate point (or object) on a simple grid	SE/TE: 212A-B, 212-215, 216A-B, 216-219, 222A, 223, 224, 225, 229, 232, 234B, 238-239, 240-241, 242, 243, 245, 248-249, 252, 355, 686, 692A-B, 692-695, 698, 699, 709, 722, 724, 727, 728, 731

ASSESSMENT ANCHOR

4D.1. Demonstrate an understanding of patterns, relations and functions

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
<p>4D.1.1 Recognize, describe, extend, create and/or replicate a variety of patterns</p>	<p>4D.1.1.1 Extend or find a missing element in a numerical or geometric pattern (+, - or x may be used – numerical patterns must be whole numbers)</p>	<p>SE/TE: 8A, 10A-B, 10-11, 37, 90A-B, 90-91, 92, 93, 97, 109, 110-111, 113, 116, 120, 128A-B, 128-131, 136B, 136, 140A-B, 140-143, 256, 275, 283, 312, 314A, 314, 335, 342-343, 351, 355, 363, 366A-B, 366-367, 378, 406B, 406, 423, 449, 454, 474B, 475, 641, 677, 680</p>
	<p>4D.1.1.2 Identify/describe the rule for a numerical or geometric pattern shown (+, - or x may be used - numerical patterns must be whole numbers)</p>	<p>SE/TE: 8A, 10A-B, 10-11, 37, 90A-B, 90-91, 92, 93, 97, 109, 110-111, 113, 116, 120, 128A-B, 128-131, 136B, 136, 140A-B, 140-143, 256, 275, 283, 312, 314A, 314, 335, 342-343, 351, 355, 363, 366A-B, 366-367, 378, 406B, 406, 423, 449, 454, 474B, 475, 641, 677, 680</p>
	<p>4D.1.1.3 Create or replicate a numerical or geometric pattern showing 3 repetitions (+, - or x may be used - numerical patterns must be whole numbers or money)</p>	<p>SE/TE: 8A, 10A-B, 10-11, 37, 90A-B, 90-91, 92, 93, 97, 109, 110-111, 113, 116, 120, 128A-B, 128-131, 136B, 136, 140A-B, 140-143, 256, 275, 283, 312, 314A, 314, 335, 342-343, 351, 355, 363, 366A-B, 366-367, 378, 406B, 406, 423, 449, 454, 474B, 475, 641, 677, 680</p>

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
4D.1.2 Apply simple function rules	4D.1.2.1 Determine the missing elements in a function table given the rule (functions may use +, - or x and whole numbers or money)	SE/TE: 98B, 98-99, 105, 111, 127, 140A-B, 140-142, 164A-B, 164-165, 166A, 167, 170, 171, 172-173, 175, 177, 179, 181, 183, 185, 186-187, 303, 342-343, 346, 347, 355, 363, 423, 648B
	4D.1.2.2 Determine the rule for a function given a completed table (functions may use +, - or x and whole numbers)	SE/TE: 98B, 98-99, 105, 111, 127, 140A-B, 140-142, 164A-B, 164-165, 166A, 167, 170, 171, 172-173, 175, 177, 179, 181, 183, 185, 186-187, 303, 342-343, 346, 347, 355, 363, 423, 648B

ASSESSMENT ANCHOR

4D.2. Represent and/or analyze mathematical situations and structures using algebraic symbols, words, tables and graphs

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
4D.2.1 Use numbers and symbols to model the concepts of expressions and/or equations	4D.2.1.1 Correlate story situations with expressions or equations (may use numbers and one operation +, - or x; no variables)	SE/TE: 94A-B, 94-95, 96A-B, 96-97, 98A-B, 98-99, 100A-B, 100-101, 104, 105, 109, 110-111, 113, 117, 121, 123, 160A-B, 160-163, 166A-B, 166-167, 170, 171, 173, 175, 179, 183, 187, 191, 195, 261, 263, 281, 335, 337, 373, 383, 389, 396A-B, 396-398, 465, 469, 566, 571, 581, 690A-B, 690-691, 692A-B, 692-695, 698, 699, 722, 724-725, 727, 728, 731

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
4D.2.2 Determine the missing number or symbol in a number sentence	4D.2.2.1 Solve for a missing number in an equation (using estimation, guess & check, etc) (may use +, - or single digit x or ÷)	SE/TE: 100A-B, 100-101, 102A, 109, 111, 113, 117, 121, 131, 132A, 166A-B, 166-167, 168A, 170, 171, 175, 177, 179, 183, 187, 191, 195, 245, 303, 355, 396A-B, 396-398, 401, 423, 489, 533, 551, 727
	4D.2.2.2 Identify the missing symbol (+, -, x, ÷, =, <, >) that makes a number sentence true (single digit x or ÷ only)	SE/TE: 17-18, 21, 49, 53, 57, 193, 195, 202, 203, 371, 417, 522-523, 525-527, 528, 529, 533, 535, 537, 542, 543, 549, 554-555, 558-559, 567, 597-598, 604, 618, 631, 633, 634, 635, 659-660, 675, 678, 682, 685

4E. Data Analysis and Probability

ASSESSMENT ANCHOR

4E.1 Formulate questions that can be addressed with data and/or collect, organize, display and analyze data

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
4E.1.1 Interpret data shown on tables, charts, line graphs, bar graphs or pictographs	4E.1.1.1 Describe, interpret and/or answer questions based on data shown in tables, charts, bar graphs, line graphs or pictographs	SE/TE: 13, 188J, 189, 204A-B, 204-205, 206A-B, 206-207, 208A-B, 208-211, 212A-B, 212-215, 216A-B, 216-221, 222A-B, 222-223, 224, 225, 226A-B, 228-229, 230A-B, 230-231, 232A-B, 232-233, 235,

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
	(continued)	236, 237, 238-239, 240-241, 242-243, 245, 247-249, 251-253, 303, 337, 343, 355, 399, 401, 404B, 405, 415, 423, 536A-B, 536-537, 549, 551, 613, 663, 677, 697, 699
4E.1.2 Organize or display data using tables, bar graphs, line graphs or pictographs	4E.1.2.1 Graph data or complete a graph given the data (bar graph, line graph or pictograph – grid is provided)	SE/TE: 188J, 206A-B, 206-207, 208A-B, 209-211, 212A-B, 212-215, 216B, 217, 219, 222A-B, 222-223, 224, 225, 232B, 234B, 235, 243, 252, 303, 536A-B, 536-537, 543
	4E.1.2.2 Translate information from one type of display to another (table, chart, bar graph, line graph or pictograph)	SE/TE: 140A-B, 140-143, 188J, 206A-B, 206-207, 208A-B, 209-211, 212A-B, 212-215, 216B, 217, 219, 222A-B, 222-223, 224, 225, 230A-B, 230-231, 232B, 234B, 235, 241, 243, 252-253, 303, 536A-B, 536-537

ASSESSMENT ANCHOR

4E.2 Select and use appropriate statistical methods to analyze data

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
4E.2.1 Describe data sets using mean, median or mode	4E.2.1.1 Determine the mean of given data (data must not have more than 6 entries and the mean must be a whole number)	SE/TE: 404A-B, 404-405, 406A, 407, 414, 415, 419, 420, 423, 727

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
	4E.2.1.2 Identify the mode and/or median of given data (data must have an odd number of elements and only one mode)	SE/TE: 226A-B, 226-229, 231, 236, 237, 242, 249, 253, 489, 613, 677

ASSESSMENT ANCHOR

4E.3 Understand and apply basic concepts of probability

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
4E.3.1 Predict and/or measure the likelihood of events	4E.3.1.1 Make a prediction based on data or chance (data may be shown in tables, charts, line graphs, bar graphs or pictographs)	SE/TE: 13, 51, 113, 179, 188J, 189, 204A-B, 204-205, 206A-B, 206-207, 208A-B, 208-211, 212A-B, 212-215, 216A-B, 216-221, 222A-B, 222-223, 224, 225, 226A-B, 226-229, 230A-B, 230-231, 232A-B, 232-233, 238-239, 240-241, 242-243, 245, 247-249, 251-253, 257, 303, 337, 343, 355, 399, 401, 415, 423, 536A-B, 536-537, 551, 613, 663, 675, 677, 686J, 700A-B, 700-703, 705, 706A-B, 706-709, 710A-B, 710-711, 718, 719, 720-721, 723, 724-725, 727, 730, 732-733

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
	4E.3.1.2 Determine the likelihood of an event based on probability (more/most likely, less/least likely, equally likely or impossible)	SE/TE: 51, 113, 179, 245, 303, 355, 423, 551, 613, 677, 686J, 700A-B, 700-703, 705, 706A-B, 706-709, 710A-B, 710-71, 718, 719, 720-721, 723, 724-725, 727, 730, 732-733
4E.3.2 Find all possible combinations or arrangements involving two variables	4E.3.2.1 Show and/or determine all possible combinations involving two variables and no more than eight total arrangements (e.g., all combinations of 4 different shirts and 2 different trousers)	SE/TE: 551, 704A-B, 704-705, 709, 710B, 716A-B, 717, 718, 719, 723, 724, 732

**Scott Foresman – Addison Wesley Mathematics
to the
Pennsylvania Mathematics Assessment Anchors
Grade Five**

M5.A Numbers and Operations

ASSESSMENT ANCHOR

M5.A.1 Demonstrate an understanding of numbers, ways of representing numbers, relationships among numbers and number systems.

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
M5.A.1.1 Express numbers in equivalent forms. <i>Reference: 2.1.5.A</i>	M5.A.1.1.1 Use expanded notation to represent whole numbers or decimals (whole numbers less than 10,000,000 and decimals to hundredths).	SE/TE: 2I, 4A, 4-5, 6A, 7, 17, 21, 50, 52, 60, 190
M5.A.1.2 Demonstrate understanding of place value of whole numbers and decimals. <i>Reference: 2.1.3.I</i>	M5.A.1.2.1 Read and write decimal numbers through the thousandths.	SE/TE: 2I, 8A-B, 8-11, 12A-B, 12-13, 17, 21, 38A-B, 38-39, 40A-B, 40-41, 44A, 50, 52-53, 56, 58-59, 60, 62-63, 316, 393, 516, 582
	M5.A.1.2.2 Identify the number with its place value (from millions to thousandths).	SE/TE: 2I, 4A-B, 4-5, 6A, 7, 8A-B, 8-11, 12A-B, 12-13, 14A-B, 14-17, 20, 21, 25, 38B, 44A, 50, 52-53, 56-59, 60-63, 120, 190, 248, 316, 382, 393
M5.A.1.3 Compare quantities or magnitudes of numbers. <i>Reference: 2.11.5.A</i>	M5.A.1.3.1 Compare whole numbers through 9 digits using the words more, less, equal, least, most, greater than, less than or the symbols <, >, =.	SE/TE: 6A-B, 6-7, 11, 20, 21, 53, 56, 60
	M5.A.1.3.2 Compare and/or order decimals through the thousandths.	SE/TE: 12A-B, 12-13, 20, 21, 39, 52-53, 55, 56, 60, 87, 167, 237, 248, 430A, 430-431, 440, 441, 545, 686

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
	M5.A.1.3.3 Compare proper fractions to 16ths with like and unlike denominators.	SE/TE: 418A-B, 418-419, 420A-B, 420-423, 424, 425, 430A, 430-431, 434B, 440, 441, 445, 447, 452, 456, 459, 582, 686
M5.A.1.4 Use simple applications of negative numbers (number line, counting, temperature). Reference: 2.1.5.F	M5.A.1.4.1 Identify negative numbers on a number line (greater than or equal to -20).	SE/TE: 712A-B, 712-714, 716A-B, 716, 718A-B, 718-719, 724A-B, 724-727, 78A-B, 728-729, 732-733, 736-737, 743, 744, 746-747
	M5.A.1.4.2 Identify negative numbers on a thermometer (°C or °F).	SE/TE: 568A-B, 568-569, 574, 575, 587, 591, 712-714, 717, 719, 727, 730B, 730, 738, 741, 746
M5.A.1.5 Use or develop models to represent fractions and/or mixed numbers. Reference: 2.1.5.D	M5.A.1.5.1 Use or develop regions and/or sets (e.g., circle graph, hundred-blocks) to model fractions and mixed numbers to hundredths (may include reducing the fractions).	SE/TE: 392I-J, 394A-B, 394-397, 398A-B, 398-399, 400A-B, 400-401, 402A-B, 402-403, 404A-B, 404-405, 408, 409, 410A-B, 410-411, 412A-B, 412-413, 416B, 416, 418A, 418, 420-421, 425, 426-429, 430A-B, 430-431, 438A-B, 440, 441, 444, 446-447, 448, 450-451, 453, 454-455, 458I-J, 460A-B, 462A-B, 462, 465, 466B, 466, 472A, 472, 474B, 476A-B, 478, 490A-B, 490-491, 493, 494A, 496A-B, 496-498, 500B, 500, 502A, 503, 504, 509, 513, 518-519, 521, 525

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
M5.A.1.6 Apply number theory concepts (i.e., primes, factors, multiples, composites). Reference: 2.1.5.E	M5.A.1.6.1 Name/identify prime and composite numbers less than or equal to 100.	SE/TE: 64I, 103, 162A-B, 162-163, 164A-B, 164-167, 170, 171, 186, 188-189, 190, 194, 198, 214B, 248, 273, 305, 382, 393, 414A-B, 414-415, 416A-B, 416-417, 419, 424, 425, 426A, 437, 445, 452, 456, 464A-B, 464-465, 469, 470, 471, 501, 583, 615
	M5.A.1.6.2 List/identify factors and/or multiples of a given number less than or equal to 50.	SE/TE: 64I, 75, 103, 155, 162A-B, 162-163, 164A-B, 164-167, 170, 171, 186, 188-189, 190, 194, 198, 214B, 248, 273, 305, 382, 390, 393, 414A-B, 414-415, 416A-B, 416-417, 419, 424, 425, 426A, 437, 445, 452, 456, 464B, 464-465, 469, 470, 471, 501, 514-515, 516, 517, 518-519, 522, 583, 615, 636

ASSESSMENT ANCHOR

M5.A.2 Understand the meanings of operations, use operations and understand how they relate to each other.

<p>Pennsylvania Assessment Anchors</p>	<p>Eligible Content</p>	<p>Scott Foresman – Addison Wesley Mathematics</p>
<p>M5.A.2.1 Solve problems involving decimals, fractions and/or whole numbers (straight computation or word problems). Reference: 2.2.5.A, 2.2.5.B, 2.2.5.C, 2.2.5.I</p>	<p>M5.A.2.1.1 Solve problems involving addition, subtraction, multiplication and division of whole numbers (multipliers up to 2 digits – divisors of one digit) and decimals (answer to hundredths – whole number divisors).</p>	<p>SE/TE: 22A-B, 22-25, 34, 35, 36A-B, 36-37, 38A-B, 38-39, 40A-B, 40-41, 46, 47, 50, 52-53, 54-55, 57-59, 61-63, 64-65, 66A-B, 66-67, 68A-B, 68-69, 70A-B, 70-71, 72A-B, 72-75, 76A-B, 76-77, 82, 83, 84A-B, 84-85, 88A-B, 88-91, 92A-B, 92-93, 94A-B, 94-97, 98, 99, 103, 118-119, 122-124, 126-128, 130I-J, 130, 132A-B, 132-135, 136A-B, 136-137, 141, 146, 147, 148A-B, 148-151, 152A-B, 152-155, 156A-B, 156-157, 158A-B, 158-159, 160A-B, 160-161, 163, 168A-B, 168-169, 170, 171, 172A-B, 172-173, 179, 180A, 182-183, 186-187, 188-189, 190, 192-195, 197-199, 200, 223, 229, 230A-B, 230-231, 233, 234-235, 238A-B, 392, 502B, 702A-B, 702-703, 742, 745</p>

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
	<p>M5.A.2.1.2 Solve problems involving addition and subtraction of fractions (to 16ths – like and unlike denominators – for unlike denominators, the LCD must be one of the given denominators).</p>	<p>SE/TE: 460A-B, 460-461, 462A-B, 462-463, 464A, 465, 466A-B, 466-468, 470-471, 472A-B, 472-473, 475, 476A-B, 476-477, 478A-B, 478-481, 487, 488-489, 493, 512-513, 514-515, 516-517, 518-520, 522-523</p>
	<p>M5.A.2.1.3 Choose the correct operation(s) to solve a problem (no more than 2 operations).</p>	<p>SE/TE: 22, 24, 33, 36-37, 38-39, 40-41, 46, 47, 52-53, 54-55, 57, 61-63, 64-65, 67, 68-69, 70B, 70-71, 72, 74, 76-77, 85, 88, 90, 93, 94, 96-97, 115, 127-129, 132-135, 137, 146, 147, 148-151, 152. 154-155, 156-157, 159, 160A-B, 160-161, 163, 168A-B, 168-169, 171, 172B, 173, 179, 180B, 187, 189, 192-194, 197-199, 200, 203, 214, 216, 218, 220, 223, 225, 226A-B, 226-227, 229, 231, 232-233, 236, 238A-B, 238-239, 241, 246-247, 248, 255-257, 392, 460-461, 462-463, 471, 473, 476-477, 4748, 480, 482-483, 484A-B, 484-487, 488, 489, 490, 493, 499, 501, 502-503, 504A-B, 504-505, 506A, 510, 511, 521, 525, 700A-B, 700-701, 702A-B, 702-703, 742, 745</p>

ASSESSMENT ANCHOR

M5.A.3 Compute accurately and fluently and make reasonable estimates.

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
<p>M5.A.3.1 Apply estimation strategies to a variety of problems. Reference: 2.2.5.D, 2.2.5.E, 2.2.5.G</p>	<p>M5.A.3.1.1 Round whole numbers through millions and decimals through hundredths.</p>	<p>SE/TE: 26A-B, 26-27, 31, 34, 35, 37, 52-53, 58, 61, 68B, 68, 86B, 86, 94, 138-139, 200I, 279, 582</p>
	<p>M5.A.3.1.2 Use estimation to solve problems involving whole numbers and/or decimals (up to 2-digit multipliers, single-digit divisors or multiples of 10; whole numbers to thousands and decimals to hundredths.).</p>	<p>SE/TE: 26A-B, 26-27, 28A-B, 28-31, 34, 35, 47, 52-53, 54, 58-59, 61-62, 64I, 68A-B, 68-69, 71, 75, 82, 83, 86A-B, 86-87, 88, 91, 93, 94, 98, 99, 118-119, 120, 124, 127, 130I-J, 138A-B, 138-141, 146, 147, 154, 180B, 188, 189, 190, 192-194, 196, 200I, 201, 204A-B, 204-207, 212, 213, 214A-B, 214-215, 218A-B, 221, 225, 233, 236, 247, 250-252, 254, 279, 287, 290-291, 335, 402A-B, 402-403, 405, 408, 409, 446, 450, 454, 494A-B, 494-495, 499, 511, 513, 514-515, 516, 520, 524, 582, 624A-B, 624-625, 628, 633, 635, 640, 643, 698, 703</p>

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
<p>M5.A.3.2 Compute accurately without the use of a calculator (straight computation or 1 operation word problems). 2.2.5.A</p>	<p>M5.A.3.2.1 Use addition, subtraction, multiplication and division to compute accurately without a calculator (multipliers up to 2 digits, single-digit whole number divisors or multiples of 10 – whole numbers to thousands and decimals to hundredths).</p>	<p>SE/TE: 22A-B, 22-25, 34, 35, 36A-B, 36-37, 38A-B, 38-39, 40A-B, 40-41, 46, 47, 50, 52-53, 54-55, 57-59, 61-63, 64-65, 66A-B, 66-67, 68A-B, 68-69, 70A-B, 70-71, 72A-B, 72-75, 76A-B, 76-77, 82, 83, 84A-B, 84-85, 88A-B, 88-91, 92A-B, 92-93, 94A-B, 94-97, 98, 99, 103, 118-119, 122-124, 126-128, 130I-J, 130, 132A-B, 132-135, 136A-B, 136-137, 141, 146, 147, 148A-B, 148-151, 152A-B, 152-155, 156A-B, 156-157, 158A-B, 158-159, 160A-B, 160-161, 163, 168A-B, 168-169, 170, 171, 172A-B, 172-173, 179, 180A, 182-183, 186-187, 188-189, 190, 192-195, 197-199, 200, 202A-B, 202-203, 223, 229, 230A-B, 230-231, 233, 234A-B, 234-235, 237, 238A-B, 392, 502B, 702A-B, 702-703, 742, 745</p>

M5.B Measurement

ASSESSMENT ANCHOR

M5.B.1 Demonstrate an understanding of measurable attributes of objects and figures, and the units, systems and processes of measurement.

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
<p>M5.B.1.1 Select appropriate units (customary or metric) to measure specific attributes of objects. <i>Reference: 2.3.5.A</i></p>	<p>M5.B.1.1.1 Select the appropriate unit for measuring weight (mass), capacity, length, perimeter and area.</p>	<p>SE/TE: 27, 49, 62, 211, 213, 248, 316, 526I-J, 526, 528A-B, 528-531, 532A-B, 532-533, 534A-B, 534-535, 536A-B, 536-539, 540A-B, 540-541, 542A-B, 542-545, 546, 547, 548A-B, 548-549, 550B, 550-551, 552A-B, 552-553, 554A-B, 554-555, 558B, 558-559, 560, 561, 563, 572B, 576-577, 578-579, 580-581, 582, 584-586, 588-590, 593, 597, 602A-B, 602-603, 614A-B, 614-615, 616A-B, 616-617, 618, 619, 620A-B, 620-621, 622A-B, 622-623, 625, 626A-B, 626-627, 628, 629, 630-631, 632-633, 636, 638-640, 641-643, 686</p>
<p>M5.B.1.2 Solve problems using simple conversions and/or add and subtract measurements. <i>Reference: 2.3.5.D, 2.3.5.E</i></p>	<p>M5.B.1.2.1 Convert using linear measurements, capacity, and weight (mass) within the same system to the unit immediately above or below the given unit (using only the units below).</p> <ul style="list-style-type: none"> ▪ Metric using mm, cm, m and km; mL and L; g and kg ▪ Customary using cup, pint, quart, gallon; in, ft, yd; oz, lb 	<p>SE/TE: 54, 71, 76B, 97, 120, 155, 190, 221, 248, 526I-J, 526A-B, 526-529, 533, 534B, 534-535, 536A-B, 536-539, 541, 546, 547, 563, 577, 578, 580, 582, 584, 588, 614A-B, 614-615, 616A-B, 616-617, 618, 619, 620A-B, 620-621, 622A-B, 622-623, 626B, 628, 629, 639-640, 642-643, 674, 686</p>

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
	M5.B.1.2.2 Add or subtract linear measurements, (inches and feet) or units of time (hours and minutes), without having to regroup with subtraction (answer should be in simplest form).	SE/TE: 529-530, 540A-B, 540-541, 545, 546, 547, 563, 564A-B, 564-567, 569, 570B, 570, 572A-B, 575, 577, 578-579, 580-581, 582-583, 584-585, 587, 589, 591
M5.B.1.3 Estimate and/or compare the perimeters or areas of 2 figures without computation. Reference: 2.11.5.E, 2.3.5.C	M5.B.1.3.1 Estimate which polygon (shown) has a greater perimeter or area (do not mix perimeter with area).	SE/TE: 526J, 541, 558A-B, 558-559, 560, 561, 572A-B
	M5.B.1.3.2 Estimate and/or compare the area of an irregular figure(s) shown on a grid.	SE/TE: 526I-J, 548A-B, 548-549, 551, 552A-B, 552, 554A-B, 554, 558A-B, 558, 560, 561, 572A, 585, 589

ASSESSMENT ANCHOR

M5.B.2 Apply appropriate techniques, tools and formulas to determine measurements.

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
M5.B.2.1 Use appropriate tools to determine measurements. Reference: 2.3.5.B	M5.B.2.1.1 Use a ruler to measure to the nearest 1/8 inch or millimeter.	SE/TE: 532A-B, 532-533, 534A-B, 534-535, 542A-B, 542, 546, 547, 580, 584, 588

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
M5.B.2.2 Solve problems involving length, time, weight, mass, capacity, temperature, perimeter, area and/or money. Reference: 2.3.5.A, 2.3.5.B	M5.B.2.2.1 Find the perimeter or area of a square or rectangle (same system of measurement – whole numbers only).	SE/TE: 211, 213, 248, 316, 526I-J, 540A-B, 540-541, 545, 546, 547, 549, 550A-B, 550-551, 552B, 554A, 572A-B, 576-577, 581, 583, 597
	M5.B.2.2.2 Solve problems involving weight, time, temperature, length, capacity, mass (limited to 3 digits) or money.	SE/TE: 26B, 86A-B, 86-87, 110A-B, 110-111, 160A-B, 160-161, 170, 171, 188-189, 190-191, 193-194, 197-198, 232A-B, 232-233, 237, 240, 241, 246-247, 248, 250, 253, 256, 257, 526, 528A-B, 528-531, 532A-B, 532-533, 534A-B, 534-535, 536A-B, 536-539, 546, 547, 562A-B, 562-563, 564A-B, 564-567, 568A-B, 568-569, 570A-B, 570-571, 572A-B, 572-573, 574, 575, 576-577, 578-579, 580-581, 582, 584, 587, 588, 591, 614A-B, 614-615, 616A-B, 616-617, 618, 619, 620A-B, 620-621, 622A-B, 622-623, 625, 626A-B, 626-627, 628, 629, 630-631, 633, 635, 636, 639-640, 642-643, 670A, 672B, 673-674, 678, 684, 699, 701, 704, 707, 709, 710, 711, 713-714, 717, 719, 722, 723

M5.C Geometry

ASSESSMENT ANCHOR

M5.C.1 Analyze characteristics and properties of two- and three- dimensional geometric shapes and demonstrate understanding of geometric relationships.

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
<p>M5.C.1.1 Define and/or use basic properties of quadrilaterals (parallelograms, squares, rectangles, trapezoids, rhombi), triangles, circles, pyramids, cubes, and/or prisms. <i>Reference: 2.9.5.B, 2.9.5.C, 2.9.5.F, 2.10.5.A</i></p>	<p>M5.C.1.1.1 Identify/classify/compare cubes, rectangular prisms and pyramids using faces, vertices and edges.</p>	<p>SE/TE: 120, 594A-B, 594-597, 598A-B, 598-601, 602A-B, 602-603, 606A-B, 605, 607, 608-609, 610A-B, 610-613, 615, 618, 619, 629, 632-633, 634, 635, 636, 638-639, 641-642, 686</p>
	<p>M5.C.1.1.2 Identify/classify/compare triangles and quadrilaterals according to sides (length, parallel or perpendicular) and angles.</p>	<p>SE/TE: 80A, 120, 190, 210B, 210-211, 213, 248, 316, 326I-J, 326-327, 338, 339, 340A-B, 340-341, 342A-B, 342-345, 346A-B, 346-349, 351, 352A-B, 352-355, 356B, 356-357, 358, 359, 360A-B, 360-363, 367, 368A-B, 368-371, 372A-B, 372-373, 374, 375, 376-377, 378-379, 380-381, 382, 385-387, 389-391, 448, 516, 540A-B, 540-541, 547, 550A-B, 550-551, 552A-B, 552-553, 554A-B, 554-555, 558A-B, 558-559, 560, 561, 571, 572A-B, 576-577, 578-579, 580-581, 582, 585-586, 588-590, 592-593, 597, 606, 609, 625, 647, 686, 689, 709, 721, 740</p>

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
	M5.C.1.1.3 Identify and/or compare parts of right triangles, including right angles, acute angles, hypotenuse and legs.	SE/TE: 332A-B, 332-335, 342A-B, 342-345, 349, 352B, 357, 358, 359, 361, 364A, 365, 373, 374, 375, 376-377, 381, 385, 389, 430A, 448, 516, 581, 740
	M5.C.1.1.4 Identify and/or determine the measure of the diameter and radii of a circle (when one or the other is given).	SE/TE: 336A-B, 336-337, 338, 339, 362, 367, 378, 380, 384, 386, 542A-B, 542-545, 547, 549, 559, 578, 580, 585, 589
M5.C.1.2 Represent and/or use properties of lines, line segments, rays, points and planes. Reference: 2.9.5.I	M5.C.1.2.1 Identify, draw and/or label points, lines, line segments, rays and planes.	SE/TE: 120, 316, 326, 328A-B, 328-331, 332A-B, 332-335, 337, 338, 339, 34A, 349, 355, 357, 363, 367, 371, 378, 380, 381, 382, 384, 388, 516, 555

ASSESSMENT ANCHOR

M5.C.2 Identify and/or apply concepts of transformations or symmetry.

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
M5.C.2.1 Analyze transformations and/or use symmetry to analyze mathematical situations. Reference: 2.9.5.K, 2.9.5.L	M5.C.2.1.1 Draw or identify a translation (slide), reflection (flip) or rotation (turn) of a 2-dimensional shape.	SE/TE: 327, 364A-B, 364-367, 374, 375, 379, 381, 382, 387, 391, 397, 399, 516, 740
	M5.C.2.1.2 Draw or identify a maximum of 2 lines of symmetry in a two-dimensional figure.	SE/TE: 190, 327, 368A-B, 368-371, 372, 374, 375, 379, 381, 387, 391

ASSESSMENT ANCHOR

M5.C.3 Locate points or describe relationships using the coordinate plane.

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
<p>M5.C.3.1 Identify, plot, or match points given an ordered pair. <i>Reference: 2.8.5.H</i></p>	<p>M5.C.3.1.1 Locate, plot and/or identify points in Quadrant I and on the x and y axes of a grid (intervals of 1 - up to 20 by 20 grid).</p>	<p>SE/TE: 55, 174A-B, 174-175, 176A-B, 177-179, 182, 183, 185, 188, 191, 195, 199, 203, 258, 651, 652A-B, 652-653, 656, 657, 682, 684, 695, 724A-B, 724-727, 728A-B, 728-729, 732, 733, 734-735, 737, 739, 741, 744, 747</p>

M5.D Algebraic Concepts

ASSESSMENT ANCHOR

M5.D.1 Demonstrate an understanding of patterns, relations and functions.

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
<p>M5.D.1.1 Create or extend patterns. <i>Reference: 2.8.5.A</i></p>	<p>M5.D.1.1.1 Extend or find a missing element in a numerical or simple geometric pattern (pattern must show 3 repetitions).</p>	<p>SE/TE: 14A-B, 14-17, 20, 21, 55, 66A-B, 66-67, 69, 84A-B, 84-85, 94A-B, 95, 98, 106A-B, 106-107, 121, 126, 136A-B, 136-137, 141, 142-143, 144A-B, 144-145, 146, 147, 151, 157, 179, 187, 189, 192, 196, 201, 202, 230, 237, 238A, 241, 243, 317, 350, 352A-B, 353-355, 356B, 367, 449, 492, 545, 583, 604, 609, 635, 637, 639, 645, 655, 683, 687, 688-689, 691, 720A-B, 720-721, 722, 723, 727</p>

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
	M5.D.1.1.2 Create a numerical or geometric pattern showing 3 repetitions of that pattern.	SE/TE: 14A-B, 14-17, 20, 21, 55, 66A-B, 66-67, 69, 84A-B, 84-85, 94A-B, 95, 98, 106A-B, 106-107, 121, 126, 136A-B, 136-137, 141, 142-143, 144A-B, 144-145, 146, 147, 151, 157, 179, 187, 189, 192, 196, 201, 202, 230, 237, 238A, 241, 243, 317, 350, 352A-B, 353-355, 356B, 367, 449, 492, 545, 583, 604, 609, 635, 637, 639, 645, 655, 683, 687, 688-689, 691, 720A-B, 720-721, 722, 723, 727
M5.D.1.2 Analyze patterns. <i>Reference: 2.8.5.C</i>	M5.D.1.2.1 Form a rule based on a given pattern, or illustrate a pattern based on a given rule (whole numbers up to 100 - patterns must show 3 repetitions).	SE/TE: 14A-B, 14-17, 55, 94A-B, 98, 106A, 106-107, 125, 136A-B, 136-137, 141, 142-143, 144A-B, 144-145, 146, 179, 187, 189, 192, 230, 238A, 241, 243, 350, 352A-B, 353-355, 356B, 492, 545, 645, 652A-B, 652-653, 655, 656, 657, 667, 681, 683, 684, 687, 688-689, 691, 694J, 720A-B, 720-721, 722, 723, 727, 728A-B, 728-729, 737

ASSESSMENT ANCHOR

M5.D.2 Represent and/or analyze mathematical situations using numbers, symbols, words, tables and/or graphs.

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
<p>M5.D.2.1 Select and/or use appropriate strategies, including concrete materials, to solve number sentences. Reference: 2.8.5.F, 2.8.5.G</p>	<p>M5.D.2.1.1 Solve for a missing number (blank, question mark, variable) in an equation involving a single operation.</p>	<p>SE/TE: 71, 87, 97, 108A-B, 108-109, 112, 113, 117, 119, 121, 125, 129, 133-135, 137, 191, 207, 230-231, 249, 317, 337, 383, 401, 419, 449, 475, 484A-B, 484-486, 505, 513, 540B, 540, 637, 687, 694I-J, 695, 696B, 696-698, 700A-B, 700-701, 702A-B, 702-703, 704-705, 706A-B, 706-709, 710, 711, 728A-B, 728-729, 732, 733, 736-737, 738-739, 741, 742-744, 745, 747</p>
	<p>M5.D.2.1.2 Choose the operation needed to solve for the variable in a one-step equation.</p>	<p>SE/TE: 484A-B, 484-486, 505, 513, 694I-J, 695, 696B, 696-698, 700A-B, 700-701, 702A-B, 702-703, 704-705, 706A-B, 706-709, 710, 711, 736-737, 738-739, 741, 742-743, 745</p>
	<p>M5.D.2.1.3 Match a realistic situation to an equation, expression, inequality (<, >, =), table or graph (variable must be isolated, e.g., $17 + 39 = n$).</p>	<p>SE/TE: 7, 11, 13, 16, 18A-B, 18-19, 21, 24-25, 27, 28B, 28, 30, 32B, 33, 35, 37, 39, 42B, 43, 44-45, 47, 49, 51, 55, 69, 70B, 71, 74-75, 77, 78-79, 80B, 90, 96, 100, 104B, 106A-B, 106-107, 109, 110B, 110-111, 112, 113, 115, 118-119, 129, 135, 140, 143, 151, 154, 158B, 162B, 169, 176B, 176, 180-181, 182, 183, 191,</p>

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
	(continued)	195, 199, 203, 214B, 216, 223, 226B, 226-227, 229, 230B, 232B, 233, 236, 238-239, 247, 249, 256, 259, 262A-B, 262-265, 266A-B, 266-269, 270A-B, 270-273, 274-275, 276A-B, 276-279, 280, 281, 282A-B, 282-285, 286A-B, 286-287, 288A-B, 288-291, 292A-B, 292-293, 294, 295, 296A-B, 296-299, 307, 311, 317, 372-373, 383, 405, 406B, 407, 409, 417, 419, 425, 432-433, 434B, 434-437, 438B, 438-439, 440, 441, 442, 447, 449, 453, 457, 469, 482-483, 484A-B, 484-487, 504B, 505, 506-507, 510-511, 513, 539, 557, 564A-B, 564-567, 568A-B, 572B, 572-573, 620B, 621, 623, 626B, 626, 629, 637, 644I, 647, 648A, 652A-B, 652-653, 654A, 655, 657, 658-659, 660A-B, 660-661, 662, 664A-B, 664-665, 666, 667, 672B, 676B, 676-677, 679, 680-681, 687, 691-693, 703, 708, 722, 723, 730-731, 734-735, 741

ASSESSMENT ANCHOR**M5.D.3 Analyze change in various contexts.**

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
5.D.3.1 Describe the relationship between rate of change and another variable (e.g., time, temperature). <i>Reference: 2.11.5.D</i>	M5.D.3.1.1 Solve problems involving a constant rate of change (e.g., word problems, graphs or data tables).	SE/TE: 44, 51, 90, 107, 154, 158B, 180-181, 201, 216, 221, 225, 238A-B, 238-239, 243, 292A, 292-293, 438-439, 636, 654A-B, 654-655, 656, 658-659, 689, 692, 710, 711, 747

ASSESSMENT ANCHOR

M5.E.1 Formulate or answer questions that can be addressed with data and/or organize, display, interpret or analyze data.

<p align="center">Pennsylvania Assessment Anchors</p>	<p align="center">Eligible Content</p>	<p align="center">Scott Foresman – Addison Wesley Mathematics</p>
<p>M5.E.1.1 Organize, display and/or interpret data using pictographs, tallies, tables, charts, line, bar and circle graphs and Venn diagrams. <i>Reference: 2.6.5.A, 2.6.5.C</i></p>	<p>M5.E.1.1.1 Display and/or interpret data shown in tallies, tables, charts, pictographs, bar graphs, line graphs and circle graphs using a title, appropriate scale, and labels.</p> <ul style="list-style-type: none"> ▪ Circle graphs for open-ended items must show a center point and tic marks (circle graph data must be based on 100 – percents are given). ▪ Venn diagram – <i>interpret</i> data with a maximum of 3 overlapping categories. ▪ Venn diagram – <i>display</i> data with a maximum of 10 elements and 2 overlapping categories (diagram of circles provided for open-ended items). ▪ A grid will be provided to display data on bar graphs or line graphs. 	<p>SE/TE: 11, 70B, 260A-B, 260-261, 262A-B, 262-265, 266A-B, 266-269, 270A-B, 270-273, 274-275, 276A-B, 276-279, 280, 281, 282A-B, 282-285, 286A-B, 286-287, 288A-B, 288-291, 292A-B, 292-293, 294, 295, 297, 305, 306A-B, 312-313, 314-315, 318-321, 322-325, 383, 403, 428, 448, 466, 493, 503, 517, 538, 551, 583, 731</p>

ASSESSMENT ANCHOR**M5.E.2 Select and/or use appropriate statistical methods to analyze data.**

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
M5.E.2.1 Describe data sets using mean, median, mode and/or range. <i>Reference: 2.6.5.B</i>	M5.E.2.1.1 Determine the mean/average (answer is a whole number), median (answer is a whole number or average of 2 numbers) and range of data (up to 10 numbers).	SE/TE: 271-273, 279, 282A-B, 282-285, 287, 289-290, 294, 295, 311, 312, 317, 319, 323, 383, 449, 517, 637, 687, 741
	M5.E.2.1.2 Identify the mode in a set of data (up to 10 numbers).	SE/TE: 277, 282A-B, 282-285, 289, 294, 295, 312, 319, 323, 383, 741

ASSESSMENT ANCHOR**M5.E.3 Understand and/or apply basic concepts of probability or outcomes.**

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
M5.E.3.1 Predict or determine all possible combinations, outcomes and/or calculate the probability of a simple event. <i>Reference: 2.7.5.E, 2.7.5.H, 2.7.5.J</i>	M5.E.3.1.1 Predict or determine why some outcomes are certain, more likely, less likely, equally likely, or impossible (information should be represented by pictographs, circle graphs, bar graphs, charts and/or tables).	SE/TE: 16, 32B, 55, 76B, 80B, 121, 191, 208-209, 210A-B, 210-211, 249, 258J, 262A, 266A-B, 266-269, 291, 296A-B, 296-299, 301, 302A-B, 302-305, 308, 309, 311, 313, 314, 315, 321, 325, 331, 383, 517, 637, 664B, 664-665, 669, 690, 693
	M5.E.3.1.2 Determine the probability of an outcome (e.g., a coin toss, a roll of a number cube) and express as a fraction without reduction.	SE/TE: 121, 191, 249, 296A-B, 296-299, 301, 302A-B, 302-305, 308, 309, 313, 314, 321, 325, 331, 383, 517, 637

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
	M5.E.3.1.3 Find all possible combinations using a maximum of 18 total arrangements.	SE/TE: 121, 296A-B, 296-299, 300A-B, 300-301, 302B, 302-303, 305, 308, 309, 310, 317, 321, 325, 449, 687

**Scott Foresman – Addison Wesley Mathematics
to the
Pennsylvania Mathematics Assessment Anchors
Grade Six**

6A. Numbers and Operations

ASSESSMENT ANCHOR

6A.1 Demonstrate an understanding of numbers, ways of representing numbers, relationships among numbers, and number systems

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
6A.1.1 Express numbers in equivalent forms	6A.1.1.1 Represent common percents as fractions and/or decimals (e.g., 25% = $\frac{1}{4}$ = .25) – common percents are 1%, 10%, 25%, 50%, 75%, 100%	SE/TE: 352I-J, 354A-B, 354-357, 358A-B, 358-361, 362A, 364, 365, 366A-B, 366-367, 368A-B, 368-369, 370A-B, 370-371, 377, 380B, 380-381, 384A-B, 384, 386B, 386, 394-395, 396-397, 399, 400-402, 403, 530
	6A.1.1.2 Convert between fractions and decimals and differentiate between a terminating decimal and a repeating decimal	SE/TE: 76A-B, 76-77, 79, 84, 85, 86B, 132, 136, 140J, 167, 172A-B, 172-175, 179, 184, 185, 186-187, 188, 190, 197, 201, 205, 209, 238, 251, 269, 352, 358A-B, 358-361, 364, 365, 394, 397, 400, 403, 483
	6A.1.1.3 Represent a number in exponential form (e.g., $10 \times 10 \times 10 = 10^3$)	SE/TE: 8A-B, 8-11, 13, 15, 17, 19, 22, 23, 27, 60, 62-63, 64, 66, 70, 106A-B, 106-109, 110A-B, 110-111, 113, 122, 123, 125, 127, 129, 130, 134-135, 138-139, 140, 147-148, 151, 153, 158-159, 188, 190, 269, 271, 385, 511, 530

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
6A.1.2 Compare quantities and/or magnitudes of numbers	6A.1.2.1 Compare and/or order integers (no more than 5 numbers in a set to be ordered)	SE/TE: 406I, 410A-B, 410-411, 412A-B, 412-413, 416, 417, 421, 425, 437, 456, 458, 459, 460, 462, 466, 618, 696
	6A.1.2.2 Compare and/or order whole numbers, mixed numbers, fractions or decimals (do not mix fractions and decimals – decimals through the thousandths)	SE/TE: 3, 12A-B, 12-13, 14A, 14-15, 22, 23, 58, 62, 64, 66, 70, 74, 78A-B, 78-79, 81, 84, 85, 126, 128, 132, 136, 141, 176A-B, 176-179, 184, 185, 191, 192, 197, 201, 361, 412A-B, 412-413, 416, 417, 421, 425, 437, 456, 458, 459, 460, 462, 466, 501, 608, 618, 696
6A.1.3 Use or develop models to represent percents	6A.1.3.1 Select, use or develop regions and/or sets (e.g., circle graph, hundred-blocks) to model percents to 100%	SE/TE: 352I-J, 354A-B, 354-357, 358A-B, 358-361, 362A, 364, 365, 366A-B, 366-367, 368-369, 370, 380B, 384B, 394, 397, 400, 403-404
6A.1.4 Apply number theory concepts (i.e., factors, multiples)	6A.1.4.1 Find the Greatest Common Factor (GCF) of two numbers (through 50)	SE/TE: 140I, 142A-B, 142-145, 146A-B, 146-149, 150A-B, 150-151, 153, 158, 159, 165-166, 190-191, 192, 194, 198, 255, 286, 317, 344, 487, 530
	6A.1.4.2 Find the Least Common Multiple (LCM) of two numbers (through 50)	SE/TE: 130, 142A-B, 142-145, 146A-B, 146-149, 151, 152A-B, 152-153, 158, 159, 163, 190-191, 195, 199, 202, 259, 290, 317, 344, 686

ASSESSMENT ANCHOR**6A.2. Understand meanings of operations, use operations and understand how they relate to each other**

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
6A.2.1 Select and/or use operations to simplify or solve problems	6A.2.1.1 Simplify numerical expressions (whole numbers) using order of operations including grouping symbols (only one set of parentheses – no exponents)	SE/TE: 24A-B, 24-27, 29, 35, 38, 39, 51, 60, 62, 63, 65, 67, 71, 223
6A.2.2 Use ratios to solve problems involving rates	6A.2.2.1 Calculate unit rates and unit prices (terminating decimals to the hundredth place only)	SE/TE: 141, 299, 306A-B, 306-309, 314, 315, 319-320, 336, 340, 342-343, 348, 371
	6A.2.2.2 Select the ‘better deal’ by finding and comparing the unit prices (terminating decimals to the hundredth place only)	SE/TE: 306A-B, 306-309, 315, 348

ASSESSMENT ANCHOR**6A.3. Compute accurately and fluently and make reasonable estimates**

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
6A.3.1 Apply estimation strategies to a variety of problems	6A.3.1.1 Use estimation to solve problems involving whole numbers and decimals (up to 2-digit divisors and 4 operations)	SE/TE: 3, 16A-B, 16-17, 18A-B, 18-19, 21, 22, 23, 62-63, 64-65, 67, 71, 75, 77, 82A-B, 82-83, 84, 85, 87, 89, 128-129, 130, 132-134, 137, 216A-B, 216-

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
	(continued)	217, 219, 223, 225, 226A-B, 226-227, 230, 231, 235, 236-237, 241, 244, 256A-B, 256-257, 259, 260, 288, 290, 292, 295, 319, 357, 368A-B, 368-369, 371, 378, 381, 393, 394, 396, 398, 404
6A.3.2 Solve problems with and without use of a calculator	6A.3.2.1 Solve problems involving operations (+, -, x, ÷) with whole numbers, decimals (through thousandths) and fractions (to 16 th) - straight computation and word problems	Sample references: SE/TE: 7, 8A-B, 8-11, 13, 15, 17, 24A-B, 24-27, 28A-B, 28-29, 30A-B, 30-31, 32A-B, 32-35, 38, 39, 43, 51, 59, 60, 62-63, 65, 67, 71, 74I-J, 86A-B, 86-89, 90A-B, 90-93, 94A-B, 94-97, 98A-B, 98-99, 100A-B, 100-103, 104, 105, 106A-B, 106-109, 111, 112A, 119, 122, 123, 128-129, 130, 133, 140-141, 142B, 145, 151, 153, 173, 180A-B, 180-181, 202I-J, 203, 204A-B, 204-205, 206A-B, 206-209, 213, 214, 215, 217, 218A-B, 218-219, 220A-B, 220-223, 224A-B, 224-225, 230, 231, 234-235, 236-237, 240-242, 243-245, 248A-B, 248-251, 252A-B, 252-255, 258A-B, 258-259, 260, 261, 266A-B, 266-269, 270A-B, 270-271, 272, 273, 276, 288-

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
		289, 290, 292-294, 295-297, 301, 323, 344, 353, 357, 367, 374B, 374, 380-381, 384, 386, 394-395, 398, 401-402, 406-407, 414A-B, 414-415, 425, 460, 470, 530, 545, 549, 590-591, 595, 604-605, 619, 625, 657, 663, 664, 672, 682-683, 686, 706, 730-731, 734

6B. Measurement

ASSESSMENT ANCHOR

6B.1. Demonstrate an understanding of measurable attributes of objects and figures, and the units, systems and processes of measurement

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
6B.1.1 Compare and/or determine elapsed time	6B.1.1.1 Determine and/or compare elapsed time to the minute (e.g., 11:46AM to 2:18PM = 2 hours 32 minutes)	SE/TE: 192, 238, 344, 554A-B, 554-557, 558-559, 562, 563, 567, 605, 606-607, 608, 611, 615

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
6B.1.2 Solve problems using simple conversions	6B.1.2.1 Convert using linear measurements, capacity, and weight (mass) within the same system to the unit immediately above or below the given unit using combined units (e.g., 28in = 2ft 4 in or 3 lbs 7 oz = 55oz) – Use only the units below cup, pint, quart, gallon in, ft, yd, oz, lb	SE/TE: 35, 64, 398, 542A-B, 542-545, 546A-B, 546-549, 551, 552A-B, 552-553, 557, 562, 563, 604, 606-607, 610, 614

ASSESSMENT ANCHOR

6B.2. Apply appropriate techniques, tools and formulas to determine measurements

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
6B.2.1 Choose or use appropriate tools and/or units to determine measurements within the same system	6B.2.1.1 Use a ruler to measure to the nearest 1/16 inch or millimeter	SE/TE: 471, 501, 542A, 546A, 550A-B, 550-551, 562, 563, 576A-B, 610, 614
	6B.2.1.2 Choose the more precise measurement of a given object (e.g., smaller units of measure are more precise- for metric use only mm, cm, m, km)	SE/TE: 542A-B, 542-545, 546A-B, 546-549, 550A-B, 550-551, 552A-B, 552-553, 562, 563, 583, 598-599, 604, 607, 610, 614
6B.2.2 Solve problems involving length, perimeter, area and/or volume of geometric figures	6B.2.2.1 Find the perimeter of any polygon (include regular polygons where only the measure of one side is given – same units of measurement)	SE/TE: 128, 130, 192, 238, 290, 333, 398, 470, 540I, 564A-B, 564-567, 570A-B, 570-571, 582A-B, 584, 585, 603, 604, 606-607, 611-613, 615-616, 704, 724B, 733, 734

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
	6B.2.2.2 Find the area of a square, rectangle or triangle (same units of measurement – formula must be provided on the reference sheet)	SE/TE: 130, 238, 290, 299, 344, 541, 568A-B, 568-569, 570A-B, 570-571, 572A-B, 572-575, 579, 582A-B, 584, 585, 590A-B, 590-593, 603, 604, 608-609, 611-613, 615-616, 673, 686, 724B
	6B.2.2.3 Find the volume of a cube or rectangular prism (same units of measurement – formula provided)	SE/TE: 594A-B, 594-597, 598B, 600, 601, 602, 605, 606-607, 617
6B.2.3 Identify, label, and/or list properties of angles	6B.2.3.1 Define, label and/or identify right, straight, acute and obtuse angles	SE/TE: 64, 238, 460, 470I, 476A-B, 476-479, 482-483, 492, 493, 496A-B, 496-499, 504, 505, 528-529, 532, 536-537, 551

6C. Geometry

ASSESSMENT ANCHOR

6C.1 Analyze characteristics and properties of two- and three- dimensional geometric shapes and demonstrate understanding of geometric relationships

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
6C.1.1 Define and/or use basic properties of triangles, quadrilaterals, pentagons, hexagons, heptagons, octagons, nonagons, decagons and circles	6C.1.1.1 Identify diameter, radius, chord and/or circumference in circles	SE/TE: 192, 344, 460, 502A-B, 502-503, 504, 505, 534, 538, 576A-B, 576-579, 580A-B, 580-581, 607, 608, 612, 616, 623, 686

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
	6C.1.1.2 Solve problems involving the relationship between the radius and diameter of the same circle	SE/TE: 502A-B, 534, 538, 577, 580B, 616
	6C.1.1.3 Identify a polygon and/or whether it is regular (measurements or tic and angle marks must be provided - polygons triangle through decagon)	SE/TE: 64, 130, 142B, 146A, 146, 192, 238, 290, 299, 333, 460, 470J, 470, 490B, 494A-B, 494-495, 496A-B, 496-499, 500A-B, 500-501, 504, 505, 506A-B, 506-509, 511, 512A-B, 512-513, 514A-B, 514-515, 516A-B, 516-519, 520A-B, 520-521, 522-523, 524-525, 526-527, 528-529, 530-531, 533-535, 537-539, 541, 564A-B, 564-567, 568A-B, 568-569, 570A-B, 570-571, 572A-B, 572-575, 579, 584, 585, 603, 606, 611-613, 615-616, 641, 663, 686, 707, 714, 717, 724B, 734
	6C.1.1.4 Identify and/or use the total number of degrees in a triangle, quadrilateral and/or circle.	SE/TE: 496-498, 500-501, 502-503, 504, 505, 507, 522, 526, 528, 530, 533, 537, 734
	6C.1.1.5 Identify polygons that are similar and/or congruent, given either measurements or tic and angle marks	SE/TE: 130, 506A-B, 506-509, 511, 522, 523, 526, 528-529, 531, 534, 538

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
6C.1.2 Represent and/or use concepts and relationships of lines and line segments	6C.1.2.1 Identify, describe and/or label parallel, perpendicular or intersecting lines	SE/TE: 453, 471, 472A-B, 472-475, 483, 486-487, 492, 493, 502A, 526-527, 528-529, 530, 532-533, 536

ASSESSMENT ANCHOR

6C.3. Locate and describe relationships using the coordinate plane

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
6C.3.1 Identify points or match points to an ordered pair	6C.3.1.1 Plot, locate or identify points in Quadrant I and/or on the x and y axes with intervals of 1, 2, 5 or 10 units - up to a 200 by 200 grid. Points may be in-between lines.	SE/TE: 440A-B, 440-443, 444A, 447, 448A-B, 448-449, 450A, 452, 453, 454-455, 457, 458-459, 465, 469, 471, 510-511, 512, 524-525, 529, 530, 697, 718A-B, 718-721, 724B, 727, 728-729, 730, 732, 738, 741

6D. Algebraic Concepts

ASSESSMENT ANCHOR

6D.1. Demonstrate an understanding of patterns, relations and functions

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
6D.1.1 Create or extend patterns	6D.1.1.1 Create, extend or find a missing element in a pattern displayed in a table, chart or graph (pattern must show at least 3 repetitions)	SE/TE: 51, 96, 100, 142B, 163, 193, 195, 210-211, 212A-B, 212-213, 214, 215, 217, 223, 232-233, 234, 236-237, 238-239, 240, 243, 267, 274B,

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
	(continued)	298I-J, 328B, 338-339, 372, 375, 399, 418B, 444A-B, 444-447, 452, 453, 454-455, 490-491, 513, 520B, 539, 568B, 576, 696I, 716A-B, 716-717, 733
6D.1.2 Analyze patterns	6D.1.2.1 Determine a rule based on a pattern or illustrate a pattern based on a given rule (displayed on an input/output table, chart or graph; pattern must show at least 3 repetitions – no variables)	SE/TE: 51, 96, 100, 142B, 163, 193, 195, 210-211, 212A-B, 212-213, 214, 215, 217, 223, 232-233, 234, 236-237, 238-239, 240, 243, 267, 274B, 298I-J, 328B, 338-339, 372, 375, 399, 418B, 444A-B, 444-447, 452, 453, 454-455, 490-491, 513, 520B, 539, 568B, 576, 696I, 716A-B, 716-717, 733

ASSESSMENT ANCHOR

6D.2. Represent and/or analyze mathematical situations and structures using algebraic symbols, words, tables, and graphs

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
6D.2.1 Select and/or use appropriate strategies to solve number sentences	6D.2.1.1 Use substitution of one and/or two variables to simplify expressions (whole numbers only – use order of operations – no exponents or coefficients)	SE/TE: 40A-B, 40-43, 40-43, 44A-B, 44-47, 48A-B, 48-51, 56, 57, 61, 62-63, 64-65, 69, 73, 75, 81, 83, 89, 93, 112A-B, 112-113, 116A-B, 116-119, 122, 123, 127, 131, 139, 193, 217, 225, 239, 243, 247, 251, 274A-B, 274-275, 276A-B, 276-277, 282, 283, 287, 288-289, 290-291, 294, 297, 299, 301, 319-320, 322A-B, 322-323, 328A-B, 328-329, 334B, 342-343, 345, 357, 369,

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
	(continued)	370A-B, 381, 383, 384B, 384, 386A-B, 386-387, 395, 398-399, 402, 407, 411, 418B, 427, 429, 430A-B, 430-431, 432, 437, 438, 439, 443, 444A-B, 444-447, 448A-B, 448-449, 452, 453, 454-455, 457, 458, 459, 461, 464-465, 468, 471, 479, 481-482, 492, 493, 496-499, 503, 504, 505, 507, 526, 530-531, 532-533, 549, 566, 567, 568A-B, 568, 571, 572A-B, 572-573, 575, 576A-B, 576-579, 580-581, 583, 584, 585, 595, 597, 609, 627, 657, 667, 670-671, 687, 697, 698A-B, 698-699, 700A-B, 700-703, 707, 708, 709, 710A-B, 710-711, 712A-B, 712-715, 716A-B, 716-717, 718A-B, 718-721, 722A-B, 722-723, 724A-B, 725, 726, 727, 728-729, 730-731, 732-733, 735, 736-738, 739-741
	6D.2.1.2 Solve a one-step equation (i.e., using the inverse operation -whole numbers only)	SE/TE: 44A-B, 44-47, 48A-B, 48-51, 56, 57, 61, 62-63, 65, 69, 73, 75, 83, 89, 112A-B, 112-113, 116A-B, 116-119, 122, 123, 127, 131, 139, 193, 217, 225, 239, 247, 276A-B, 276-277, 282, 283, 287, 288, 291, 294, 297, 299, 301, 319-320, 322A-B, 322-323, 334B, 342-343, 345, 357, 369, 370A-B, 370, 383, 384, 387, 399, 407, 430A-B, 430-431, 432, 437, 438,

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
	(continued)	439, 443, 461, 468, 471, 526, 531, 532-533, 549, 627, 667, 671, 687, 697, 712A-B, 712-715, 717, 726, 727, 730, 732-733, 735, 737, 740
6D.2.2 Create and/or interpret expressions or equations that model problem situations	6D.2.2.1 Match an equation or expression involving one variable, to a verbal math situation (one operation only)	SE/TE: 42-43, 44B, 48B, 73, 112A, 113, 114-115, 116A-B, 116-119, 122, 127, 129, 131, 135, 139, 145, 185, 193, 201, 247, 277, 319, 321, 322, 325, 326, 327, 370B, 370, 381, 384, 386, 390, 394-395, 431, 432, 453, 461, 709, 710A-B, 710-711, 712, 716-717, 719-721, 722A-B, 722-723, 724A-B, 725, 726, 727, 731, 732-733, 735, 740

ASSESSMENT ANCHOR

6D.3 Analyze change in various contexts

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
6D.3.1 Interpret relationships between variables in a graph	6D.3.1.1 Explain the relationship of the data on the horizontal axis to the data on the vertical axis represented on a line graph	SE/TE: 638A-B, 638-641, 645, 646, 648A, 648, 650-651, 653, 657, 684, 689, 690, 694, 718A-B, 718-721, 722B, 724B, 726, 727, 728-729, 730, 732, 735, 738, 741

6E. Data Analysis and Probability

ASSESSMENT ANCHOR

6E.1 Formulate questions that can be addressed with data and/or collect, organize, display, and analyze data

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
<p>6E.1.1 Interpret data shown in frequency tables, histograms, circle, bar or double bar graphs, line or double line graphs or line plots</p>	<p>6E.1.1.1 Analyze data and/or answer questions pertaining to data represented in frequency tables, histograms, circle, bar or double bar graphs, line or double line graphs or line plots (for circle graphs, no computation with percents)</p>	<p>SE/TE: 170-171, 182A, 193, 200, 250, 362B, 363, 365, 368, 370, 393, 400, 404, 461, 531, 609, 625, 628A-B, 628-631, 632A-B, 632-633, 634, 635, 636A-B, 636-637, 638A-B, 638-641, 642A-B, 642-645, 646-647, 648A-B, 648-649, 650A-B, 650-651, 652, 653, 657, 674A-B, 674-675, 676B, 678, 682, 684-685, 687, 688-691, 692-695, 735</p>
	<p>6E.1.1.2 Choose the appropriate representation for a specific set of data (choices should be the same type of graph)</p>	<p>SE/TE: 531, 609, 625, 628A-B, 628-631, 632A-B, 632-633, 634, 635, 636A-B, 636-637, 638A-B, 638-641, 642A-B, 642-645, 646-647, 648A-B, 648-649, 650A-B, 650-651, 652, 653, 657, 674A-B, 674-675, 676B, 682, 684-685, 688-691, 692-695</p>

ASSESSMENT ANCHOR**6E.2 Select and use appropriate statistical methods to analyze data**

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
6E.2.1 Describe data sets using mean, median, mode and/or range	6E.2.1.1 Determine/calculate the mean, median, mode and/or range of displayed data (data can be displayed in a table, chart or line plot – use whole numbers only up to 2 digits)	SE/TE: 92, 193, 291, 345, 609, 624A-B, 624-627, 628A-B, 629-631, 632A-B, 632-633, 634, 635, 661, 676A-B, 676-677, 682, 684-685, 687, 688, 692

ASSESSMENT ANCHOR**6E.3 Understand and apply basic concepts of probability**

Pennsylvania Assessment Anchors	Eligible Content	Scott Foresman – Addison Wesley Mathematics
6E.3.1 Determine all possible combinations, outcomes and/or calculate the probability of a simple event	6E.3.1.1 Define and/or find the probability of a simple event (express as a fraction in lowest terms)	SE/TE: 131, 239, 291, 345, 399, 461, 531, 661, 662A-B, 662-663, 664A-B, 664-667, 668A-B, 668-671, 672A-B, 672-673, 678, 679, 683, 685, 687, 690-691, 694-695, 699, 735
	6E.3.1.2 Determine/show all possible combinations involving no more than 20 total arrangements (e.g., tree diagram, table, grid)	SE/TE: 38, 65, 193, 239, 262-263, 264A-B, 264-265, 272, 273, 287, 289, 293, 372-373, 376, 496B, 609, 618J, 654A-B, 654-657, 658A-B, 658-661, 662A, 662-663, 668A-B, 671, 678, 679, 683, 685, 687