

CORRELATION OF

Everyday Mathematics®

SECOND EDITION © 2001-2002



TO THE

ALASKA MATHEMATICS PERFORMANCE STANDARDS

AGES 5-14

INTRODUCTION

Increasing the mathematical knowledge and competence for today's school population requires bold initiatives. The *Everyday Mathematics* program, developed by the University of Chicago School Mathematics Project, reflects these initiatives through an enriched curriculum for the elementary grades. *Everyday Mathematics* encourages teachers and students to explore more of the spectrum of mathematical ideas through a deeper understanding of key mathematical concepts and an in-depth study of all the strands of mathematics.

The curriculum allows students to construct an understanding of mathematics from their own experience, and includes practical routines to build arithmetic skills that are essential for building number sense, estimation skills, and flexibility in a problem-rich environment. Important concepts or skills recur with variations throughout the curriculum, and concepts are introduced and revisited in a variety of formats providing considerable practice each time.

The focus of *Everyday Mathematics* is to have students recognize that there are many ways to accomplish a task, and to use the best tools and strategies for solving problems. This is done by establishing a framework for dialogue about mathematics between the teacher and students and among students themselves, thereby helping students clarify and refine ideas and strategies in problem solving.

Everyday Mathematics respects the student's ability and desire to learn. It provides a rich context and accommodates a variety of learning styles that help children make the gradual transition from intuition and concrete operations to abstractions and symbol processing skills.

The program establishes high expectations for students and teachers. *Everyday Mathematics* is an empowering mathematics program—*young children learn mathematics*.

ALASKA MATHEMATICS PERFORMANCE STANDARDS

This correlation indicates how kindergarten through sixth grade *Everyday Mathematics*, © 2001-2002, fulfills the objectives found in the Alaska Mathematics Performance Standards for ages 5-14. Below is a legend describing the components correlated by grade level.

Kindergarten	TGA:	listed by page number as found in <i>Teacher's Guide to Activities</i>
	MM:	listed by page number as found in <i>Minute Math</i>
Grades 1-3	TLG:	listed by page number as found in <i>Teacher's Lesson Guide</i>
	MM:	listed by page number as found in <i>Minute Math+</i>
Grades 4-6	TLG:	listed by page number as found in <i>Teacher's Lesson Guide</i>
	SMJ:	listed by page number as found in <i>Student Math Journal</i>
	SRB:	listed by page number as found in <i>Student Reference Book</i>

Kindergarten - Grade 2

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 5 – 7
Mathematics Standard A1: Numeration

A1.1.1 Read, write, order, count, and model one-to-one correspondence with whole numbers to 100.

Kindergarten

TLG: Pages 5 (Settling Disputes), 6 (Forming Small Groups), 7 (Quantifying) (Distributing Snacks or Treats), 10-11, 17, 20-23, 26-29, 31, 33-36, 38, 44, 49-50, 52-57, 66-70, 74, 77, 79-86, 88-89, 92, 97, 101, 104, 112-132, 136, 140, 152, 158, 169-174, 184-186, 189, 198-199, 201, 213-216, 222-224, 226, 232, 240-243, 260-263, 267-268, 277, 281, 287-289, 291, 296-297

MM: 1-5, 7-8, 10-16, 18-22, 24-25, 27, 29-31, 33, 35, 37-38, 40, 42, 44-45, 47, 49-50, 52, 54, 56, 60, 62, 65-66, 69, 71, 73, 75, 79, 81, 84, 86-87, 91, 95, 98, 100, 102, 104, 107, 111, 113, 117, 119, 123, 127, 129, 135, 137, 141, 144, 147, 150, 156-157, 161, 165, 168, 171, 174, 177, 179, 181, 183-184, 186, 190, 194, 196, 203, 206, 210, 214, 218, 223, 229, 231, 233, 239, 241, 245

First Grade

TLG: 14-15, 17-21, 23-25, 27-33, 35-38, 40-50, 52-55, 57-59, 61-70, 72-74, 88-91, 93-96, 98-100, 102-105, 107-110, 112-115, 117-119, 121-124, 126-133, 136-143, 145-148, 150-153, 170-171, 174-177, 179-182, 184-186, 188-196, 198-199, 202-204, 206-215, 217-222, 225-226, 228-230, 231, 233-234, 237-241, 257-259, 261, 263-264, 266-268, 271-272, 274-275, 278-279, 282, 284, 287-290, 292-295, 297-299, 303, 305-316, 318-321, 335-337, 340-344, 346-349, 351-354, 356, 358-360, 362-364, 366-369, 371-377, 380-382, 384-388, 390-392, 394-397, 399-401, 405, 407, 410, 413-415, 417, 419, 421-423, 427, 487-490, 493-497, 499-508, 510-514, 516, 519-521, 524-526, 529-531, 533-534, 537, 541-548, 550-553, 566, 569, 572-573, 576-577, 579, 581-582, 587, 592, 599-601, 615-616, 618, 622, 625, 627, 629, 638, 651-652, 655-656, 659, 661, 675-679, 681-682, 684-686, 688-691, 693-695, 699-700, 704, 708-709, 712-715, 727-729, 732-733, 735, 737-738, 740, 742-743, 746-747, 751-753, 757

MM: 3-5, 27-29, 31-34, 88

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 5 – 7

Mathematics Standard A1: Numeration

A1.1.1 Read, write, order, count, and model one-to-one correspondence with whole numbers to 100.

Second Grade

TLG: 16-17, 19-20, 22-23, 25, 27-29, 31-34, 36-38, 42, 44-63, 65-66, 68-69, 71, 73-74, 76-79, 92-99, 101-104, 106-117, 119, 122, 124-127, 129-132, 134-137, 139-146, 148-151, 153-155, 169-172, 174, 176, 182, 184, 187-192, 196-197, 199-200, 206, 209-211, 224-229, 231-234, 236-237, 239-240, 242-246, 248, 250, 252-253, 255-256, 258-259, 262, 264-268, 270-272, 274, 276-279, 291, 294, 296-299, 301-302, 304, 308, 313, 315, 317, 320, 323-324, 326, 329-332, 335, 338-341, 355-365, 367-376, 378-389, 391-394, 396-399, 401-404, 406-411, 413-415, 417-421, 429-430, 433-434, 436-437, 451, 511-514, 516-519, 523-532, 534-538, 540-541, 543-544, 546-555, 557-561, 563-567, 581-583, 585, 587-589, 591-593, 596-602, 604-605, 607-609, 613-615, 633-634, 638-640, 643-647, 649-655, 660, 663-664, 666, 669-671, 673-678, 680-682, 684-687, 699-700, 706, 710-714, 717-718, 720, 726, 728-729, 731, 733-735, 737-740, 742, 744-750, 754-757, 771, 773-774, 780-781, 783-787, 789-815, 818-820, 822-825, 837-843, 845, 847-857, 862-867, 870-873

MM: 3-5, 27-29, 31-34, 88

A1.1.2 Use, model, and identify place value positions of 1's, 10's, and 100's.

Kindergarten

TLG: 11, 17, 31, 55, 125, 216, 261-262, 268, 284, 286, 290, 294-295

First Grade

TLG: 16, 55, 175-176, 179-180, 182, 188, 288, 305, 311, 314, 335-336, 338, 340-344, 347-348, 351, 357-358, 360, 362, 364, 368, 370, 372, 374, 376-377, 381, 387, 390-392, 396, 399-401, 490, 493, 495-496, 513-514, 516, 551, 553, 569, 582, 584, 586, 589, 599, 601, 614, 625-629, 631, 633, 635, 637-638, 642, 647, 649, 655-656, 658-660, 675-676, 678-682, 684, 686, 689-690, 693, 699, 704, 709, 712-714, 729, 736-738, 740, 743, 745, 752, 755-757

MM: 23, 36, 43

Second Grade

TLG: 34, 43-44, 51-52, 54, 59, 61-63, 69, 73-74, 77-78, 94, 99, 103, 107, 129, 136, 141, 146, 169-172, 176, 182, 184-185, 187, 192, 197, 206, 209, 228, 240, 245, 256, 266, 268, 271-274, 279, 330, 358-359, 378-383, 386-389, 511-512, 514, 516, 520, 526-527, 530, 532, 567, 588-589, 604, 731, 733-735, 737-742, 744-745, 747, 749, 753, 755, 776, 793, 798, 803, 814

MM: 23, 36, 43

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 5 – 7
Mathematics Standard A1: Numeration

A1.1.3 Model and explain the processes of addition and subtraction, describing the relationship between the operations.

Kindergarten

TLG: 5 (Handing Out Supplies), 22, 32, 82-83, 87, 90-91, 94, 126-127, 132-133, 152, 185, 189, 196-199, 201-203, 209, 217, 224, 227-230, 232-233, 248-253, 277, 279, 282-283, 296-298

MM: 6, 17, 23, 26, 32, 37, 77-78, 91, 97-98, 121, 157, 159, 166, 184, 190, 197, 199, 225-226, 228, 238-239, 241, 246

First Grade

TLG: 20, 31-32, 50, 52, 57, 68-70, 73, 88-90, 93, 98-100, 102, 104, 112, 114, 117, 119, 121, 123-124, 128, 136-137, 139, 141-142, 145-148, 150-152, 176, 179, 181, 184, 186, 189-196, 199, 202-204, 207-209, 211-215, 217, 220, 222, 225, 228, 233-234, 237, 239, 241, 259, 263, 266, 275, 279, 282, 284, 286, 290, 294-295, 297, 299, 308, 310, 315, 318-321, 337, 341, 343, 354, 356-359, 364, 366-369, 371-373, 375-377, 379, 381-382, 386-388, 396, 400, 488, 499-505, 510-512, 516, 525, 534, 537, 544, 550, 553, 571, 573, 577, 592, 599-600, 622, 631-633, 652, 656, 659, 678, 681-682, 688-689, 691, 697, 699, 704, 714, 733, 737, 743, 745

MM: 8-9, 15, 39, 41

Second Grade

TLG: 32-34, 38, 41, 46-47, 51-54, 60, 68, 73, 77-78, 93-98, 102, 104, 109, 112-113, 115-117, 124-127, 143-145, 148-149, 151, 153-155, 184, 187, 189, 194, 197, 200, 210-211, 225-229, 231-234, 240, 243-246, 248, 250, 253-256, 261-262, 265-267, 270-274, 278-279, 294, 299, 304, 313, 317, 324, 330, 335, 341, 355-365, 370, 372-376, 378-389, 393, 398, 404, 410, 414, 420, 433-434, 511-512, 520, 523-527, 529-532, 534, 536-538, 543, 554, 557, 561, 566-567, 582, 604, 640, 660, 670, 675, 687, 712, 720, 723-724, 726, 735, 740, 745, 748-750, 754, 772-773, 779, 781, 785, 804, 814, 817-818, 820, 843, 852

MM: 8-9, 15, 39, 41

A1.1.4 Select and use various representations of ordinal and cardinal numbers.

Kindergarten

TLG: 10-11, 17, 23, 28, 31, 35, 54-55, 82-83, 89, 104, 115, 120-123, 178-179, 208, 210-213, 226, 230-233, 276, 278, 282

MM: 2, 5, 7, 11-12, 20, 22, 33, 36, 41, 44, 62-63, 72-73, 77, 79, 87, 90, 92, 97-98, 109, 115, 121, 129, 135, 138, 144, 159, 165, 184, 186, 189, 196, 225, 231

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 5 – 7

Mathematics Standard A1: Numeration

A1.1.4 Select and use various representations of ordinal and cardinal numbers.

First Grade

TLG: 15, 17-21, 25, 27-28, 31-33, 35-37, 40-47, 49-50, 52-55, 57-59, 61-63, 65, 67-68, 70, 73-74, 88-91, 93-96, 98-100, 102, 104-105, 107-110, 112, 114, 117-119, 121, 123-124, 126, 128-130, 133, 136, 143, 150-151, 169, 171, 173, 175-176, 179-182, 184, 186, 188, 191, 193-196, 199, 202-203, 206-209, 213-214, 218, 220, 225, 228, 232, 234, 237-239, 241, 260-261, 263, 274, 279, 284, 286, 297, 299, 303, 305-308, 315, 318-319, 321, 337-338, 342, 344, 358, 362-364, 368, 373-377, 381, 383, 387, 391, 396, 399-401, 405, 414-415, 420-422, 427, 487, 490, 493-497, 499-504, 508, 511-512, 514, 516, 521-522, 525, 537, 546-548, 551-553, 567, 573, 577, 581-582, 599, 601, 616, 625-629, 638, 646-647, 652, 656, 659, 661, 675-678, 680-682, 684-686, 688-691, 693, 695, 699, 704, 709, 712, 714, 729, 733, 737-738, 745, 755-759

MM: 6, 11, 15

Second Grade

TLG: 16-18, 20-21, 27, 29-30, 32-34, 36-39, 42-46, 49-61, 63, 65, 67-69, 73-74, 76-79, 92-96, 99, 102-104, 107-109, 112-113, 115-117, 122, 126-127, 129-132, 134-136, 141, 146, 149-151, 153-154, 169-172, 176, 179, 182, 184-185, 187, 189-192, 196-197, 200, 206, 209, 211, 227-229, 231-232, 239-240, 243-246, 250, 252, 255-256, 268, 271-274, 279, 294, 298, 303-304, 317, 324, 330, 355, 359, 364, 368-369, 371, 375, 378-383, 386-388, 391-394, 396-399, 401-404, 406-409, 411-412, 414-415, 419, 421, 511-514, 517-521, 523-527, 529-532, 535, 537-538, 544, 548, 554, 557-558, 564-565, 567, 582, 585, 588-589, 592-593, 597-598, 601, 604-605, 634, 646, 650, 666, 670, 675, 682, 687, 726, 728, 731, 733-735, 738-741, 747, 749-750, 753, 755, 757, 776, 781, 785, 787, 790, 792-794, 796-798, 803, 805, 807-808, 810-811, 817-820, 825, 848-850, 852, 866, 870-871

MM: 6, 11, 15

A1.1.5 Identify, model, and label simple fractions, describing and defining them as equal parts of a whole, a region, or a set.

Kindergarten

TLG: 180, 200, 245-246, 263, 271

MM: 232

First Grade

TLG: 272-273, 277, 292, 406, 415, 519, 528-529, 582, 616, 640-652, 654-656, 658, 661, 682, 686, 690, 695, 697-698, 700-703, 705, 707-710, 713-715, 733, 738, 743, 752, 754

MM: 8, 40, 44, 49, 51, 75, 86, 112-113

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 5 – 7
Mathematics Standard A1: Numeration

A1.1.5 Identify, model, and label simple fractions, describing and defining them as equal parts of a whole, a region, or a set.

Second Grade

TLG: 260, 332-336, 385, 395, 424-425, 439, 534-538, 542, 544, 547, 549, 552-553, 560, 566, 579-583, 585-587, 589-593, 595-609, 611-615, 634, 637-640, 644-652, 655, 664-667, 670, 673-677, 682, 685, 687, 698, 703-707, 712, 714-717, 720, 725, 728, 730-731, 735, 750, 754, 757, 773, 780, 785, 798, 810, 819, 843, 852

MM: 8, 40, 44, 49, 51, 75, 86, 112-113

A1.1.6 Identify, describe, and extend patterns inherent in the number system. Skip count by 2's, 5's, and 10's. Add and subtract by 10. Identify even and odd numbers.

Kindergarten

TLG: 7 (Distributing Snacks or Treats), 11, 33, 66, 104, 131, 141-142, 144, 152, 167, 175-176, 200, 206-207, 213, 221, 237, 261, 263, 281, 285, 290

MM: 115, 125, 131, 146, 149, 158, 164, 167, 173, 208, 220

First Grade

TLG: 18, 23, 27, 40, 47, 52, 54, 57, 61-63, 65, 67, 72, 74, 93, 96, 98-99, 102-105, 109-110, 112, 118-119, 126, 128-133, 138, 143, 145, 150, 153, 169, 171, 173-177, 179-182, 184-186, 188-191, 193, 195, 202-204, 207-214, 218, 220, 223-225, 228-230, 232, 234-235, 237-239, 241, 255, 258-260, 268, 274, 284, 289, 292, 295, 299, 305-307, 312, 318-319, 321, 338, 341-343, 354, 368, 373-374, 380-382, 390-391, 394-396, 399-400, 421-422, 427, 487, 490, 496, 504, 512, 517, 519-520, 522, 524-525, 529, 531, 533, 535, 546, 548, 550, 553, 569, 573, 587, 592, 616, 627, 638, 675-678, 680-682, 684-686, 688-690, 693, 695, 704, 708, 712, 714-715, 729, 732-733, 736-737, 743, 747, 750, 752, 756-757, 759

MM: 5, 7, 14, 24, 29-31, 42

Second Grade

TLG: 16, 22, 34, 38-39, 45, 48-55, 58-64, 68, 71, 74, 77-78, 95, 99, 103, 106-109, 113, 126, 132-133, 137, 141, 148-151, 153, 172, 174, 179, 181, 192, 198, 210-211, 233, 242-243, 247, 254-255, 258, 262, 267, 296, 299, 304, 313, 317, 335, 338, 368-369, 371, 375, 377, 382, 396, 399, 404, 406, 414, 421, 511-514, 517-518, 520-523, 526, 548, 564, 650, 660, 687, 739-741, 793, 795, 802-803, 852

MM: 5, 7, 14, 24, 29-31, 42

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 5 – 7

Mathematics Standard A1: Numeration

A1.1.7 Demonstrate the commutative and identity properties of addition.

Kindergarten

TLG: 282

First Grade

TLG: 143, 263, 294, 308-309, 311, 313, 315, 343, 359, 375, 377, 379-380, 382-385, 387-388, 396, 400, 487, 489-491, 500-506, 511-512, 516, 531, 542, 551, 553, 571, 577, 589, 592, 599-600, 622, 652, 656, 659, 675, 681, 704, 733, 743

MM: 5, 7, 14, 24, 29-31, 42

Second Grade

TLG: 73, 97-99, 101-103, 106-109, 113, 116-117, 122, 124-125, 127, 132, 136, 141, 150, 153-155, 172, 187, 192, 210-211, 262, 324, 341, 356-360, 372, 393, 414, 529-532, 554, 780, 808

MM: 5, 7, 14, 24, 29-31, 42

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 5 – 7

Content Standard A2: Measurement

A2.1.1 Compare and order objects by various measurable attributes including calendar, temperature, length, weight, capacity, area, and volume.

Kindergarten

TLG: 12, 14, 30-31, 46, 48, 54-57, 99-101, 106-107, 135-137, 139, 146-147, 148-152, 166, 168, 192, 204-205, 213, 235-236, 239

MM: 9, 34, 36, 41, 43, 51, 74, 88-89, 105, 145, 170, 172, 175, 201-202, 204-205, 209, 219, 224, 236, 243-244, 247

First Grade

TLG: 15-16, 48-50, 62-66, 90, 117-118, 229, 255-257, 259, 264, 266-267, 272-273, 275, 282-283, 297-298, 300, 302, 310, 319, 351-353, 361-362, 364, 370-371, 391, 406, 409, 414, 418-419, 517, 521, 531, 542, 587, 638, 661, 687-690, 693, 699, 704, 709, 714, 727-729, 731, 747, 750-753

MM: 12, 19-21, 37, 62-63, 68, 74, 83-85, 91, 93, 97, 99, 103-105, 107, 110-111, 116, 118-119, 122, 125-126, 128-129, 131, 134, 159

Second Grade

TLG: 16, 26-27, 29, 60, 71-72, 74, 79, 103, 119-122, 126, 154, 224-225, 236-237, 240, 242-246, 251, 255, 258-260, 264, 274, 276, 279, 308, 339, 358, 364, 370, 382, 388, 396, 408, 419, 428-437, 537, 544, 547, 549, 551-555, 557-560, 597, 637-639, 643, 652-653, 662-664, 668-671, 673-677, 678-682, 687, 714, 725, 728-729, 785, 836-839, 843, 845-848, 862-863, 866-868, 870-871

MM: 12, 19-21, 37, 62-63, 68, 74, 83-85, 91, 93, 97, 99, 103-105, 107, 110-111, 116, 118-119, 122, 125-126, 128-129, 131, 134, 159

A2.1.2 Compare objects to standard and non-standard units to identify objects that are greater than, less than, and equal to, a given unit .

Kindergarten

TLG: 13-14, 43, 92-93, 95, 135, 146-147, 235, 282

MM: 28, 48, 200

First Grade

TLG: 117-118, 260-262, 264, 267-269, 271-275, 279-280, 284, 290, 295, 315, 320, 348, 373, 386-387, 391, 409, 425, 507, 514, 517, 519, 526, 531, 537, 547, 551, 576, 582, 592, 616, 627, 661, 682, 694, 733

MM: 62, 101, 135

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 5 – 7
Content Standard A2: Measurement

A2.1.2 Compare objects to standard and non-standard units to identify objects that are greater than, less than, and equal to, a given unit .

Second Grade

TLG: 258-259, 262, 274, 313, 364, 388, 408, 451, 520, 546-549, 554, 565, 601, 615, 631-634, 637-640, 643-647, 649-651, 654-655, 657, 660, 675, 682, 685-686, 706, 731, 798, 804, 838, 848, 862

MM: 62, 101, 135

A2.1.4 Choose a unit of measure, estimate the length or weight of objects, and then measure to check for reasonableness.

Kindergarten

TLG: 204-205, 235, 239

MM: 94, 248

First Grade

TLG: 277-278, 286-287, 386, 413, 514-515, 531

Second Grade

TLG: 540-541, 563, 631, 633, 681, 717

A2.1.5 Tell time to the nearest half hour, distinguishing between morning, afternoon, and evening.

Kindergarten

TLG: 51, 159-160, 191-193, 224, 254-259, 263

MM: 57, 120, 126, 132, 136, 191, 211, 215

First Grade

TLG: 75, 107-110, 112-115, 117, 119, 124, 128, 133, 138, 143, 147, 150-151, 153, 171, 181, 186, 188, 190, 195, 197-200, 209, 220, 230, 234, 237, 239-241, 263, 274, 276, 284, 289, 292-293, 295, 298, 305, 315, 318, 320-321, 335, 354, 363, 399, 511, 516, 523, 527, 534-538, 540, 550-552, 574, 594, 598-599, 652-653, 687, 712, 726, 731-735

MM: 61, 71, 75, 92

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 5 – 7
Content Standard A2: Measurement

A2.1.5 Tell time to the nearest half hour, distinguishing between morning, afternoon, and evening.

Second Grade

TLG: 28, 30, 48, 63, 68, 92, 138, 153, 179-182, 185, 187, 211, 292-293, 335, 375, 646, 706, 825, 838, 840-842, 844-846, 870, 872

MM: 61, 71, 75, 92

A2.1.6 Identify coins, their value, and the value of given sets of coins.

Kindergarten

TLG: 15, 40-42, 44, 88, 104, 142-145, 152, 172-173, 177-182, 186, 194, 237, 263, 265-266

MM: 64, 70, 85, 93, 99, 103, 108, 112, 114, 116, 122, 128, 134, 139-140, 143, 148-149, 158, 166-167, 173, 180, 192-193, 198, 208, 216, 239

First Grade

TLG: 23-24, 27-28, 32, 37, 52, 68-69, 75, 98-100, 105, 114, 119, 121-124, 126-129, 131-134, 138-140, 143, 145-148, 150-153, 171, 176, 181, 190, 199, 204, 210, 214-215, 217-221, 223-227, 230, 234, 239-240, 258, 263, 268, 271, 289, 294, 299, 302, 306, 310, 315, 319-320, 343, 346, 353-354, 359, 365-366, 368-369, 377, 387, 396, 399, 401, 427, 486, 501, 507, 521, 526, 528-532, 537, 542, 545, 547, 550-551, 553, 568-569, 577, 579, 581-582, 587, 598-599, 601, 614-617, 619-623, 627, 630, 634-638, 642, 652, 658-661, 694, 701, 709, 712-713, 715, 729-730, 735-738, 741-742, 747, 755, 757

MM: 12, 22, 35, 43, 65-70, 74, 144-145

Second Grade

TLG: 22-24, 26, 35, 43, 46-47, 51, 54, 63, 67-68, 78, 103, 136, 174-176, 201, 205-206, 208, 211, 234, 238, 240, 294, 299, 303, 330, 335, 365, 383, 393, 398, 436-437, 522, 590, 600-601, 604, 606, 637, 646, 656, 670, 698-701, 703, 706-707, 710-713, 717, 730, 735, 745, 756, 780, 851

MM: 12, 22, 35, 43, 65-70, 74, 144-145

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 5 – 7

Content Standard A3: Estimation And Computation

A3.1.1 Make reasonable estimates of “how many” and “how much”; estimate the results of simple addition and subtraction problems.

Kindergarten

TLG: 27, 171, 198-199, 236, 239

MM: 152, 161, 243

First Grade

TLG: 38, 129, 142, 152, 364, 422, 529, 649, 691

MM: 50

Second Grade

TLG: 38, 46, 189-190, 248-250, 262, 264-268, 270, 277, 294, 315, 320, 324, 335, 339, 357, 364, 375, 385, 387, 389, 391, 393, 408, 414, 418, 514, 525, 531, 537, 554, 582, 588, 677, 719-721, 723-724, 731, 733, 737, 755, 771, 773-774, 776-778, 780, 783, 810, 812, 822

MM: 50

A3.1.2 Recall and use basic addition and subtraction facts orally and with paper and pencil without a calculator.

Kindergarten

TLG: 31, 91, 202-203, 226, 248-252, 267, 277-279, 298

MM: 197, 207, 217, 221

First Grade

TLG: 308-309, 313-315, 321, 348, 354, 363, 375, 377-381, 383-385, 387-388, 394, 396, 486-491, 493-497, 499-512, 516, 520, 521-522, 524-526, 531, 542, 544, 547, 550-553, 566, 569, 571-573, 577, 582, 587, 589, 592, 599-601, 622, 625, 651-652, 655-656, 659, 675, 678, 681, 686, 690, 694-695, 715, 732, 743, 747, 752

MM: 10-11, 41, 45

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 5 – 7

Content Standard A3: Estimation And Computation

A3.1.2 Recall and use basic addition and subtraction facts orally and with paper and pencil without a calculator.

Second Grade

TLG: 32-33, 38, 42, 45, 56-57, 67-68, 71, 74, 77-79, 95, 97-99, 101-103, 106, 108-117, 119, 121-122, 124-127, 129-133, 145-146, 150, 153-155, 172, 187-188, 192, 197, 200, 206, 209-211, 233, 239, 250, 262, 279, 294, 299, 304, 308, 313, 317, 324, 335, 341, 358, 388, 398, 414, 421, 513, 538, 660, 687, 773, 780

MM: 10-11, 41, 45

A3.1.3 Add and subtract whole numbers to 100 using a variety of models and algorithms.

Kindergarten

TLG: 32, 82-83, 87, 91, 104, 253

MM: 6, 14, 17, 23, 26, 32, 34, 37, 43, 46, 55, 59, 64, 70, 74, 78, 80, 88, 91, 93, 101, 106, 118, 124, 130, 139, 145, 151, 157, 160, 163, 166, 169, 172, 175, 180, 183-184, 188, 190, 195, 198, 200, 204-205, 213, 216, 218, 222, 227, 236, 244

First Grade

TLG: 68-69, 73, 98-100, 105, 112, 116, 119, 121, 136-137, 139, 141-142, 145-146, 148, 152, 192-196, 202-205, 208-209, 214-215, 217, 220, 222, 225, 228, 230, 233-235, 239-241, 263, 266, 279, 282, 284, 286, 290, 294-295, 297, 299, 308-311, 313-315, 318-321, 337-338, 343, 348, 354, 356-359, 362, 366-368, 371-373, 376-377, 379, 381-382, 387, 389-392, 394-396, 400, 499-504, 508, 511-512, 516, 524-525, 534, 537, 553, 573, 577, 592, 599, 630-633, 638, 652, 656, 659, 661, 678, 680-682, 688-689, 694, 697, 699, 715, 729, 737, 741-743, 752

MM: 10-11, 13, 15, 24, 39, 41-42, 46, 82, 85, 92-94, 96-97

Second Grade

TLG: 32, 38, 41, 45, 67, 71, 78, 92-95, 102, 104, 117, 122, 126, 132, 144-145, 148-149, 151, 211, 225-228, 236, 243-244, 249-256, 258, 262, 264-268, 270-274, 276-279, 291, 296, 299-300, 304, 308, 313, 317, 326, 332, 335, 338-339, 341, 354-365, 370, 372-389, 393, 398, 404, 406, 408, 410, 413-414, 418-421, 514, 518, 520, 525, 528-532, 534, 536-537, 543-544, 546, 550, 565-567, 593, 602, 604, 608, 634, 640, 650, 655, 660, 670, 675, 687, 700, 712, 720, 747-750, 754, 773, 777, 779, 781, 785, 793, 802, 804, 814, 843, 852, 856

MM: 10-11, 13, 15, 24, 39, 41-42, 46, 82, 85, 92-94, 96-97

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 5 – 7

Content Standard A3: Estimation And Computation

A3.1.4 Model multiplication as repeated addition and grouping objects; model division as “sharing equally” and grouping objects.

Kindergarten

TLG: 6 (Forming Small Groups), 7 (Distributing Snacks or Treats), 200, 213, 245-247

MM: 172, 225, 232

First Grade

TLG: 649-652, 659

MM: 79, 84, 88-90, 93-95, 98-99, 132, 149

A3.1.4 Model multiplication as repeated addition and grouping objects; model division as “sharing equally” and grouping objects.

Second Grade

TLG: 121, 298, 303, 391-394, 396-399, 401-404, 406-409, 411-415, 417-421, 514, 520, 526, 531, 534-538, 541-542, 544, 548, 554, 561, 564, 581, 588-589, 593, 608, 615, 634, 640, 646, 666, 675, 700, 706, 712, 735, 745, 750, 757, 783-787, 789-798, 800-805, 807-808, 814, 817, 823-825, 838, 843, 849, 871, 873

MM: 79, 84, 88-90, 93-95, 98-99, 132, 149

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 5 – 7

Content Standard A4: Functions And Relationships

A4.1.1 Recognize, describe, create, and extend repeating and increasing patterns with a variety of materials including symbols, objects, and manipulatives.

Kindergarten

TLG: 38-39, 75-76, 102-104, 154-157, 163, 165, 183, 187-188, 216, 222, 224

MM: 15

First Grade

TLG: 25, 169-172, 174-175, 179-180, 182, 185-186, 190, 193, 199, 229, 232, 337, 381, 417, 501, 522, 577, 579, 587, 600, 675, 684, 704, 743, 757

Second Grade

TLG: 20, 49, 62, 113, 133, 433-434, 511-515, 542-543, 673, 802-803

A4.1.2 Generate and solve simple functions by identifying and applying addition and subtraction patterns.

Kindergarten

TLG: 32, 226, 248-253, 263

MM: 230

First Grade

TLG: 202-205, 207-209, 214-215, 220, 225, 230, 239-241, 258-259, 279, 294, 321, 337, 343, 348, 373, 389-392, 394-397, 400, 422, 490, 496, 507, 512, 516, 521, 524-526, 537, 553, 573, 587, 592, 638, 642, 652, 661, 678, 682, 685, 700, 704, 715, 729, 747, 752

MM: 10, 15

Second Grade

TLG: 134-137, 139-142, 150-151, 154-155, 172, 176, 181-182, 187, 192, 194-198, 200, 206, 210, 233, 245, 250, 262, 267, 299, 304, 308, 317, 341, 370, 382, 404, 408, 534-537, 544, 548, 582, 601, 700, 745, 852

MM: 10, 15

A4.1.3 Use a calculator to find and extend patterns in the number system.

Kindergarten

TLG: 124-130, 152, 189, 206-207, 223

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 5 – 7

Content Standard A4: Functions And Relationships

A4.1.3 Use a calculator to find and extend patterns in the number system.

First Grade

TLG: 211-213, 215, 303, 305, 341-342, 354, 496, 526, 541, 544-545, 548, 622, 647, 690, 757

Second Grade

TLG: 17, 50, 58, 60, 62, 97, 116, 511-513, 520, 523-525, 534-536, 567, 746

A4.1.5 Complete open space sentences with missing numbers; use appropriate vocabulary including greater than, less than, and equal to; and use the correct symbols.

Kindergarten

TLG: 276, 279, 298

MM: 56, 58, 68, 86-87, 92, 98, 107, 113, 119, 135, 152-153, 165, 186, 196, 226, 228, 237-241

First Grade

TLG: 19, 37, 58, 75, 137, 142, 148, 193-196, 202-204, 208, 211-214, 218, 220, 225, 234, 239, 263, 279, 294, 299, 303, 308-309, 311, 314-315, 320-321, 337, 341-342, 346-349, 358-359, 361-366, 368, 372, 375, 377, 379-384, 387, 396, 399-401, 405, 490-491, 493-495, 500-502, 504-505, 507-512, 516, 521, 526, 531, 537, 541-544, 548, 550-551, 553, 573, 577, 587, 592, 600-601, 614, 618, 621-622, 627, 632, 636, 647, 652, 655-656, 659, 661, 678, 680-682, 686, 688-691, 695, 700, 704-705, 707-709, 714-715, 729, 733, 735, 743, 747, 751-752

MM: 9, 38-39, 80

Second Grade

TLG: 17, 24, 32, 38, 41, 45, 50-51, 54, 56-57, 60, 62-63, 65-69, 74, 77-79, 92, 94-97, 101-104, 106-117, 119, 122, 124-127, 132-133, 136, 139-141, 143-146, 148-150, 153-155, 169, 171-172, 174, 176, 182, 187-188, 192, 197, 200, 206, 209, 211, 224-228, 233, 236, 245, 248-253, 255-256, 258, 262, 264-268, 270-272, 274, 277-279, 291, 294, 296, 299, 301, 304, 308, 313, 315, 317, 320, 324, 326, 330, 335, 338-339, 341, 356-360, 362-365, 370, 372-373, 375-376, 379, 381-382, 384-385, 387-389, 391, 393, 396-399, 401-404, 408-410, 413-414, 418-421, 511-514, 516, 520, 523-532, 534-538, 544, 548, 550-551, 554, 557, 561, 565, 582, 592-593, 596-597, 600, 602, 604-606, 608, 615, 631, 634, 640, 646, 650-651, 653-655, 657, 660, 669-671, 674-675, 682, 685, 687, 700, 709, 712, 714, 717-718, 720-721, 723, 725, 731, 733, 735, 740, 747-750, 754-755, 757, 772-773, 780, 784-786, 793, 796-799, 801-804, 806, 809-810, 813-815, 817, 819, 822, 824-825, 838-839, 843, 845, 848, 850-852, 854-857, 862, 867, 871, 873

MM: 9, 38-39, 80

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 5 – 7

Content Standard A5: Geometry

A5.1.1 Identify, sort, describe, model, and compare circles, triangles, and rectangles including squares regardless of orientation.

Kindergarten

TLG: 16, 37, 58, 65, 71, 74, 78, 105-111, 166, 218-220, 272, 274-275

MM: 39, 53, 61, 66-67, 96

First Grade

TLG: 24, 59, 519-520, 566-568, 571-572, 575-577, 579-582, 591-592, 598, 616, 627, 643-646, 652-655, 696-698, 700-701, 709, 715, 733, 738, 745-747

MM: 17-18, 53, 55, 58-60

Second Grade

TLG: 19-20, 25, 32, 135, 141, 186, 239, 260-261, 291-294, 296-297, 299, 301-302, 304, 311, 315-318, 323, 331, 334, 338-341, 391, 427, 439, 521, 595-597, 600-601, 634, 655, 665, 667-671, 729, 740, 783

MM: 17-18, 53, 55, 58-60

A5.1.2 Identify, sort, describe, model, and compare solid figures including cubes, cylinders, and spheres.

Kindergarten

TLG: 73, 273

MM: 53, 67

First Grade

TLG: 584-585, 587, 589-592, 596, 600, 622, 652, 678, 745-748

MM: 17-18, 53, 58

Second Grade

TLG: 313, 320-324, 326-332, 338-339, 414, 662-663

MM: 17-18, 53, 58

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 5 – 7

Content Standard A5: Geometry

A5.1.3 Identify and create examples of line symmetry; compare and describe given circles, triangles, and rectangles as larger, smaller, or congruent.

Kindergarten

TLG: 37, 61-63, 65, 71, 74, 106-107, 166, 218-220, 274

MM: 234-235

First Grade

TLG: 567-568, 571-572, 575-576, 580, 587, 594-596, 598, 600-601, 694-695

Second Grade

TLG: 239, 260-261, 291-292, 296-297, 299, 332-336, 338-340, 392, 441, 521, 579

A5.1.4 Demonstrate conservation of area using drawings or manipulatives.

Kindergarten

TLG: 59, 61, 72, 105, 110-111, 162, 195, 269-271

MM: 234

First Grade

TLG: 24-25, 55, 58, 185, 287, 417, 501, 519-520, 572, 582, 600, 652, 654-655, 698

Second Grade

TLG: 186, 274, 292-293, 297, 302, 312-313, 316-319, 323, 391, 398, 542-543, 585-587, 592, 595-597, 654, 664, 668-671, 728, 731, 798, 838

A5.1.5 Describe and identify geometric transformations including slides, flips, and turns.

Kindergarten

TLG: 71, 78, 108-111

MM: 67

First Grade

TLG: 417, 519-520, 580, 591

Second Grade

TLG: 186, 297, 316-319

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 5 – 7

Content Standard A5: Geometry

A5.1.6 Use comparative directional and positional words: above, below, inside, outside, on, in, right and left, horizontal, vertical, and middle.

Kindergarten

TLG: 26-27, 29-30, 47, 58, 60, 71, 77, 79-80, 100, 112, 132, 160-161, 163, 182, 188, 198, 201, 216, 223, 232-233, 244, 248-253, 279, 283, 294

MM: 6, 9, 11, 23, 30, 32, 46, 48-49, 55, 59, 74, 103, 106, 112, 120, 124-125, 134, 148, 151, 155, 199, 202, 213, 222, 227, 230-232

First Grade

TLG: 15, 23, 29, 31, 62, 64, 66, 98, 103-105, 108, 113-114, 117-119, 121, 124, 127-128, 131, 136, 139, 147, 150, 152, 169, 172, 176, 186, 188, 199, 217, 223-224, 229, 241, 258, 263, 279, 288, 294, 310, 337, 343, 354, 375, 380-381, 387, 389-392, 394-397, 400, 488, 494, 500, 506, 510, 516, 520, 524-525, 528-529, 546, 548, 572, 582, 586, 619, 621, 625, 629, 633, 642, 645, 682, 685, 699-700, 704, 715, 727-728, 739

MM: 17-18, 135

Second Grade

TLG: 16-18, 32, 34, 41-44, 46-47, 49, 52-55, 59-61, 63, 66-67, 73, 93-94, 97-99, 101-103, 107-109, 112-113, 119-121, 129, 132, 139-143, 182, 184-187, 189-192, 201, 203-205, 209, 226-229, 234, 242, 244, 251, 259, 261, 265, 272, 292-293, 298-299, 308, 311, 313, 316-318, 330, 336, 363-364, 368-369, 380, 383, 391-392, 396-399, 401-404, 406-409, 412, 419, 425, 429-430, 443-444, 517-519, 524-525, 531, 534, 537, 540-541, 546-548, 552-553, 555, 558-561, 563, 567, 581, 583, 587-588, 593, 596-597, 599-601, 604, 611, 614-615, 634, 638-639, 644-646, 651, 653, 664, 667-668, 671, 673, 675-677, 682, 684, 700, 705-707, 710-711, 720-721, 724, 728, 730, 733-734, 744, 748, 750, 771, 784, 787-789, 791-793, 795-796, 801-805, 808-809, 815, 818, 822-823, 838, 843, 847-848, 856-857, 859-868, 872

MM: 17-18, 135

A5.1.7 Draw and build familiar shapes.

Kindergarten

TLG: 59, 64-65, 72-73, 78, 108-111, 195, 234, 243, 269-272

MM: 31

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 5 – 7

Content Standard A5: Geometry

A5.1.7 Draw and build familiar shapes.

First Grade

TLG: 24-25, 44, 46, 50, 55, 58-59, 170, 185-186, 199, 287, 337, 417, 501, 519-520, 572, 575-577, 580-582, 587, 591-592, 600, 653-655, 694, 715, 745-747

MM: 56, 59-60

Second Grade

TLG: 20, 25, 54, 186, 272, 292-293, 297, 302-303, 307-309, 312-313, 316-319, 323-324, 327-328, 330-331, 334, 340, 391, 398, 409, 426, 542-543, 548, 583, 585-588, 651, 654, 665, 675, 706, 729-730, 798

MM: 56, 59-60

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 5 – 7
Content Standard A6: Statistics/Probability

A6.1.1 Collect, record, organize, display, and explain the classification of data.

Kindergarten

TLG: 6 (Voting), 10-11, 13, 18-19, 24-25, 30-32, 47, 52-53, 56-57, 68-69, 95, 100-101, 119, 136-139, 148-152, 158, 160-161, 176, 184-185, 211, 240-241, 244

MM: 7, 11, 110

First Grade

TLG: 15-16, 20, 61, 63, 65, 95, 110, 112, 228-230, 280, 287-288, 297-298, 300, 375-376, 409, 421, 423, 425, 427, 487, 520, 545-548, 573, 579, 581-582, 616, 631, 640, 686, 693, 727, 729, 758-759

MM: 47

Second Grade

TLG: 39, 189-192, 316, 322, 329, 368-369, 371, 392, 430, 436-437, 447-448, 451, 557-560, 563, 597, 633, 674-675, 677, 680, 700, 710-713, 729, 848, 852-853, 860-861, 863-868, 870-871

MM: 47

A6.1.2 Describe data from a variety of visual displays including tallies, tables, pictographs, bar graphs, and Venn diagrams.

Kindergarten

TLG: 6 (Voting), 24-25, 32, 47, 100-101, 152, 161, 176, 184-185, 211, 240-241, 244

MM: 110

First Grade

TLG: 20, 40-41, 112, 230, 263, 288, 376, 387, 409, 520, 546-548, 573, 581-582, 638, 727, 729, 733, 759

Second Grade

TLG: 101-102, 107, 111, 113, 121, 191, 194, 196, 316, 322, 368-369, 371, 430, 437, 549, 555, 558-561, 651, 673, 678, 710-714, 746, 859-863, 865-868, 872

A6.1.3 Use the terms “maximum” and “minimum” when working with a data set.

First Grade

TLG: 582

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 5 – 7
Content Standard A6: Statistics/Probability

A6.1.3 Use the terms “maximum” and “minimum” when working with a data set.

Second Grade

TLG: 812, 867-868, 871

A6.1.5 Find and record the possibilities of simple probability experiments; explain differences between chance and certainty, giving examples.

Kindergarten

TLG: 296

MM: 46, 209, 243, 247

First Grade

TLG: 44, 46, 375, 409-410, 487

Second Grade

TLG: 39

A6.1.6 Conduct a survey and tally the results.

Kindergarten

TLG: 6 (Voting), 100, 176

First Grade

TLG: 41, 65, 95, 110, 112, 228, 427, 640, 693

MM: 47

Second Grade

TLG: 39, 191, 368-369, 371, 449

MM: 47

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 5 – 7
Content Standard B: Problem-Solving

B1.1.1 Formulate problems from practical and mathematical activities.

Kindergarten

TLG: 84-85, 90-91, 94, 132-133, 152, 196-197, 201, 224, 228-229

MM: 5, 77, 97, 121, 159, 197, 246

First Grade

TLG: 69-70, 72, 124, 146, 148, 195, 358-359, 367, 372-373, 571, 628, 630, 633-634, 691, 736-737, 742-743

MM: 16

Second Grade

TLG: 46-47, 58-59, 73, 93-97, 104, 108-109, 114-115, 143-144, 155, 175, 177, 185, 200, 205-206, 210-211, 226, 254, 278, 292, 298, 365, 373, 376, 389, 391-392, 401-404, 411, 414, 433-434, 437, 447-449, 524-525, 529-530, 542, 544, 549, 587-588, 607, 609, 613, 655, 671, 684-686, 699-700, 703, 716, 720-721, 724-725, 730, 756, 774, 780, 785-786, 791, 805, 807-808, 811-813, 824, 863, 873

MM: 16

B1.1.2 Develop and apply strategies including guess and check, modeling and acting out, drawings, and extending patterns to solve a variety of problems.

Kindergarten

TLG: 5 (Handing Out Supplies), 6 (Lining Up), 7 (Distributing Snacks or Treats), 12, 42, 47-4, 8, 82-85, 90-91, 94, 99, 108-109, 132-133, 148-149, 162, 164, 168, 187-188, 196-205, 210-213, 228-231, 236, 238-239, 246-253, 263, 267, 274-276, 278-279, 282-283

MM: 5-6, 9, 14, 17, 23, 26, 30, 32, 34, 43, 46, 48, 55, 59, 64, 70, 74, 76, 80, 82, 88, 93, 101, 114, 118, 124, 130-131, 139, 142, 145, 148, 151, 154, 157, 160, 163, 166, 169, 172, 175, 178, 180, 182, 185, 188, 192-193, 195, 198-200, 202, 204-205, 208, 211, 213, 216, 219, 222, 225, 227, 230, 232, 235-236, 239, 241, 244

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 5 – 7

Content Standard B: Problem-Solving

B1.1.2 Develop and apply strategies including guess and check, modeling and acting out, drawings, and extending patterns to solve a variety of problems.

First Grade

TLG: 20, 31-32, 52, 57, 68-70, 73, 88, 90, 93, 98, 102, 112, 117-118, 121, 123-124, 127, 131-133, 136, 138-139, 141, 145-148, 150-151, 179, 184-185, 189-195, 202-205, 207-210, 214-215, 217, 220, 222, 228, 230, 237-241, 258-259, 266, 279, 282, 286, 292, 295, 297, 319, 336, 343, 348, 356-359, 361-362, 364, 366-373, 377, 379, 381, 389-392, 394-397, 400-401, 490, 495-496, 499, 501-502, 507, 511-512, 516, 521, 524-526, 534, 537, 543, 547, 551, 553, 573, 577, 587, 592, 599, 601, 630-638, 642, 647, 649-652, 656, 659-661, 676-678, 680, 682, 684-691, 693, 695, 697-700, 704, 708-710, 712-715, 728-729, 737-738, 741, 747, 751-754, 756-757

MM: 8-9, 15, 30, 34, 39, 45, 72-73, 79-81, 84-159

B1.1.2 Develop and apply strategies including guess and check, modeling and acting out, drawings, and extending patterns to solve a variety of problems.

Second Grade

TLG: 34, 41, 46-47, 54-55, 58-59, 61, 68, 76-78, 92-96, 98-99, 103, 108, 113, 115, 120-122, 124, 126-127, 130-132, 136, 138-140, 150, 154-155, 172, 175-177, 182, 184-187, 198-201, 203-206, 210-211, 225-229, 231-234, 240, 243-245, 247-251, 262, 267, 273-274, 278-279, 291-294, 296-299, 302-305, 307, 309-310, 312, 316-319, 323, 330, 332-334, 336, 340, 354-355, 358, 361-366, 370, 373-376, 391-399, 401-404, 411-415, 417-421, 433-434, 511-514, 517-521, 523-527, 529-532, 534-538, 540-544, 548, 551-555, 560-561, 564, 566-567, 581-583, 585-587, 589-593, 595-608, 611-615, 634, 648, 650-652, 654-655, 662-666, 670, 674-677, 682, 687, 699-700, 703, 705-706, 710-717, 719-721, 723-725, 728-731, 735, 737, 740, 745-746, 750, 755-757, 770-774, 776-781, 783-787, 789-798, 800-802, 804-805, 810, 814, 817-820, 822-825, 836-838, 840, 842-843, 845-849, 852-853, 856, 860-868, 870-873

MM: 8-9, 15, 30, 34, 39, 45, 72-73, 79-81, 84-159

B1.1.3 Predict an answer before solving a problem and compare results to check for reasonableness.

Kindergarten

TLG: 43, 99, 135, 164, 167-168, 171, 198-199, 235, 238-239, 270-271

MM: 28, 161

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 5 – 7
Content Standard B: Problem-Solving

B1.1.3 Predict an answer before solving a problem and compare results to check for reasonableness.

First Grade

TLG: 32, 38, 46, 118, 124, 129, 136-137, 139, 141-142, 351-353, 364, 387, 529, 649, 693

Second Grade

TLG: 46, 58-59, 63, 76, 120-121, 224-225, 333, 357, 375, 385, 387, 389, 393, 408, 414, 514, 525, 531, 537, 554, 588, 663, 677, 719-721, 724, 731, 755, 771-772, 810

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 5 – 7
Content Standard C: Communication

C1.1.1 Translate problems from everyday language into math language and symbols.

Kindergarten

TLG: 6 (Voting), 12, 22-25, 32, 34, 39, 41, 43, 46-48, 52-57, 60-65, 68-69, 71-73, 76, 78, 87-88, 90-91, 94-95, 97-98, 100-101, 105, 112-114, 122-123, 132-133, 136-139, 146-149, 158-159, 161, 163, 176-177, 184-185, 188, 190, 196-197, 200, 202-205, 208, 210-213, 217, 221, 228-230, 232-233, 236, 239, 244-247, 273, 279, 282-283

MM: 2, 5, 10-11, 14, 16, 21, 28, 36-37, 39, 41, 51, 53, 57, 62, 66-67, 72, 78, 83, 85, 89-91, 94, 99, 101, 103, 110, 112, 115, 125, 131, 138, 152, 161, 170, 183-184, 190, 199, 202, 209, 224, 234, 243-244

First Grade

TLG: 15, 19-20, 31, 37, 41, 61, 69, 117, 121, 136-137, 139, 141-142, 145-146, 148, 176-177, 192-195, 217, 222, 228-230, 266, 282, 286, 336, 352, 356-358, 361, 364, 366-367, 371-373, 379, 389, 401, 499, 534, 543, 630-632, 634, 650, 688-689, 751

MM: 8, 30, 72, 80

Second Grade

TLG: 16-17, 58-59, 66, 93-95, 103-104, 138-140, 150, 155, 176, 199-201, 204-206, 210, 225-228, 231-234, 240, 243-246, 252-256, 274, 278, 291-292, 298-299, 304, 332-336, 340-341, 354-355, 361-365, 368-371, 373-375, 391-393, 396-397, 401-404, 419, 424-426, 437, 529-530, 534-536, 551-555, 557-560, 580-582, 585-588, 592, 600, 607-609, 613, 651, 662-664, 670-671, 674-675, 719-721, 728-729, 771-772, 774, 783-787, 789-798, 801-802, 804, 807-808, 814, 825, 837, 843, 847-848, 864-865, 867

MM: 8, 30, 72, 80

C1.1.2 Use manipulatives, models, pictures, and language to represent and communicate mathematical ideas.

Kindergarten

TLG: 5 (Handing Out Supplies), 6 (Quantifying) (Lining Up), 8 (Displaying a Day Schedule), 10-14, 16-17, 20-25, 27-32, 34-37, 40, 42-44, 46-65, 67, 70-73, 75-78, 80-97, 100-103, 105-115, 119-133, 135-152, 154-168, 170-173, 175-177, 180-182, 184-197, 200-224, 226-239, 242-261, 263-283, 286, 288, 290, 292-298

MM: 1-2, 10-11, 15, 18-22, 25, 28, 31, 33, 35, 37, 39, 44, 48-49, 61-62, 66-67, 72, 78-79, 83, 85, 90-91, 98-99, 103, 109-110, 112, 115-116, 120, 122, 125-126, 128, 131-132, 134-136, 138, 140, 143-144, 149, 154-155, 159, 161, 166-167, 172-173, 175-176, 180, 185-187, 189-193, 196-202, 204-205, 207-208, 211-212, 215-217, 219, 221-222, 224-226, 228, 230-231, 234-242, 244, 246

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 5 – 7

Content Standard C: Communication

C1.1.2 Use manipulatives, models, pictures, and language to represent and communicate mathematical ideas.

First Grade

TLG: 15-16, 19-20, 24-25, 29, 31-32, 35-37, 41-42, 44, 48-49, 52-55, 57-59, 61-64, 66-68, 73-75, 88-91, 93, 96, 98-100, 102-105, 107-110, 112-115, 117-121, 123-124, 126-129, 131-143, 145-148, 150-153, 169-177, 179-182, 184-186, 188-189, 192-199, 203-204, 207-209, 211-215, 217-226, 228-230, 232-235, 237, 239-241, 255-264, 266-269, 271-280, 282-284, 287-290, 292-295, 297, 299, 302-316, 318-321, 335-338, 340-344, 347-349, 351-354, 356-377, 382, 384, 386-389, 394, 396-397, 399-401, 405-410, 412-413, 416-417, 420-423, 486-489, 493-496, 499-509, 511-517, 519-523, 526-532, 534-538, 540-542, 544-548, 550-553, 566-569, 571-573-577, 579-582, 584-587, 589-592, 594-596, 598-601, 614-617, 619-623, 625-631, 633-634, 636-638, 640-647, 649-656, 658-661, 675-678, 680-682, 684-691, 693-710, 712-715, 726-743, 745-748, 750-753, 755-757

MM: 13, 18-19, 30, 56-57, 59, 97

Second Grade

TLG: 17-21, 23-26, 28, 30, 32-35, 38-39, 41-43, 45-55, 57-60, 62-63, 66, 68, 71-74, 76-79, 92, 94-95, 98-99, 102-104, 108-109, 112, 115-117, 119-122, 124-127, 130-131, 138, 142, 145-146, 149-151, 153-155, 169-172, 174-177, 179-182, 184-187, 189-190, 192, 197, 199-201, 203-206, 209-211, 224-229, 231-234, 236-240, 243-245, 248-251, 253-256, 258-262, 267-268, 271-274, 276-279, 291-294, 296-299, 301-304, 306-309, 311-313, 315-324, 326-336, 338-341, 355, 359, 361, 364-365, 367, 370, 375, 378-383, 386-389, 391-394, 396-399, 401-404, 406-409, 411-415, 417-419, 421, 424-431, 436-437, 739-440, 451, 511, 514-515, 517-527, 529-532, 534-538, 540-544, 546-549, 551-555, 559-561, 563-567, 579-583, 585-593, 595-609, 611-615, 631-634, 637-640, 643-647, 649-651, 653-660, 662-664, 669-671, 673-677, 679-682, 684-687, 698-701, 703-707, 709-713, 715-721, 723-725, 728-731, 733-735, 737-747, 749-750, 754-757, 770-774, 776-781, 784-787, 790-799, 803-805, 807-811, 813-815, 817-820, 824-825, 837-839, 841-849, 851-857, 861, 864-867, 870-873

MM: 13, 18-19, 30, 56-57, 59, 97

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 5 – 7

Content Standard C: Communication

C1.1.3 Use everyday language to explain thinking about problem solving strategies and solutions to problems.

Kindergarten

TLG: 6 (Lining Up), 14, 22, 37, 39, 43, 46-48, 54-55, 71, 75-76, 82-83, 87, 90-93, 96, 99-103, 106-111, 146-151, 163, 167-168, 171-173, 184-185, 187, 190, 200, 204-205, 210, 212-213, 216, 231-233, 235, 237-241, 244-249, 254-255, 260-261, 296

MM: 5-6, 9, 17, 23, 26, 28, 30, 32, 34, 37, 41, 43, 46, 48, 51, 53, 55, 59, 64, 70, 74, 76, 80, 82, 88, 93, 106, 108, 110, 114, 116, 118, 124, 128, 130, 134, 139, 142, 145, 148, 151, 154, 157, 160, 163, 166, 169, 172, 175-176, 178, 180, 182, 185, 188, 192-193, 195, 198-200, 202, 204-205, 208-209, 211, 213, 216, 219, 222, 225, 227, 230, 232, 234-236, 239, 241, 243-244, 247

First Grade

TLG: 19, 64, 66, 68, 70, 73, 96, 117-118, 121, 127, 131, 138, 145-147, 264, 286, 292, 319, 336, 352-353, 356, 358, 361, 364, 366-367, 379, 390, 499, 534, 630-631, 636-637, 650, 652, 688-689, 697, 752

MM: 47, 102

Second Grade

TLG: 17, 34, 41, 46, 53, 73, 77-78, 93, 96-97, 109, 114, 120-121, 127, 142, 154-155, 186, 204-205, 247-251, 292-293, 298, 333, 340, 355, 362, 365, 374, 376, 391-393, 401-402, 404, 411-414, 421, 433-434, 514, 520-521, 552-553, 559-560, 587-588, 611, 613, 615, 651, 653-654, 712, 728-729, 757, 772, 777-781, 784, 790-792, 794, 797, 799, 817-820, 822, 824, 838-839

MM: 47, 102

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 5 – 7

Content Standard D: Reasoning

D1.1.1 Draw conclusions about mathematical problems.

Kindergarten

TLG: 6 (Voting) (Lining Up), 12-13, 22-23, 27, 30-32, 37-38, 43, 47-48, 52-57, 65, 75-76, 82-87, 90-94, 96-97, 99-101, 106-107, 134, 136-137, 146-151, 153, 161, 163, 167-168, 171, 184-185, 187, 190, 200, 204-205, 209, 212-213, 216, 218-219, 235-237, 240-241, 244, 268, 273-275, 281, 288, 296

MM: 8, 23, 25-26, 28, 30, 32, 34, 41, 43, 46, 48, 51, 55, 59, 64, 66, 70-71, 74, 76, 80, 82, 88, 93, 105-108, 110, 113-114, 118, 124-125, 130, 139, 142, 144-145, 148, 151, 154, 157, 160, 162-163, 165-167, 169, 172, 175-176, 178-180, 184-188, 190, 192-193, 195-196, 198-202, 204-205, 208-209, 211, 213, 216, 219, 222, 225, 227, 230, 232, 234-236, 238-239, 241, 243-244, 247

First Grade

TLG: 41, 44, 46, 117, 121, 123-124, 127, 169, 174-177, 179-180, 182, 185, 190, 232, 235, 266, 268, 271, 288, 338, 379, 382, 409, 413, 487, 546, 580, 590-591, 598, 620, 640, 645, 698

MM: 47, 55, 89-90, 105, 115, 127, 138, 146-147

Second Grade

TLG: 17, 20, 29, 45, 49, 53, 97, 102, 106-107, 111, 115, 149, 203-204, 225, 231, 246, 258-259, 276, 291-294, 296-298, 307, 311-313, 315-316, 321-322, 328, 334, 340, 356, 373-376, 387, 413, 430-431, 511-513, 517, 529, 546, 558, 581, 586-588, 591, 596, 603, 607, 612, 632, 643-644, 647, 649-650, 653, 657-660, 666, 668-669, 675, 744, 755, 802-803, 837-838, 850, 854

MM: 47, 55, 89-90, 105, 115, 127, 138, 146-147

D1.1.2 Find examples that support or refute mathematical statements.

Kindergarten

TLG: 47-48, 54-55, 63, 95, 102, 105-107, 166, 175, 218-220, 222-223, 273-275, 278

MM: 39, 61, 67, 87, 96, 113

First Grade

TLG: 143, 152, 511-512, 567-569, 571, 575, 580, 582, 584, 587, 596, 600, 627, 642, 645, 647, 700, 709

MM: 96

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 5 – 7
Content Standard D: Reasoning

D1.1.2 Find examples that support or refute mathematical statements.

Second Grade

TLG: 73, 120, 122, 126, 131, 142, 154, 239, 260-261, 291-292, 294, 296-298, 311, 318, 597, 599-601, 603, 605, 725, 740, 750

MM: 96

D1.1.3 Explain why a prediction, estimation, or solution is reasonable.

Kindergarten

TLG: 29, 47-48, 90-91, 96, 106-107, 163, 167-168, 171, 235, 274-275, 290

MM: 152, 161, 202, 209, 234-235, 243, 247

First Grade

TLG: 46, 352, 364, 413

MM: 120-121, 140

Second Grade

TLG: 23, 46, 189-190, 196, 249-250, 264-268, 318, 327, 437, 715, 719, 729, 777, 812

MM: 120-121, 140

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 5 – 7
Content Standard E: Connections

E1.1.1 Apply mathematical skills and processes to literature.

Kindergarten

TLG: 96, 138-139, 146

MM: 248

First Grade

TLG: 17, 21, 25, 269, 272, 279, 300, 386, 407, 411, 414-415, 419, 643, 691, 700, 746, 753,
758-759

Second Grade

TLG: 18, 20, 97, 104, 108-109, 132, 177, 185, 238, 260, 302, 306, 313, 318, 323, 331, 336,
399, 404, 414, 427, 431, 435, 437, 441, 449, 538, 543, 582-583, 593, 635, 641, 673, 701,
726, 786, 793, 802, 863

E1.1.2 Apply mathematical skills and processes to situations with self and family.

Kindergarten

TLG: 11-14, 18-19, 22, 31-32, 35, 43, 54, 56-57, 68-69, 92-93, 95, 100-101, 136-140, 146-
147, 156-158, 160-161, 171, 184-185, 210, 212-213, 231, 240-241, 244, 271, 287

MM: 7, 28, 36, 57, 67

First Grade

TLG: 15-17, 50, 59, 61, 65, 67, 91, 93-96, 110, 112, 114, 143, 145, 147-148, 177, 179, 186,
188, 198-200, 202, 228-230, 261-262, 264, 266-268, 271, 275, 281-284, 286-287, 298,
300, 302, 306, 407-408, 411, 423, 425-427, 541, 543, 545, 548, 573, 634, 726-729, 731

MM: 47, 63, 72, 80, 84-85, 87-88, 90, 93, 96, 102, 105, 128, 130, 134, 136-137, 157-158

Second Grade

TLG: 16-17, 19-21, 29, 38-39, 71-72, 177, 182, 184, 189-192, 194, 200, 203, 251, 262, 298,
324, 335, 341, 367-369, 371-373, 376, 414, 427, 429-431, 433-435, 437, 441-451, 541,
546-548, 551-553, 557-560, 567, 593, 615, 631-632, 634, 640, 643, 646, 649, 651, 655,
666, 671, 673, 676, 679, 682, 684, 687, 700, 712, 717-718, 721, 725, 728-729, 757, 774,
825, 839, 845, 848, 868, 873

MM: 47, 63, 72, 80, 84-85, 87-88, 90, 93, 96, 102, 105, 128, 130, 134, 136-137, 157-158

Grades 3-5

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 8 – 10

Mathematics Standard A1: Numeration

A1.2.1 Read, write, model, order, and count with positive whole numbers to 1,000,000 and negative whole numbers.

Third Grade

TLG: 16-19, 21-29, 31-39, 41-48, 50-53, 57-58, 61, 63-65, 67-70, 74, 78-81, 92-103, 105-108, 110-120, 122-145, 149-151, 165-168, 170-179, 181, 184, 187-191, 194-196, 201-202, 204-207, 210-211, 225-229, 231-241, 243-246, 248-252, 254-258, 260-262, 264-268, 270, 272-274, 276-279, 293-296, 298-302, 304-309, 311-315, 317-320, 323-325, 327, 330, 334-336, 339-343, 346-349, 352-355, 358-359, 361-365, 378-382, 384-385, 388, 390-391, 393, 397, 399-400, 402-403, 405-406, 408-411, 413, 416, 419, 421-422, 427, 430, 434, 436, 439, 448, 450-451, 458, 465, 471-473, 534-538, 541-548, 551-565, 567-573, 575, 577, 579-583, 596, 599-600, 603-608, 612, 617, 621-622, 627, 629-633, 635, 637, 639, 652-658, 661-662, 664-666, 668-674, 676-679, 681-684, 686, 688, 690-694, 697-700, 702-706, 708-711, 713-717, 722, 725-729, 744-746, 749-752, 754-756, 760-761, 764-765, 770-771, 773-775, 777-793, 795-797, 799-802, 818-819, 821-824, 827-829, 834, 839-840, 843-844, 847-850, 855-856, 860-861, 863-867

MM: 3-5, 7, 27-29, 31-33, 38, 88, 108, 136

Fourth Grade

TLG: 16-19, 22, 25, 29-34, 40, 45, 50, 55, 59-61, 76-81, 83-86, 88-97, 99-102, 104-108, 110-126, 128-131, 146-156, 158-165, 167-188, 190-197, 199-201, 214-218, 220-222, 224-227, 230-232, 234-236, 241, 244-246, 250-260, 263-265, 281-285, 287-296, 298-321, 323-327, 329-339, 341-344, 346-349, 366-406, 410, 412, 415, 419-420, 444-446, 515, 520-521, 526, 533, 539, 543-544, 547, 552, 557, 560-563, 567-568, 574, 581, 596-600, 602-610, 612-615, 617-636, 638-643, 657-661, 663-666, 672-673, 675-685, 687-691, 693-709, 711-715, 733, 735, 739, 741, 744, 747, 750, 752, 754-755, 758-762, 765, 767, 783-787, 791-792, 795, 798, 804-805, 808-812, 814-818, 820-823, 826-829, 843-879

SMJ: 2-5, 7, 9, 11, 14, 19, 24, 26-73, 76-87, 89-90, 94-95, 97-99, 101-109, 112-115, 117-119, 121-161, 163-172, 174-176, 192, 194-195, 199, 201, 204-206, 208-209, 212, 215-220, 222, 224-227, 229, 232-264, 268-269, 271-282, 284-288, 290, 292-298, 301, 303, 305-308, 310-323, 325-339, 341-342, 344

SRB: 2-22, 58, 62-70, 106-125, 128-146, 148-158, 160-182, 184-195, 199-208, 211-214, 216-257

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 8 – 10

Mathematics Standard A1: Numeration

A1.2.1 Read, write, model, order, and count with positive whole numbers to 1,000,000 and negative whole numbers.

Fifth Grade

TLG: 15-21, 23-25, 27-35, 37-49, 51-55, 58-61, 76-84, 86-91, 93-97, 99-103, 106-124, 126-129, 131-133, 145-164, 166-169, 172, 176, 179-180, 184-190, 192, 194-195, 198-200, 215-218, 220-223, 226-229, 232, 233-240, 242-244, 246-248, 264-269, 272, 278, 285, 290-291, 295-296, 299, 303, 304, 307-308, 312-315, 317-322, 324-325, 329, 337, 352-355, 358-371, 373-376, 378-381, 384-387, 391-392, 396, 401, 405-407, 410-437, 503-518, 520-529, 531-535, 537-541, 543-547, 549-558, 560-563, 581, 583, 588, 594, 601-602, 609, 611, 614, 618-620, 624, 625, 630-637, 639-642, 645-648, 652-655, 669-689, 691-701, 703-713, 718-719, 721-724, 726-729, 743-748, 750-783, 785-790, 792-796, 799-803, 817-820, 822, 826, 829-832, 834, 836-837, 841-847, 849-852, 855-857, 871-875, 878-882, 884-898, 900-902, 904-909, 911-913, 915-917, 919-923

SMJ: 2-26, 28-42, 44-76, 81, 83-84, 85, 88-92, 94-95, 100, 102-119, 122, 123, 125, 130, 135, 138, 144, 146, 148-166, 171-197, 200, 204, 208-215, 218-248, 253, 257, 260, 262, 264, 268, 272, 276, 278, 280-281, 283-294, 296, 299-302, 304-311, 313, 316-317, 319, 321, 324-327, 329-338, 340, 342-367, 369-377, 379, 381-383, 386-401, 405-409, 411-433, 435-436, 439, 441

SRB: 2-24, 96-104, 108-124, 166-198, 200-228, 233-235, 243-252, 256-262, 264-273, 280-282, 284-287, 290-292, 294-296, 298-349, 354-355

A1.2.2 Use, model, and identify place value positions from 0.001 to 1,000,000.

Third Grade

TLG: 21-23, 27, 29, 36, 39, 43, 51, 53, 61, 65, 74, 78-79, 96, 99-101, 108, 129-133, 135-139, 143, 179, 279, 293-296, 298-302, 304-308, 311, 314, 319, 322-323, 325, 327-331, 333-336, 339-343, 345-349, 351-355, 357, 359, 361-364, 378, 382, 384, 399, 408, 416, 430, 433-434, 441, 448, 472, 534, 537, 541, 544, 547, 557, 559, 562, 567, 570, 575, 577, 580-581, 600, 603, 608, 612, 637, 662, 664-665, 670-673, 676, 680, 692, 698-699, 702-703, 708-710, 713-715, 726-727, 742, 748, 779, 783, 795, 800, 816, 818, 821, 834, 839, 855, 865, 867

MM: 14, 23, 33, 36, 43-44

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 8 – 10
Mathematics Standard A1: Numeration

A1.2.2 Use, model, and identify place value positions from 0.001 to 1,000,000.

Fourth Grade

TLG: 45, 55, 61, 80, 88-97, 101, 107, 113, 115, 118, 125, 170, 178, 216-217, 225, 235, 238-241, 244-245, 255, 257-260, 265, 284, 288, 295, 307, 312, 320, 323-327, 329-333, 341, 347-348, 370, 376, 415, 792

SMJ: 14, 24, 26, 28, 31-33, 36, 38, 41, 45, 49, 59, 64, 80, 82, 87, 94-99, 106-107, 111, 114, 116, 121, 127, 130, 132-137, 142, 149, 152, 176, 311

SRB: 4, 25-30, 201-204

Fifth Grade

TLG: 17, 20, 25, 34, 44, 49, 54, 61, 80-81, 84, 99, 105, 108, 124, 126, 129, 131-132, 145, 148, 154, 172, 176, 184, 194, 199, 201, 217, 230, 233, 242, 287, 306, 319, 331, 333, 354, 357, 366-367, 370, 380-381, 404, 407, 510-515, 518, 522, 541, 552, 561, 581, 609, 614, 669, 673, 676, 682, 849, 881, 886, 897, 900, 902

SMJ: 5, 7, 10, 14, 20, 22, 26, 28, 46, 54, 62, 81, 85, 100, 102, 104-105, 114, 158, 166, 169, 180-181, 189, 193, 210, 215-216, 218, 221, 236, 244, 253, 264, 272, 300, 304, 309, 414, 418, 425, 427

SRB: 4, 5, 28-32, 282-283, 354

A1.2.3 Model and explain the processes of multiplication and division. Describe the relationships among the four basic operations

Third Grade

TLG: 200-201, 206-207, 211, 225-229, 231-241, 243-246, 249-252, 254-258, 260-261, 264-265, 268, 273, 276-279, 295, 301, 314, 325, 336, 342, 354, 362, 388, 399, 410, 418, 422, 424, 434, 450-451, 535-538, 543, 549, 551-562, 567, 569-572, 575-577, 580-582, 596, 599, 607, 612, 614, 622, 630-633, 636-637, 639, 653-655, 660-662, 664-666, 668-673, 676-684, 686-700, 702-703, 706, 708-711, 713-717, 722, 725-729, 745, 750-751, 755, 764-765, 775, 785-786, 788, 792, 800, 818-819, 828, 839, 849, 856, 858, 860-861, 863-864

MM: 16, 41, 48

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 8 – 10

Mathematics Standard A1: Numeration

A1.2.3 Model and explain the processes of multiplication and division. Describe the relationships among the four basic operations

Fourth Grade

TLG: 80, 83-86, 91, 96, 101, 113, 125, 131, 147-151, 153-156, 158-161, 163-165, 167, 170-171, 173-174, 178, 180-183, 186-188, 190-193, 197, 199-201, 214, 217, 220-221, 225, 230, 232, 235, 245, 265, 281-285, 287-291, 295, 298, 300-302, 304-314, 316-321, 323, 326, 332, 338, 344, 347-349, 366-387, 389-390, 392, 395, 397, 401-402, 410, 412, 415, 419, 420, 521, 526, 533, 539, 544, 552, 557, 562, 568, 574, 605, 614, 620, 625, 630, 635, 643, 660, 665, 672, 675, 677, 690, 696, 703, 709, 786, 792, 798, 829, 846, 863, 868, 879

SMJ: 28-30, 33-34, 36, 41, 49, 51-52, 54, 57, 59, 61, 64-65, 67-72, 77, 82, 85, 87, 90, 94, 99, 111-115, 117, 121, 123-125, 127-131, 136, 138, 139, 142-155, 157-158, 162-163, 166, 169, 174, 176, 195, 199, 201, 204, 206, 209, 212, 216, 219, 222, 227, 235, 244-245, 249, 258-259, 264, 268, 271-273, 275, 278, 281, 308, 311, 313, 325, 327, 334, 338, 344

SRB: 15-22, 186-191, 194-195, 202-203, 208, 232, 235

Fifth Grade

TLG: 19-21, 23-25, 27-31, 33-35, 38-41, 44-49, 51-55, 58-61, 77, 80, 83, 86, 90, 108, 110-113, 116-119, 121-124, 128, 131-132, 147, 149, 153, 163, 166, 168, 176, 179, 180, 184, 185, 190, 192, 194, 201, 215-218, 220-223, 227-228, 231-240, 243, 247-248, 266, 272, 278, 285, 313, 319, 354, 360, 362, 366, 370, 373, 376, 381, 385, 387, 405, 407, 416-418, 505, 523, 528, 533-534, 541, 546, 552-554, 557-558, 561, 563, 609, 611, 614, 619, 625, 630, 636, 642, 648, 673-674, 677, 682, 688, 694, 706-708, 712-713, 718-719, 722, 724, 728-729, 747, 750, 754-755, 760-766, 768, 772, 794, 796, 800-803, 826, 834, 836-837, 843, 846-847, 850-852, 855-856, 871, 874, 886, 893, 902, 909, 912, 915, 917, 920, 922

SMJ: 8-9, 11-17, 19-26, 28, 31, 33, 35, 46-47, 50, 57, 61, 63, 73, 76, 81, 83-85, 94, 100, 102-103, 109-110, 112-117, 125, 130, 135, 138, 153, 157, 169, 173, 180-181, 187, 189, 196, 210, 214, 223, 228, 231, 236, 241, 244, 248, 250, 264, 268, 276, 280, 283, 287-288, 294, 300, 305, 309, 313, 317, 324-326, 329-337, 341, 347-349, 353-354, 360, 375, 383, 389, 390-391, 397-398, 400-401, 405, 409, 418, 427, 431, 435, 439

SRB: 10-11, 18-24, 285

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 8 – 10
Mathematics Standard A1: Numeration

A1.2.4 Identify and describe different uses for the same numerical representation.

Third Grade

TLG: 41-44, 48, 58, 69, 79, 102, 126, 179, 229, 231, 252, 261, 265, 268, 317-318, 328-330, 334-336, 340-343, 346-347, 352-353, 357-359, 363, 382, 536, 542, 547, 551-557, 572, 597-600, 612, 617, 620-621, 626, 637, 670-673, 681, 684, 686-689, 691-695, 702-703, 708-710, 713-714, 726, 745, 760-761, 764, 771, 785, 788-793, 795-797, 819, 828, 839, 849, 858-861, 867

MM: 11, 85, 157

Fourth Grade

TLG: 128, 147-151, 184-188, 193, 288-289, 385, 396

SMJ: 50, 52, 68, 115, 157

SRB:

Fifth Grade

TLG: 41, 179, 236-240, 521-522, 525, 529, 533, 540, 553, 561, 630, 642, 706-707, 754, 756

SMJ: 83, 115-116, 224-225, 231, 235, 283, 288, 324-326, 347

SRB: 201-202, 215-216

A1.2.5 Model and explain the process of adding and subtracting fractions with common denominators and decimals that represent money.

Third Grade

TLG: 399, 676-677, 683, 686, 688, 694, 706, 864

MM: 8, 31

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 8 – 10

Mathematics Standard A1: Numeration

A1.2.5 Model and explain the process of adding and subtracting fractions with common denominators and decimals that represent money.

Fourth Grade

TLG: 156, 164, 174, 182, 193, 201, 216, 228-231, 233-236, 263-264, 289, 347-349, 384, 390, 420, 444-446, 529-534, 538-541, 547-548, 554, 557, 568, 578, 580, 600, 610, 625, 635, 660, 672, 786, 798, 814-816, 846, 849-851, 854, 857, 860, 862-863, 868-870, 877-879

SMJ: 55, 58, 61, 67, 72, 79, 81, 88, 91-94, 117, 124, 146, 156, 163, 200, 202-204, 209, 215, 222, 230, 241, 249, 259, 268, 273, 308, 313, 320, 327-328, 331, 333, 338, 344

SRB: 24, 53-55, 179-180, 192-193

Fifth Grade

TLG: 15-17, 23, 25, 40-41, 45, 49, 59, 61, 75, 89, 95, 97, 112, 128, 156, 217, 231, 233-234, 240, 243, 247, 277-279, 290, 299, 303, 319, 330-331, 334, 387-402, 405, 424-426, 505, 546, 556-558, 561, 581-582, 584-589, 591-595, 602, 630, 636, 642-643, 648, 653, 694, 713, 770, 782, 795, 819, 841-842, 851, 857, 881, 897

SMJ: 2-3, 5, 10, 17, 22, 28, 34, 36, 48, 57, 69, 105, 113-114, 133-134, 142, 148, 158, 165-166, 198-199, 201-203, 205-206, 213, 241, 246, 248, 252, 254-255, 257-259, 263, 283, 287, 317, 331, 362, 369, 377, 382, 394-395, 399, 403, 414, 425

SRB: 51, 62-63, 68-72, 211, 249-250, 256, 265-266, 288

A1.2.6 Identify and describe factors and multiples including those factors and multiples common to a pair or set of numbers.

Third Grade

TLG: 47, 232-233, 248, 254-258, 261, 273, 278-279, 301, 314, 388, 410, 450-451, 536, 541-544, 547, 552, 556, 558-562, 567, 570, 582, 612, 617, 627, 681-684, 698-700, 705-706, 711, 717, 722, 727-729, 745, 761, 775, 823, 828, 844, 849

MM: 41

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 8 – 10

Mathematics Standard A1: Numeration

A1.2.6 Identify and describe factors and multiples including those factors and multiples common to a pair or set of numbers.

Fourth Grade

TLG: 18, 29, 147-151, 156, 162-165, 167, 281-283, 285, 314, 529-534, 538-541, 547-548, 554-558, 562, 568, 574, 577-580, 600, 610, 625, 635, 660, 672

SMJ: 3, 7, 52, 57, 112-113, 200, 202-204, 209, 213-216, 219, 222, 227, 241, 249, 259, 268, 273

SRB: 7, 52-55, 166

Fifth Grade

TLG: 394-400, 402, 405-406, 410-415, 502, 505, 523, 546, 557, 563, 579, 582, 584-589, 591-595, 599, 600, 602, 642, 645-649, 651-653, 694, 709, 713, 795, 819, 831, 837, 841-842, 851, 857, 872-875, 881, 897, 920, 921

SMJ: 201-203, 205-206, 213-214, 223, 241, 248, 250, 252, 254-255, 257-259, 263, 288, 292-293, 317, 334, 377, 382, 388, 391, 394-395, 399, 403, 406-408, 414, 425

SRB: 64-65

A1.2.7 Demonstrate the commutative and identity properties of multiplication.

Third Grade

TLG: 211, 232, 249, 252, 254-258, 261, 268, 273, 278-279, 301, 314, 388, 410, 450-451, 536, 543-545, 547, 556, 562, 567, 582

MM: 41

Fourth Grade

TLG: 147-151, 154, 158, 160, 171, 184, 199, 281-282, 298

SMJ: 11, 52, 113

SRB: 134, 136

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 8 – 10
Mathematics Standard A1: Numeration

A1.2.7 Demonstrate the commutative and identity properties of multiplication.

Fifth Grade

TLG: 21, 23-25, 29, 37-40, 49, 60, 153, 218

SMJ 8-9, 15-17, 22, 63

SRB 205

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 8 – 10

Content Standard A2: Measurement

A2.2.1 Estimate and measure weights, lengths, and temperatures to the nearest unit using the metric and standard systems.

Third Grade

TLG: 32, 34, 151, 171-174, 176-179, 184-185, 191, 193, 196, 202, 207, 210, 228, 234, 251, 268, 272-274, 308, 314, 354, 359, 399, 402, 455-456, 458, 462-463, 471-473, 568-569, 612, 617, 668, 688, 705, 715, 719-720, 723, 729, 744, 746, 751, 755, 761, 764-765, 775, 780, 785, 797, 801-802, 822-823

MM: 87, 97, 136, 152

Fourth Grade

TLG: 51, 85, 96, 101, 113, 115-119, 125, 170-174, 178-179, 182, 187, 196-197, 199-201, 217, 226, 230, 236, 241, 243-246, 248-255, 259, 263, 284, 292-296, 312, 326, 338, 348, 370, 380, 390, 526, 533-534, 544, 552, 569, 581, 596, 598-600, 602-606, 612-613, 619, 621, 635, 639, 696, 744, 767

SMJ: 30, 34, 36, 41-43, 49, 59-61, 64, 67, 69, 76-77, 79, 90, 97-98, 100-103, 105-106, 109, 114, 118-119, 121, 130, 136, 142, 149, 155, 199, 206, 212, 229, 232-234, 236-237, 242, 248, 259, 281, 296, 305

SRB: 106-110

Fifth Grade

TLG: 76-77, 83, 96, 148, 156, 166, 217, 223, 225-229, 233, 239, 249, 295-296, 308, 314, 325, 357-358, 361, 363-366, 381, 391-392, 395, 401, 516, 534, 552, 614, 625, 673, 682, 748, 777, 787, 792-793, 796, 801, 818, 850, 852

SMJ: 30, 33, 38, 62, 69, 74, 105, 108-110, 114, 117, 121, 144-146, 151, 154, 161, 174, 178-180, 189, 200, 203, 208, 219, 232, 243, 268, 280, 300, 309, 371, 373-374, 381, 400

SRB: 166-169, 186-187

A2.2.2 Identify and use equivalent measurements (e.g. 60 minutes = 1 hour, 7 days = 1 week).

Third Grade

TLG: 53, 176, 178, 184, 191, 202, 206-207, 209, 229, 261, 268, 295, 317-318, 340-343, 346-349, 362, 382, 388, 455, 472, 568, 596, 600, 607, 673, 683, 729, 744, 746, 768-771, 775, 777, 785, 792, 797, 823, 834, 852, 855

MM: 12, 19, 21, 37, 63, 68, 74-75, 79-81, 82-84, 86, 90-93, 95, 98-99, 101, 104, 107, 109-111, 114, 116, 118-123, 126, 128, 131, 134-135, 137, 140, 142-143, 148, 155-156, 159

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 8 – 10

Content Standard A2: Measurement

A2.2.2 Identify and use equivalent measurements (e.g., 60 minutes = 1 hour, 7 days = 1 week).

Fourth Grade

TLG: 18, 29, 174, 179, 182, 193, 196, 199-200, 217, 221, 230, 243-246, 248, 252-255, 259, 263-264, 284, 289, 301, 370, 372, 380, 401, 539, 547, 552, 557, 568, 581, 596, 621, 684, 690, 696, 702, 708, 804, 820-824, 827, 829, 864, 868, 872, 879

SMJ: 3, 7, 61, 67, 72, 76, 85, 90, 100, 102, 105, 109, 117, 124, 149, 155, 169, 204, 209, 212, 215-216, 222, 229, 276, 279, 281, 284, 288, 314, 322-323, 325, 335, 338, 342, 344

SRB: 107-110, 119-120, 259

Fifth Grade

TLG: 15, 96, 126, 225-229, 319, 331, 337, 354, 358, 370, 394-395, 528, 844, 847

SMJ: 2, 38, 109-110, 158, 166, 168-169, 174-175, 181, 228, 396

SRB: 168

A2.2.3 Use a variety of measuring tools; describe the attribute(s) they measure.

Third Grade

TLG: 24, 27, 151, 168, 172-173, 176-179, 188, 190-191, 205, 207, 210, 228, 234, 251, 268, 308, 314, 340-342, 346-347, 349, 354, 359, 416, 426-427, 439, 455, 458, 465-467, 471, 473, 630, 729, 744, 746, 755, 758-761, 764, 768-769

MM: 61

Fourth Grade

TLG: 53-54, 79, 85, 96, 101, 113, 115-116, 119, 125, 174, 178, 187, 197, 201, 217, 241, 243-246, 248-251, 253-255, 259, 263, 284, 289, 295, 301, 312, 326, 332, 338, 344, 349, 370, 380, 390, 395-396, 398-401, 403-406, 409, 415, 419-420, 515, 521, 526, 533-534, 539, 544, 547, 552, 569, 581, 598-600, 602-606, 744, 761

SMJ: 20, 30, 34, 36, 41-42, 49, 64, 69, 77, 79, 97-98, 100-106, 109, 114, 117, 121, 124, 130, 136, 139, 142, 144, 146, 149, 155, 163-165, 167, 169-173, 176, 192, 195, 199, 201, 204, 206, 209, 212, 229, 232-238, 296, 303

SRB: 106-126

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 8 – 10

Content Standard A2: Measurement

A2.2.3 Use a variety of measuring tools; describe the attribute(s) they measure.

Fifth Grade

TLG: 75-77, 83, 96, 100-103, 133, 148, 155, 157, 159-164, 166-169, 172, 180, 184, 186-190, 194-195, 199, 217, 223, 225-229, 233, 239, 249, 265, 271, 274, 296, 304, 308, 314, 325, 358, 361, 363-365, 370, 391, 401, 516, 528, 531, 534, 552, 587, 614, 625, 636, 648, 653, 673, 682, 686, 691-695, 698, 700-701, 708, 723, 727, 729, 747-748, 755, 766, 786-789, 796, 801, 818, 826, 829, 831, 850, 886, 901-902, 911

SMJ: 29-30, 33, 38-40, 59, 62, 67, 70-71, 74-76, 84-85, 88-92, 94, 100, 105, 108-111, 114, 117, 121, 124, 129, 146, 151, 154, 161, 174-175, 178-179, 200, 208, 219, 228, 232, 243, 256, 268, 280, 287, 294, 300, 309-310, 314-316, 337, 340-341, 348, 359, 371-372, 381, 383, 386, 400, 418, 426-427, 432

SRB: 169, 187-190, 196

A2.2.4 Estimate and measure the dimensions of geometric figures.

Third Grade

TLG: 183, 185, 188, 190-191, 205, 207, 210, 324, 398, 403, 405, 409, 416, 427, 439, 537, 748-752, 754-756, 764-765, 785, 797, 801-802, 823, 834, 844, 855, 867

Fourth Grade

TLG: 243-246, 250-251, 515, 526, 569, 597-606, 612, 619-620, 622-626, 628-631, 635, 639-643, 767, 802-806

SMJ: 98, 101, 192, 199, 231-238, 242, 245, 248-259, 262, 305

SRB: 111-118

Fifth Grade

TLG: 108, 124, 249, 430-432, 516, 534, 686, 694-695, 698, 700-701, 708, 727, 729, 755, 766, 789, 796, 826, 829, 831, 850

SMJ: 46, 54, 121, 219, 232, 310, 316, 318, 340, 348, 359, 372, 383, 386, 400

SRB: 156-159, 164

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 8 – 10

Content Standard A2: Measurement

A2.2.5 Tell time using analog and digital clocks identifying AM and PM; find elapsed time.

Third Grade

TLG: 18, 31-34, 38, 41, 48, 58, 69, 72-75, 78-79, 102, 144, 174, 241, 251, 336, 419, 422, 673, 796-797, 852-854, 856, 866

MM: 71-73, 80

Fourth Grade

TLG: 22, 34, 168, 182, 292, 396, 574

SMJ: 5, 9, 66, 118-119, 182, 227

SRB: 54, 220-221, 259

Fifth Grade

TLG: 40, 49, 126, 330, 397, 511, 553, 767

SMJ: 17, 22, 164

SRB:

A2.2.6 Read, write, and use money notation, determining possible combinations of coins and bills to equal given amounts; count back change for any given situation.

Third Grade

TLG: 43, 53, 55-59, 61-65, 70, 74, 77-79, 96, 102, 108, 113, 120, 126, 133, 168, 201, 207, 229, 251-252, 257, 268, 279, 327, 337, 393, 570, 633, 664, 800, 864

MM: 12, 22, 35, 43, 64-69, 70, 74, 141, 144-145

Fourth Grade

TLG: 156, 163, 216, 233-236, 263, 302, 348-349, 384, 390, 420, 519-521, 524, 526, 579, 600, 610, 643, 665-666, 676, 759-761, 798, 811, 815-816, 829, 851, 854, 857, 860, 870, 877

SMJ: 55, 57, 81, 91-93, 146, 156, 163, 192-194, 230, 241, 264, 272, 274, 302, 313, 319-320, 325, 328

SRB: 24, 148-149, 152, 192-193

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 8 – 10

Content Standard A2: Measurement

A2.2.6 Read, write, and use money notation, determining possible combinations of coins and bills to equal given amounts; count back change for any given situation.

Fifth Grade

TLG: 17, 25, 75, 95, 97, 112, 148, 217, 231, 233, 238, 240, 247, 264, 267, 280, 287, 289-290, 293, 303, 307, 309, 312, 330, 424-426, 545, 547, 552, 588, 601-602, 611, 629-630, 632, 634, 636, 672, 708, 764, 822, 898

SMJ: 5, 10, 37, 48, 105, 113-115, 123, 140-142, 148-149, 165, 240, 244, 257, 262-263, 282, 285, 299, 356

SRB: 24, 44-46, 49, 51-53, 74, 97, 99, 100-101, 211, 217-218, 249-250

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 8 – 10
Content Standard A3: Estimation And Computation

A3.2.1 Describe and use a variety of estimation strategies including rounding to the appropriate place value, multiplying by powers of 10, and using front-end estimation to check the reasonableness of solutions.

Third Grade

TLG: 62, 64-65, 77, 129-130, 132-133, 135, 137-139, 143, 149, 168, 175, 181, 187, 191, 210, 227, 264, 277, 312-315, 318, 323, 399, 564-566, 568, 572, 577, 581-582, 600, 617, 627, 676, 679, 681, 699, 715, 745, 761, 823, 846, 860, 864

MM: 10, 50-51

Fourth Grade

TLG: 79-80, 156, 164, 170, 178, 201, 217, 224-226, 249-251, 292-295, 300-303, 307, 310, 312, 320, 323, 326, 332, 336-339, 341, 344, 346-347, 377, 379-380, 386, 406, 614, 632, 639, 744, 761, 767, 785-787, 792, 805, 817, 829, 846, 856-857, 876, 879

SMJ: 55, 58-59, 64, 79, 82, 86-87, 100-102, 118, 123, 127-130, 133, 136, 139-140, 142, 144, 153-155, 158, 172, 244, 296, 303, 305-307, 311, 315, 321, 325, 327, 330-331

SRB: 154-157

Fifth Grade

TLG: 34, 40, 44, 48-49, 54, 105, 111-113, 116-117, 123-124, 131-132, 147-148, 150-153, 156, 163, 172, 179, 201, 215, 217, 229-233, 239, 247, 278, 289, 291, 306, 319, 330-331, 333, 354, 360, 367, 370, 376, 404, 541, 552, 581, 588, 594, 602, 629, 630, 634
712, 747, 760 150-152, 703, 881, 847

SMJ: 14, 17, 20-22, 26, 29-30, 47, 50-51, 53, 61-63, 65-66, 69, 73, 75-78, 83, 102-103, 105, 113, 116, 135, 140-141, 144, 152-153, 158, 165-166, 173, 179, 181, 187, 236, 244, 253, 257, 260, 263, 279, 282, 285, 290-291, 295, 309, 322-323, 330, 341, 349, 351, 361, 414, 425, 624, 641-642, 682, 705

SRB: 37, 225-228

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 8 – 10

Content Standard A3: Estimation And Computation

A3.2.2 Recall and use basic multiplication and division facts orally, with paper and pencil without a calculator.

Third Grade

TLG: 211, 248-250, 252, 254-258, 260-262, 266-268, 270, 273, 277-279, 295, 301, 308, 314, 319, 322-323, 330, 342, 354, 363-364, 382, 388, 393, 405, 410, 416, 421, 427, 439, 448, 450-451, 534-538, 541-548, 551-557, 559-562, 569, 572, 577, 579-582, 596, 600, 607, 612, 622, 629-630, 633, 637, 639, 656, 673, 679, 681-684, 686, 697-698, 700, 706, 711, 722, 751, 766, 771-772, 785, 792, 800, 819, 828, 839, 849, 855

MM: 10-11, 13, 15, 41, 43, 45-46, 48-49, 51, 82, 87, 96, 101, 107, 110, 114-115, 123-124, 126, 139, 143, 147, 150, 154, 158

Fourth Grade

TLG: 80, 83-86, 91, 96, 101, 113, 125, 131, 147-151, 153-156, 158-161, 163-165, 167, 170, 171, 173, 174, 178, 180-183, 186-188, 190-193, 197, 199-201, 214, 217, 220-221, 225, 230, 245, 265, 281-285, 287-290, 291, 295, 298, 300-302, 304-314, 316-321, 323, 326, 332, 338, 344, 347-349, 370, 376-381, 385, 387, 390, 392, 395, 401, 410, 415, 419, 420, 521, 526, 533, 539, 544, 552, 557, 562, 568, 574, 605, 614, 625, 635, 643, 660, 665, 672, 675, 696, 703, 786, 792, 798, 829, 846, 863, 868, 879

SMJ: 28-30, 33-34, 36, 41, 49, 51-52, 54, 57, 59, 61, 64-65, 68-72, 77, 82, 85, 87, 90, 94, 99, 111-115, 121, 123, 125, 127-131, 136, 138-139, 142, 144, 146, 148-149, 152-155, 157-158, 163, 166, 169, 174, 176, 195, 199, 201, 204, 206, 209, 212, 216, 219, 222, 227, 235, 244, 249, 259, 264, 268, 271, 273, 281, 308, 311, 313, 325, 327, 334, 338, 344

SRB: 15-22, 186-191, 194-195, 202-203, 208, 232, 235

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 8 – 10

Content Standard A3: Estimation And Computation

A3.2.2 Recall and use basic multiplication and division facts orally, with paper and pencil without a calculator.

Fifth Grade

TLG: 19-21, 23-25, 27-31, 33-35, 38-41, 44-49, 51-55, 58-61, 77, 80, 83, 86, 90, 108, 110-113, 116-119, 121-124, 128, 131-132, 147, 149, 153, 163, 166, 168, 176, 179, 180, 184, 185, 190, 192, 194, 201, 215-218, 220-223, 227-228, 231-240, 243, 247-248, 266, 272, 278, 285, 313, 319, 354, 360, 362, 366, 370, 373, 376, 381, 385, 387, 405, 407, 416-418, 505, 523, 528, 533-534, 541, 546, 552-554, 557-558, 561, 563, 609, 611, 614, 619, 625, 630, 636, 642, 648, 673-674, 677, 682, 688, 694, 706-708, 712-713, 718-719, 722, 724, 728-729, 747, 750, 754-755, 760-766, 768, 772, 794, 796, 800-803, 826, 834, 836-837, 843, 846-847, 850-852, 855-856, 871, 874, 886, 893, 902, 909, 912, 915, 917, 920, 922

SMJ: 8-9, 11-17, 19-26, 28, 31, 33, 35, 46-47, 50, 57, 61, 63, 73, 76, 81, 83-85, 94, 100, 102-103, 109-110, 112-117, 125, 130, 135, 138, 153, 157, 169, 173, 180-181, 187, 189, 196, 210, 214, 223, 228, 231, 236, 241, 244, 248, 250, 264, 268, 276, 280, 283, 287-288, 294, 300, 305, 309, 313, 317, 324-326, 329-337, 341, 347-349, 353-354, 360, 375, 383, 389, 390-391, 397-398, 400-401, 405, 409, 418, 427, 431, 435, 439

SRB: 10-11, 18-24, 285

A3.2.3 Add and subtract whole numbers and fractions with common denominators to 12 and decimals, including money amounts, using models and algorithms.

Third Grade

TLG: 28-29, 33, 38, 41, 43-44, 46-48, 50-53, 57, 67-70, 74, 77, 79, 81, 93-103, 105-108, 111-114, 116-120, 123-145, 149-150, 165, 168, 174, 179, 184, 191, 193, 196, 198, 201-202, 207, 210, 225, 229, 241, 245, 251, 261, 268, 279, 301, 308, 314, 325, 336, 348, 359, 382, 388, 393, 410, 535-536, 538, 547, 551-557, 559, 565-568, 572-573, 577, 581, 600, 607, 622, 656, 671-674, 676-679, 683, 694, 697-700, 706, 710-711, 713-714, 722, 727, 745, 771, 785, 792, 797, 802, 819, 839, 844, 849, 855-856, 858, 860-861, 867

MM: 10-11, 13, 15, 42, 45-47, 82, 87-88, 92, 94, 97, 103, 107-111, 113, 116, 118-119, 122-125, 127, 129, 136, 139, 142, 153-154

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 8 – 10

Content Standard A3: Estimation And Computation

A3.2.3 Add and subtract whole numbers and fractions with common denominators to 12 and decimals, including money amounts, using models and algorithms.

Fourth Grade

TLG: 16, 18-22, 25, 29-30, 34, 40, 45, 50, 55, 59-61, 76, 80, 83-86, 88, 90-91, 93-97, 99, 107, 110-114, 118, 121-126, 129-131, 150, 152, 156, 160, 164, 170, 174, 177-178, 180-183, 185-188, 190-194, 197, 199-201, 214, 216-217, 220-221, 224-226, 228-231, 233-237, 241, 245, 247, 250, 255, 259, 263-265, 284, 287-290, 292-296, 301-303, 315, 341, 348, 349, 370, 376, 384, 386, 390, 401, 420, 519-521, 524, 526, 529-533, 537-541, 547, 554, 557, 578-580, 600, 610, 625, 630, 635, 639, 641, 643, 660, 665, 666, 672, 676-677, 684, 696, 708, 759-761, 783, 786, 798, 811, 814-818, 820, 822, 827-829, 843, 846, 851, 854, 857, 860, 864, 868, 870, 872, 877, 879

SMJ: 3, 5, 7, 9, 11, 14, 19, 24, 26, 28-30, 32-34, 38-41, 44-48, 50, 51, 53, 55-59, 61-65, 67-72, 77, 79, 81-82, 85-88, 90-94, 97, 99, 102, 106, 108-109, 111, 114-115, 117-118, 121, 124, 146, 149, 152, 156, 158, 163, 169, 192-194, 200, 203-204, 209, 215-216, 230, 241, 249, 258-259, 264, 268, 272-276, 281, 288, 302, 308, 313, 319-320, 323, 325, 327-329, 331, 335, 338, 342, 344

SRB: 6, 148-149, 152

Fifth Grade

TLG: 15-17, 23, 25, 40-41, 49, 61, 75, 83-84, 86-91, 93-97, 102, 108, 110, 112-113, 117, 121-124, 128, 131-132, 148, 156, 163, 217, 233, 243-244, 277-279, 290, 303, 319, 330-331, 387-407, 424-426, 505-506, 516, 521-523, 525-529, 533-534, 537-541, 543-547, 549-553, 555-558, 561-563, 581-582, 584-589, 591-595, 602, 630, 642, 648, 653, 672, 677, 688, 699, 706-707, 713, 729, 747, 754, 759-760, 770, 776, 782, 789, 795, 819, 831, 841-842, 851, 857, 881, 897

SMJ: 2-3, 5, 10, 17, 22, 28, 32, 34, 36-37, 40-42, 45, 48-49, 52-54, 57, 62, 69, 73, 105, 114, 133-135, 142, 148, 158, 165-166, 198-204, 206-208, 210, 213, 219, 224-227, 231-242, 244-246, 248, 250, 252-255, 257-260, 263, 283, 288, 294, 299, 305, 313, 321, 324-326, 331, 340-341, 347, 349-352, 362-363, 369, 372, 377, 382, 388, 394-395, 399, 403, 414, 425

SRB: 13-17, 34-36, 68-73, 78, 92-93, 98, 135, 150, 204-206, 231, 235, 242, 265-266, 292, 294, 296

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 8 – 10

Content Standard A3: Estimation And Computation

A3.2.4 Multiply and divide multi-digit whole numbers by 2-digit numbers, limiting the 2-digit divisors to those that end in 0; multiply and divide decimals that represent money by whole numbers.

Third Grade

TLG: 313, 455, 472, 564-568, 570-571, 573, 579, 582, 596, 652-655, 668, 697-700, 702-703, 708-711, 713-717, 722, 727, 742, 745, 750, 755, 765, 775, 780, 785, 800, 819, 828, 839, 844, 849, 851, 856, 858, 860-861

MM: 43, 48, 79, 81, 84, 88, 90, 93, 95, 105, 110, 119-120, 152

Fourth Grade

TLG: 91, 281-285, 287-291, 295, 298, 300-302, 304-314, 316-321, 323, 326, 332, 338, 344, 347-349, 366-390, 392, 395, 397, 401-402, 406, 410, 412, 420, 515, 521, 526, 533, 539, 544, 547, 552, 557, 562, 568, 574, 600, 610, 617-625, 627-631, 635, 639-643, 657, 660, 663, 665, 669-670, 672-673, 675-685, 687-691, 693-709, 711-715, 730, 733, 735, 739, 741, 744, 750, 754-755, 761, 765, 767, 786, 792, 795, 798, 804-805, 808-812, 814, 817, 820, 822, 827-829, 846-852, 854-860, 862-870, 872-873, 876-879

SMJ: 33, 112-115, 117, 121, 123, 125, 128-131, 133, 136-139, 141-142, 144, 146-158, 162-163, 166, 169, 172, 174, 192, 195, 199, 201, 204, 206, 209, 212, 216, 219, 222, 227, 230, 241, 245-262, 264, 268-269, 272-279, 281-288, 292-293, 295-296, 298, 300-301, 303, 305, 308, 311, 313-319, 321-323, 325, 327-331, 333-338, 341-342, 344

SRB: 16-17, 20-22, 187, 202

Fifth Grade

TLG: 16, 33-35, 44, 48, 53-54, 58-59, 61, 77, 80, 86, 90, 94, 108, 110-124, 126-129, 131-132, 147, 149, 152-153, 163, 166, 168, 176, 179-180, 184-185, 190, 192, 194, 198-201, 215-218, 220-223, 228, 231-240, 242-249, 264, 266-269, 272, 278, 285, 309, 313, 354, 360, 362, 366, 370, 376, 381, 405, 407, 427-429, 503-505, 508-518, 520-529, 533, 677, 682, 687-688, 694, 699, 718, 747, 763, 766, 766, 834, 915, 917

SMJ: 3, 12-14, 19-21, 24-26, 28, 31, 35, 46-47, 49-57, 61, 63, 66, 73, 76, 81, 83-85, 94, 100, 102-103, 105-108, 112-117, 199, 121-123, 125, 130, 135, 138, 153, 169, 173, 1780-181, 187, 189, 210-212, 214-228, 231-323, 236, 241, 243-244, 246, 248, 250, 264, 268, 276, 280, 287, 294, 305, 309, 311, 313, 317, 321, 334, 341, 354, 359, 439

SRB: 18-24, 37, 41, 46

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 8 – 10

Content Standard A3: Estimation And Computation

A3.2.5 Find equivalent fractions. Convert between fractions and mixed numbers.

Third Grade

TLG: 399, 598, 612, 615-622, 625-628, 630, 633, 635-638, 656, 667-668, 673, 686, 688, 706, 715, 718, 727, 744, 751, 755, 765, 768, 775, 785, 799, 819, 828, 830-831, 834, 849

MM: 11-12

Fourth Grade

TLG: 223, 230, 376, 421, 525, 544, 546, 548-549, 551-553, 555, 558, 562, 574, 579, 600, 610, 664-665, 670, 673, 683, 712

SMJ: 89, 152, 178, 197-198, 206-207, 210-213, 219, 227, 230, 241, 270, 272, 356-357

SRB: 44-52, 196-197

Fifth Grade

TLG: 16, 20, 54, 228, 244, 249, 265-266, 277, 281-285, 288, 314, 325, 331, 334, 337, 377, 399, 402, 405, 510, 523, 528, 530, 552, 577-583, 587, 614, 617, 625, 643, 651, 677, 688, 707, 723, 727, 755, 766, 799, 871, 875, 881, 896, 898, 901, 922

SMJ: 4, 7, 26, 112, 119, 121, 124-125, 133, 136-137, 154, 161, 168, 205, 217, 223, 228, 243, 251-252, 256, 268, 273, 280, 305, 313, 327, 338, 348, 359, 414, 422-423

SRB: 59-63, 65-67, 277, 279

A3.2.6 Develop and interpret scales and scale models.

Third Grade

TLG: 172-173, 270-274, 276, 295, 308, 319, 330, 347, 419-422, 439, 745, 802

Fourth Grade

TLG: 81, 174, 179, 182, 193, 196, 200, 226, 236, 292-294, 396, 416, 513, 547, 597-600, 602-606, 612-615, 619-621, 625, 639-641, 702

SMJ: 67, 72, 76, 118-119, 208-209, 231-234, 236-238, 242, 245, 247-249, 284

SRB: 41, 125-126

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 8 – 10
Content Standard A3: Estimation And Computation

A3.2.6 Develop and interpret scales and scale models.

Fifth Grade

TLG: 225-229, 249, 391, 401, 803

SMJ: 109-110, 121, 200, 208, 379

SRB: 58, 104, 195

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 8 – 10

Content Standard A4: Functions And Relationships

A4.2.1 Use patterns and their extensions to make predictions and solve problems; describe patterns found in the number system including those formed by multiples, factors, perfect squares, and powers of 10.

Third Grade

TLG: 22-25, 29, 38, 43, 45-48, 51-52, 67-68, 70, 79, 96, 98-103, 174, 193, 196, 198, 207, 229, 234, 241, 249-250, 252, 264, 276, 295-296, 304-305, 312-315, 323, 325, 340-342, 359, 382, 399, 422, 451, 455, 472, 541, 544, 558-562, 567, 569-573, 579, 581-582, 596, 600, 619, 637, 639, 652-655, 658-660, 662, 664-665, 668, 673-674, 683, 697-700, 707, 720-721, 726-727, 742, 851, 864

MM: 9, 30, 34, 86, 88, 96, 98-99, 100, 106-110, 112, 114-115, 119-121, 123, 126, 128, 131-132, 137, 140-141, 145, 147-151, 155-156, 158-159

Fourth Grade

TLG: 18, 153, 162-165, 171, 174, 178, 182, 193, 201, 257-258, 281-283, 285, 289-290, 301, 330-331, 421, 515-516, 786

SMJ: 3, 57, 61, 64, 67, 72, 79, 107, 112-113, 117, 124, 137, 178, 191, 308

SRB: 138-146, 190

Fifth Grade

TLG: 43, 45, 102, 117, 153, 163, 201, 290, 303, 314, 392, 410-412, 506, 512, 514, 541, 552, 593, 609, 619-620, 637, 677, 688, 729, 759, 761, 766, 776, 789, 819, 847

SMJ: 18, 42, 52, 63, 73, 102, 142, 148, 154, 218, 236, 244, 259, 264, 276, 305, 313, 340, 352, 363, 372, 398

SRB: 214-218

A4.2.2 Generate and solve simple functions by identifying and applying multiplication and division patterns.

Third Grade

TLG: 105, 206-207, 241, 273, 278, 295, 301, 348, 382, 388, 393, 451, 537, 581, 611

Fourth Grade

TLG: 170, 174, 178, 182, 193, 314, 849-852, 854, 858, 862-865, 867-870, 872, 877-879

SMJ: 59, 61, 64, 67, 72, 328-329, 333-338, 341-342, 344

SRB: 138-146

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 8 – 10
Content Standard A4: Functions And Relationships

A4.2.2 Generate and solve simple functions by identifying and applying multiplication and division patterns.

Fifth Grade

TLG: 153, 163, 201, 541, 552, 609, 619-620, 637, 729, 759, 761, 766, 847

SMJ: 63, 73, 102, 236, 244, 264, 276, 340, 352, 398

SRB: 215-218

A4.2.3 Use a calculator to find a missing item in a number sequence.

Third Grade

TLG: 67, 100-101, 107, 113, 293, 692-694

MM: 13

Fourth Grade

TLG: 257-259, 851, 858, 862, 867-870, 872, 877-879

SMJ: 107, 328, 333-338, 341-344

Fifth Grade

TLG: 413-415

A4.2.4 Use words, lists, and tables to represent and analyze patterns.

Third Grade

TLG: 36-39, 73, 188, 190, 205-206, 255-256, 295-296, 305, 341, 472, 536, 542, 556-557, 561-562, 616, 788-792, 852-854

Fourth Grade

TLG: 18, 49, 56, 153, 162-165, 171, 174, 178, 182, 193, 201, 257-258, 281-283, 285, 289-290, 301, 330-331, 421, 438-443, 515-516, 753-756, 765-766, 786

SMJ: 3, 17, 57, 61, 64, 67, 72, 79, 107, 112-113, 117, 124, 137, 178, 191, 299

SRB: 74-75, 94, 138-146, 190

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 8 – 10
Content Standard A4: Functions And Relationships

A4.2.4 Use words, lists, and tables to represent and analyze patterns.

Fifth Grade

TLG: 43, 45, 102, 117, 153, 163, 201, 290, 303, 314, 392, 410-412, 506, 512, 514, 541, 552, 593, 609, 619-620, 637, 677, 688, 729, 759, 761, 766, 776, 789, 819, 847

SMJ: 18, 42, 52, 63, 73, 102, 142, 148, 154, 218, 236, 244, 259, 264, 276, 305, 313, 340, 352, 363, 372, 398

SRB: 214-218

A4.2.5 Explain the purpose of variables and use them in open sentences to express relationships and describe simple functions.

Third Grade

TLG: 105, 110

Fourth Grade

TLG: 30, 80, 83, 143, 170, 174, 178, 182, 190-193, 199, 214, 217, 220, 225, 235, 245, 247, 259, 379-381, 385, 618, 786, 798, 808, 851, 864, 872

SMJ: 59, 61, 64, 67, 71-72, 82, 87, 94, 99, 108, 153-155, 157, 308, 313, 329, 335, 342

SRB: 128-129, 132-136, 142-146

Fifth Grade

TLG: 46-47, 95, 97, 102, 112, 117, 132, 153, 156, 163, 168, 201, 236-240, 243-244, 247, 290, 399, 541, 552, 609, 619-620, 637, 699, 729, 747-748, 755-759, 762-766, 770-771, 777, 779, 794, 799-801, 803, 819, 822, 826, 829, 831, 837, 842, 851, 855, 896, 898, 917

SMJ: 36-37, 42, 48, 52, 63, 68, 73, 76, 102, 115-116, 142, 205, 243-244, 264, 276, 321, 340, 341, 343, 341, 348, 350-352, 354, 356-357, 359, 361, 366, 375, 379-382, 386, 388, 391, 395, 423, 439

SRB: 200-218, 256-257

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 8 – 10

Content Standard A5: Geometry

A5.2.1 Identify and compare various triangles and quadrilaterals according to their sides and/or angles.

Third Grade

TLG: 32, 182-183, 190, 324, 365, 386, 397-400, 402-406, 427, 434, 439, 447-449, 544, 562, 706

MM: 18, 53, 55, 58-59

Fourth Grade

TLG: 26-27, 29, 33-35, 37-45, 50, 55-56, 59-61, 80, 91, 103, 113, 129, 405, 600, 734, 791

SMJ: 8, 10-11, 14, 18-19, 23-24, 28, 33, 41, 171, 230, 310

SRB: 82-86, 97

Fifth Grade

TLG: 16-17, 25, 77, 102, 108, 113, 124, 128, 133, 172-176, 178-180, 182-184, 187-190, 193-196, 199-200, 217, 266, 278, 366, 381, 614, 636, 648, 655, 688, 727, 755, 766, 770, 782, 803, 818

SMJ: 4-5, 10, 31, 42, 46, 49, 54, 57, 59, 77-80, 82, 86-90, 92, 98-99, 105, 125, 135, 180, 189, 268, 287, 294, 296, 312, 348, 359, 362, 369, 379-380

SRB: 132-136, 156-157, 164, 289

A5.2.2 Compare and contrast plane and solid figures (e.g., circle/sphere, square/cube, triangle/pyramid) using relevant attributes, including the number of vertices, edges, and the number and shape of faces.

Third Grade

TLG: 365, 436-437, 440, 442-445, 447-449, 467, 547, 567, 576, 679

MM: 17-18, 58

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 8 – 10

Content Standard A5: Geometry

A5.2.2 Compare and contrast plane and solid figures (e.g., circle/sphere, square/cube, triangle/pyramid) using relevant attributes, including the number of vertices, edges, and the number and shape of faces.

Fourth Grade

TLG: 22, 26-29, 32-35, 37-45, 47-52, 54-56, 58-61, 80, 91, 101, 103, 125, 129, 174, 182, 193, 250, 259, 517, 600, 630, 734, 744, 747, 765, 789-793, 795-800, 802-806, 808-812, 817, 828

SMJ: 4, 8, 10-19, 21-24, 28, 33, 36, 49, 61, 67, 72, 102, 109, 230, 257, 296, 297, 309-312, 314-319, 321

SRB: 82, 86-89

Fifth Grade

TLG: 16-17, 25, 77, 90, 102, 108, 113, 117, 124, 128, 133, 172-176, 178-180, 182-184, 187-190, 193-196, 199-200, 217, 233, 266, 273, 278, 366, 381, 609, 614, 619, 630, 636, 642, 648, 655, 673, 688, 691, 699, 710-719, 722, 727-728, 755, 765-766, 770, 782, 795, 803, 817-820, 822-827, 829-831, 836-837, 851-852, 855-857

SMJ: 4-5, 10, 31, 35, 42, 46, 49, 52, 54, 57, 59, 77-80, 82, 86-93, 98-99, 105, 114, 125, 135, 180, 189, 264, 268, 276, 283, 287-288, 294, 296, 312, 321, 328-329, 332-336, 348, 358-359, 362, 369, 377, 379-380, 384-387, 389-391

SRB: 132-142, 144, 156-159, 164, 289, 293

A5.2.3 Identify and model geometric figures that are congruent, similar, and/or symmetrical.

Third Grade

TLG: 188, 190, 365, 411, 416, 424-428, 430-431, 434, 436, 439, 444, 449-450, 467, 544, 562, 575-576, 656, 754-755

Fourth Grade

TLG: 32-35, 37-41, 45, 47-51, 55-56, 59, 80, 438-443, 660, 672, 684, 696, 708, 715, 731-734, 736-740, 742-745, 747-751, 754-756, 761, 764-767, 786, 789-793, 795-800, 802

SMJ: 268, 273, 276, 281, 288, 290, 295, 297, 301, 303-304

SRB: 80, 82-95, 103-104

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 8 – 10

Content Standard A5: Geometry

A5.2.3 Identify and model geometric figures that are congruent, similar, and/or symmetrical.

Fifth Grade

TLG: 124, 172-176, 178-180, 182-184, 193-195, 581, 594, 655, 688, 718, 770, 817-820, 823-827

SMJ: 54, 77-80, 96-99, 253, 260, 296, 312, 334, 362, 380, 384-385

SRB: 126-164, 289, 293

A5.2.4 Distinguish between area and perimeter; find both using a variety of methods including rulers, grid paper, and tiles.

Third Grade

TLG: 183, 185, 187-191, 193-202, 210-211, 229, 231, 234, 241, 245, 257, 268, 273, 314, 319, 324, 330, 336, 399, 403, 405, 409, 416, 427, 439, 544, 558, 662, 673, 683, 694, 706, 711, 722, 744, 780-781, 801, 844, 860

MM: 82

Fourth Grade

TLG: 515, 521, 533, 581, 597-600, 604-605, 607-610, 612-620, 622-631, 633-635, 639-643, 657, 660, 665, 672, 677, 684, 690, 696, 699, 702, 708, 733, 750, 767, 808, 814, 846, 857

SMJ: 192, 195, 201, 229-234, 235, 239, 242, 244-262, 268, 272-273, 275-276, 279, 281-282, 284, 288, 292, 298, 305, 327, 331

SRB: 111, 113-116

Fifth Grade

TLG: 108, 124, 427-432, 516, 534, 563, 588, 602, 624-625, 654, 684-689, 691-696, 698, 700, 707, 723, 727-729, 760, 766, 793, 796, 801, 803, 826, 850, 855-856

SMJ: 46, 54, 219, 232, 250, 257, 263, 278, 296, 310-311, 314-316, 319, 327, 338, 340, 349, 359, 374, 379, 383, 400

SRB: 170-178

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 8 – 10

Content Standard A5: Geometry

A5.2.5 Identify and model transformations of geometric figures, describing the motions as slides, flips, or rotations.

Third Grade

TLG: 181-182, 386, 391-393, 395, 413-417, 419-422, 426, 434, 449, 836, 863

Fourth Grade

TLG: 393, 438-443, 731-734, 736-738, 740, 742-745, 747-751, 753-756, 765, 786, 792, 798, 805, 817

SMJ: 291, 293, 297-299, 308, 311, 313, 315, 321

SRB: 92-94

Fifth Grade

TLG: 182-184, 190, 675-676, 680-681, 683

SMJ: 86-87, 302-303, 306-307

SRB: 147-148, 150-151

A5.2.6 Locate and describe objects in terms of their position with and without compass directions; identify coordinates for a given point or locate points of given coordinates on a grid.

Third Grade

TLG: 795-797, 819, 828, 839, 849, 867

Fourth Grade

TLG: 79, 388-391, 395-396, 400, 406, 415, 419, 544, 552, 739, 755

SMJ: 160-161, 166, 168, 172, 176, 206, 212, 295, 301

SRB: 124, 199-200, 213

Fifth Grade

TLG: 557, 614, 625, 655, 669-673, 675-678, 680-683, 694, 713, 724, 727-729, 773

SMJ: 247, 268, 280, 296-299, 301-303, 306-308, 317, 331, 340, 364

SRB: 192, 281

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 8 – 10

Content Standard A5: Geometry

A5.2.7 Sketch and identify line segments, midpoints, intersections, parallel, and perpendicular lines.

Third Grade

TLG: 32, 179, 184, 191, 196, 202, 207, 234, 251, 268, 308, 314, 324, 365, 379-383, 385-389, 393, 398-400, 402-406, 408, 410, 416, 422, 427, 431-432, 437-438, 442-445, 447, 449-450, 547, 552, 562, 577, 612, 617, 662, 715, 729, 761, 780

MM: 57, 60

Fourth Grade

TLG: 20-23, 26-28, 32-35, 37-56, 59-61, 91, 101, 103, 113, 125, 129, 150, 160, 217, 225, 241, 253, 255, 263, 338, 534

SMJ: 4, 5-6, 8-20, 22-24, 33, 36, 41, 49, 53, 56, 82, 87, 97, 103, 106, 142

SRB: 76-77, 80-81, 99, 103-104

Fifth Grade

TLG: 128, 217, 233, 249, 265-266, 278, 825

SMJ: 57, 105, 114, 121, 124-125, 135

SRB: 126-164

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 8 – 10

Content Standard A6: Statistics/Probability

A6.2.1 Collect, organize, and display data creating a variety of visual displays including tables, charts, and line graphs.

Third Grade

TLG: 17-19, 36-38, 53, 65, 73-75, 80, 125-126, 167-168, 205, 357-359, 405, 458, 571-572, 601, 623, 666, 749, 754-758, 761, 788-793, 801, 821-824, 845, 847-848, 852-854, 858-860

Fourth Grade

TLG: 99-102, 104-107, 116-119, 129, 170, 174, 193, 216, 220-221, 234-236, 238, 241, 255, 292, 294, 445, 665, 670, 672, 676-677, 682, 684-685, 693-697, 739, 786, 804, 844, 850-855, 860, 862-864, 867-869, 872-873, 877-879

SMJ: 35, 43, 59, 61, 72, 80-81, 83-84, 93, 95, 118, 120, 272, 274-276, 280, 294, 308, 314, 328-329, 333, 335, 338, 341, 344, 356-357

SRB: 62-64, 68-69, 214, 223-225, 241-243, 245-249

Fifth Grade

TLG: 146, 148, 153, 156, 163, 296, 308, 312-314, 328, 337, 352-353, 355, 359, 376, 379, 391, 401, 405, 437, 541, 552, 677, 688, 729, 763-765, 768, 771, 773-774, 776, 780, 789, 800, 826, 837, 847, 884-885, 908, 913, 916, 923

SMJ: 60, 62-63, 69, 73, 146, 151-152, 163, 168, 177, 190-191, 200, 208, 236, 244, 305, 313, 340, 354-357, 360, 363-365, 367-368, 372, 383, 391, 398, 429, 433, 437, 441

SRB: 111-113, 116-118

A6.2.2 Present the data using a variety of appropriate representations and explain the meaning of the data.

Third Grade

TLG: 37-38, 43, 65, 73-75, 80, 125-126, 205-206, 358-359, 361, 458, 468-470, 572, 666, 773-774, 788-793, 822-824, 848, 852-854, 858-860

Fourth Grade

TLG: 78-81, 99-102, 104-108, 116-119, 159, 168-169, 195-197, 216, 298-300, 337, 339, 342, 565, 571-575, 579, 634, 685, 687-691, 694-697, 852-853, 857-859, 864, 867, 869, 873, 878

SMJ: 27, 35, 37-38, 42-43, 73-75, 81, 122, 140, 143, 182-183, 224-225, 260-261, 277, 280

SRB: 63-69

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 8 – 10

Content Standard A6: Statistics/Probability

A6.2.2 Present the data using a variety of appropriate representations and explain the meaning of the data.

Fifth Grade

TLG: 16, 20, 30, 61, 77, 90, 100-103, 108, 132, 146, 148, 153, 156, 163, 186-188, 272, 285, 296, 308, 312-314, 328, 337, 352-353, 355, 359, 363-369, 371, 376, 379-381, 391, 396, 401, 405-406, 437, 505, 523, 541, 552, 677, 688, 729, 755, 763-766, 768, 771, 773-774, 776, 780, 789, 800, 826, 837, 847, 884-885, 907-908, 913, 916, 923

SMJ: 3, 7, 11, 28, 31, 35, 39-40, 45, 60, 62-63, 69, 72-73, 89-90, 130, 138, 146, 151-152, 163, 168, 171, 177-179, 184, 189, 190-192, 200, 204, 207-208, 214, 223, 236, 244, 305, 313, 340, 348, 354-357, 359, 360, 363-365, 367-368, 372, 383, 391, 398, 429-430, 433, 437, 441

SRB: 111-118

A6.2.3 Describe and interpret a data set using mean, median, mode, and range.

Third Grade

TLG: 37-38, 298, 308, 319, 330, 342, 405, 434, 458, 472, 572, 627, 729, 751, 771, 773-781, 788-793, 797, 799, 801, 819, 828, 839, 849, 860

MM: 120

Fourth Grade

TLG: 17, 61, 99-102, 104-108, 116-119, 129, 156, 164, 200, 216, 246, 255, 515, 526, 600, 610, 733, 750, 873

SMJ: 2, 26, 35, 37-38, 42, 45, 55, 58, 81, 192, 199, 230, 241, 293, 298

SRB: 65-68

Fifth Grade

TLG: 16, 20, 30, 61, 77, 90, 100-103, 108, 132, 148, 156, 163, 186-188, 272, 285, 296, 308, 337, 353, 355, 363-369, 371, 376, 380-381, 396, 401, 405-406, 505, 523, 755, 766, 907-908

SMJ: 3, 7, 11, 28, 31, 35, 39-40, 45, 62, 69, 72, 89-90, 130, 138, 146, 151, 168, 171, 178-179, 184, 189, 192, 204, 207, 214, 223, 348, 359, 429-430

SRB: 113-115

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 8 – 10
Content Standard A6: Statistics/Probability

A6.2.5 Estimate whether a game is mathematically fair or unfair; analyze and present probability data using simple fractions.

Third Grade

TLG: 803, 826-827, 829, 834, 866

Fourth Grade

TLG: 434-436, 565-569, 571-575, 609-610, 614, 620, 625, 630, 635, 811, 822

SMJ: 220, 223-225, 240-241, 245, 249, 258-259, 319, 323

Fifth Grade

TLG: 105-109, 146-147, 320, 321, 359, 375, 378, 819, 857, 877-882, 921

SMJ: 43-44, 176-177, 185, 382, 403, 410-413

SRB: 122-124

A6.2.6 Conduct simple probability experiments using concrete materials and represent the results using fractions and probability.

Third Grade

TLG: 803, 817-819, 820-822, 824, 827-829, 831-835, 837-845, 847-850, 855, 860, 863, 865-866

Fourth Grade

TLG: 395, 410, 421, 565-569, 571-575, 579, 600, 609-610, 614, 620, 625, 630, 635, 690, 744, 761, 822

SMJ: 166, 174, 178, 220-225, 230, 240-241, 244-245, 249, 258-259, 279, 296, 303, 323

SRB: 70-72

Fifth Grade

TLG: 105-109, 146-147, 320, 321, 359, 375, 378, 819, 857, 877-882, 921

SMJ: 43-44, 176-177, 185, 382, 403, 410-413

SRB: 122-124

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 8 – 10

Content Standard B: Problem-Solving

B1.2.1 Read and summarize a problem, using mathematical terms and symbols.

Third Grade

TLG: 50-52, 99-100, 111-114, 116-120, 123-127, 132-133, 139-144, 149-150, 174, 183, 188-190, 205-206, 211, 227, 231-235, 237-239, 243-245, 251, 254, 257, 261, 264-265, 277-278, 298, 301, 314, 318, 320, 336, 347, 388, 399, 410, 419-422, 431-434, 471-472, 552-557, 559, 564-566, 568, 580-581, 596, 603-604, 609, 630-631, 633, 653-654, 675-679, 681-682, 691-694, 727, 754-756, 837-840, 845, 858-860, 863-866

Fourth Grade

TLG: 41, 56, 80, 91, 107, 118, 131, 170, 174, 176-178, 182, 187, 193, 197, 200, 216, 224, 226, 230-231, 234-236, 241, 255, 263, 292-296, 300-302, 307-310, 312, 314, 332, 347-349, 369, 371, 375-382, 384-387, 392, 395, 401, 420, 521, 533, 544, 552, 557, 561, 568, 574, 579, 620, 630, 640, 663, 665, 676-678, 690-691, 702, 707-708, 712, 714, 733, 750, 792, 795, 805, 817, 829, 846, 852-853, 858-859, 863, 866-869, 872-873, 877-879

SMJ: 28, 33, 38, 45, 51, 61-63, 67, 69, 72, 77, 81, 86, 90, 93, 97, 106, 118-119, 121, 123, 128-130, 138, 146-147, 150-151, 153-154, 156-157, 166, 169, 174, 195, 201, 206, 212, 215-216, 218, 222, 226, 245, 258, 269, 272, 274-275, 279, 284-285, 287, 293, 298, 311, 315, 321, 327, 334, 336-337, 341, 344

SRB: 148-158

Fifth Grade

TLG: 20, 30, 34, 93, 95-97, 132, 190, 217-218, 233-234, 236-240, 247, 272, 285, 366, 381, 385, 521, 822, 829, 545, 556, 558, 561, 588, 602, 619, 672, 694, 713, 754, 759, 799, 800, 802, 819, 826, 831, 841, 855, 891, 894-897, 904, 922

SMJ: 7, 11, 14, 36-37, 94, 105, 114-116, 130, 138, 180, 189, 196, 224-225, 240, 246, 257, 263, 276, 299, 317, 331, 347, 350-351, 382-383, 388, 394, 420, 422-423

SRB: 220-224

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 8 – 10

Content Standard B: Problem-Solving

B1.2.2 Select and apply a variety of strategies including making a table, chart or list, drawing pictures, making a model, and comparing with previous experience to solve problems.

Third Grade

TLG: 36-38, 51, 57, 59, 62, 65, 98-100, 103, 111-114, 116-120, 123-127, 132-133, 139-144, 149, 174, 185, 205, 225-229, 231-241, 243-246, 251, 254, 257, 261, 272-274, 277-278, 298, 301, 305, 312-314, 318, 320, 323-324, 328-330, 336, 339, 342, 347-349, 351, 362, 382, 388, 393, 399, 410, 422, 430-434, 471-473, 547, 552-557, 575-577, 580-581, 596, 599, 603-607, 609, 625, 630-633, 635-639, 653-655, 658-662, 668, 673, 675-679, 681-682, 686-689, 691-696, 700, 704, 715, 721-723, 726-729, 745-746, 758, 760-761, 764-765, 770-771, 780, 783, 788, 796, 800, 819, 831-835, 837-840, 842-845, 847-850, 852-856, 858-860, 864-866

MM: 20, 30, 62-63, 79, 81, 84, 87, 89-90, 93-95, 98-100, 104-108, 110, 112, 114-116, 118-119, 121-124, 126-132, 134-136, 139-141, 145, 147-151, 153-154, 156, 158-159

Fourth Grade

TLG: 41, 56, 80, 91, 107, 118, 131, 170, 174, 176-178, 182, 187, 193, 197, 200, 216, 221, 224, 226, 230-231, 234-236, 241, 255, 260, 263, 281-282, 292-296, 300-302, 307-310, 312, 314, 320, 332, 347-349, 369, 371, 375-387, 392, 395-396, 401-402, 410, 420, 444-446, 521, 533, 544, 552, 557, 561, 568, 574, 579, 620, 630, 640, 663, 665, 676-678, 690-691, 702, 707-708, 712, 714, 733, 750, 792, 795, 805, 817, 829, 846, 852-853, 858-859, 863, 866-869, 872-873, 877-879

SMJ: 28, 33, 38, 45, 51, 61-63, 67, 69, 72, 77, 81, 86, 90, 93, 97, 106, 112-113, 118-121, 123, 127-130, 133, 138, 146, 150-151, 153-154, 156-157, 166, 169, 174, 195, 201, 206, 212, 215-216, 218, 222, 226, 245, 258, 269, 272, 274-275, 279, 284-285, 287, 293, 298, 311, 315, 321, 327, 334, 336-337, 341, 344

SRB: 148-158

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 8 – 10

Content Standard B: Problem-Solving

B1.2.2 Select and apply a variety of strategies including making a table, chart or list, drawing pictures, making a model, and comparing with previous experience to solve problems.

Fifth Grade

TLG: 34, 38, 44, 49, 54, 59, 75-76, 83-84, 91, 93, 95-97, 102, 108, 112, 127, 129, 132, 147-148, 152, 155, 167-168, 180, 199, 215, 217-218, 227, 233-234, 236-240, 243, 247, 264, 267, 270-273, 278, 280, 285, 289-290, 296, 303, 308-309, 329-330, 366, 368, 381, 385, 405-406, 410-437, 505, 525, 529, 540-541, 552, 556, 558, 588, 602, 609, 619, 624, 629, 633, 636-637, 653, 673, 682, 768, 770, 773, 777, 850-851, 855-856, 874, 891, 896, 898, 902, 913, 917, 921-922

SMJ: 14, 16, 20, 22, 26, 29-30, 33, 36-38, 41, 45-46, 48, 55, 61, 65, 67, 75-76, 84, 103, 105, 109-110, 114-116, 122-123, 126-130, 134, 138, 140-142, 146, 148, 151, 162-165, 180, 182, 189, 196, 213, 235-236, 244, 246, 257, 263-264, 276, 279, 281, 284, 300, 309, 360-361, 364, 400, 409, 420, 422-423, 433

SRB: 220-228

B1.2.3 Explain and verify results of the original problem and apply what was learned to new situations.

Third Grade

TLG: 45-47, 98-100, 103, 185, 226-229, 231-235, 237-241, 243-246, 318, 320, 328-330, 349, 351, 471-473, 633, 675-679, 682, 686-688, 837-840, 842-845

MM: 20, 79, 81, 84, 86, 88, 90, 92-95, 98, 105, 119, 121, 131-132, 141, 145, 150-151, 155

Fourth Grade

TLG: 32, 34, 39, 41, 46, 48-51, 54-56, 59-61, 81, 84-86, 102, 129, 176-178, 200, 216, 224, 226, 230, 234-236, 294, 296, 300-302, 307, 377-381, 392, 420, 444-446, 539, 547-548, 579, 640, 676-678, 690-691, 712, 714, 795, 829, 852-853, 856, 858-859, 862, 866-869, 872-873, 877-879

SMJ: 8, 10, 15-18, 22-24, 62-63, 81, 86, 90, 93, 120, 123, 127-129, 153-154, 208, 274-275, 279, 330, 333, 336-337, 341, 344

SRB: 148-153

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 8 – 10

Content Standard B: Problem-Solving

B1.2.3 Explain and verify results of the original problem and apply what was learned to new situations.

Fifth Grade

TLG: 34, 38, 44, 49, 54, 59, 75-76, 84, 95, 97, 112, 132, 152-153, 155, 167-168, 199, 227, 234, 236-240, 243, 247, 267, 272, 309, 329, 366, 368, 373, 375, 378, 385, 392, 405-406, 420-422, 432, 437, 505-506, 521-522, 525, 529, 541, 553, 561, 582, 587, 593, 604, 609, 619, 643, 653, 672-673, 682, 727-729, 748, 770, 777, 783, 794, 796, 836-837, 842, 846, 850-851, 855-856, 874, 878, 896, 921-922

SMJ: 14, 16, 20, 22, 26, 29-30, 36-37, 48, 65, 67, 75-76, 109-110, 115-116, 130, 162-163, 182, 185-186, 188, 196, 213, 224-225, 236, 259, 264-265, 276, 299-300, 309, 340, 361, 375, 390, 400, 404, 411, 423

SRB: 220-228

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 8 – 10
Content Standard C: Communication

C1.2.1 Use the mathematical vocabulary appropriate to the problem.

Third Grade

TLG: 32, 34, 46-48, 50-52, 59, 62-63, 67-68, 77, 93, 105-106, 111-112, 116-117, 123-124, 129-132, 141-144, 150, 176-178, 182-185, 194-195, 199-200, 205-207, 231-233, 235, 241, 244, 246, 248, 264-265, 268, 271, 276, 294-296, 305, 327-331, 346, 351-353, 379-382, 385-389, 391-395, 397-400, 402-406, 409-410, 419-422, 424-428, 430-434, 472, 550-553, 564-568, 603-604, 609, 661-662, 666-667, 837-840, 863

MM: 157

Fourth Grade

TLG: 2-930

SMJ: 2-344

SRB: 1-207

Fifth Grade

TLG: 2-971

SMJ: 2-441

SRB: 1-384

C1.2.2 Represent mathematical and practical situations using concrete, pictorial, and symbolic representation.

Third Grade

TLG: 31-34, 36-39, 41-48, 50-53, 55-59, 61, 63-65, 67-70, 74-75, 77-80, 93-97, 100, 102-103, 105-108, 110-114, 116-120, 122-127, 129-133, 135-145, 149-151, 166-168, 171-179, 181-185, 187-191, 193-197, 199-202, 204-207, 210-211, 225-229, 231-241, 243-246, 249, 251-252, 254-257, 260-262, 264-268, 270-274, 276-279, 293-296, 299-301, 304-308, 311-315, 317-320, 322-325, 327-331, 333-337, 345-349, 351-355, 357-359, 361-365, 379-383, 385-389, 391-395, 397-400, 402-406, 408-411, 419-422, 424-428, 430-434, 436-440, 442-445, 447-451, 455-456, 458-463, 465-466, 468-473, 534-538, 541-544, 546-547, 552-557, 561-562, 564-568, 570-573, 575-577, 580-581, 596-600, 603-607, 609-612, 614-623, 625-628, 630-633, 636-639, 652-656, 658-662, 664-668, 670-679, 681-684, 686-695, 697-700, 702-706, 708-711, 713-723, 725-729, 743-746, 748-752, 754-756, 758-761, 764-766, 768-769, 771-776, 780-781, 783-786, 788-793, 795-797, 799-803, 819-824, 826-829, 831-835, 837-850, 852-856, 863-867

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 8 – 10
Content Standard C: Communication

C1.2.2 Represent mathematical and practical situations using concrete, pictorial, and symbolic representation.

Fourth Grade

TLG: 16-23, 25-30, 32-34, 37-56, 59-61, 76-81, 83-86, 88-97, 99-119, 121-131, 147-156, 158-165, 167, 170-178, 180-194, 197, 199-201, 214-218, 220-226, 228-260, 262-265, 281-285, 287-296, 298-321, 323-327,, 329-339, 341-344, 346-349, 366-386, 392-406, 410, 415, 419-421, 444-446, 513-575, 577-581, 596-600, 602-643, 657-661, 663-667, 669-673, 675-685, 687-691, 693-709, 711-715, 733-734, 739, 744, 747, 750, 754-755, 760-762, 767, 783-787, 789-793, 795-800, 802-806, 808-821, 814-818, 820-823, 827-829, 843-873, 876-879

SMJ: 2-20, 22-49, 51, 53, 55-59, 61-72, 77, 79-109, 111-142, 144, 146-172, 174-176, 178, 189-227, 229, 232-260, 264-288, 290, 292-298, 300-303, 305-323, 325-338, 341-342, 344

SRB: 1-207

Fifth Grade

TLG: 15-21, 23-25, 27-31, 3-35, 37-49, 51-55, 58-61, 75-84, 86-91, 93-97, 99-103, 105-124, 126-133, 145-164, 166-170, 172-190, 192-196, 198-201, 215-218, 220-240, 242-244, 246-249, 262-285, 287-297, 299-304, 306-310, 312-315, 317-321, 323-331, 333-337, 351-355, 357-371, 373-402, 404-407, 410-437, 502-518, 520-535, 537-541, 543-558, 560-563, 577-589, 591-595, 597-602, 604-609, 611-625, 627-637, 639-643, 645-649, 651-655, 669-689, 691-701, 703-713, 715-719, 721-724, 726-729, 748, 750-783, 785-790, 792-796, 798-803, 817-820, 822-832, 834-837, 839-847, 849-852, 854-857, 871-875, 877-898, 900-909, 911-913, 915-917, 919-923

SMJ: 2-26, 28-57, 59-100, 102-119, 121-166, 168, 171-248, 250-294, 296-338, 340-377, 379-401, 406-433, 435, 439, 441

SRB: 1-361

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 8 – 10

Content Standard C: Communication

C1.2.3 Organize and communicate mathematical problem solving strategies and solutions to problems.

Third Grade

TLG: 22, 24, 36-38, 45-48, 50-52, 57, 62, 99-100, 111-114, 116-120, 123-127, 132-133, 139, 141-144, 149, 166, 174, 225-229, 231-240, 243-246, 251, 254, 257, 261, 264, 268, 277-278, 296, 301, 315, 336, 347, 362, 388, 410, 431-434, 552, 555-557, 596, 603-607, 617, 653-654, 661-662, 667-668, 675-679, 686-688, 696, 700, 702-704, 727, 751-752, 788, 831-835, 837-840, 843, 845, 852-853, 856, 858-860, 863-866

Fourth Grade

TLG: 17, 28-29, 32, 39, 41, 59, 129, 226, 228, 236, 263, 281-282, 339, 347-349, 378-381, 444-446, 520, 539, 547-548, 579, 609, 620, 631, 677-678, 685, 691, 702, 708, 712, 829, 852-853, 856, 858-859, 862, 866, 868, 869, 877-878

SMJ: 2, 6, 8, 10, 88, 112-113, 153-154, 194, 208, 240, 287, 330, 333, 336-337

SRB: 1-207

Fifth Grade

TLG: 16, 30, 38, 43, 45, 59, 75-76, 84, 95, 97, 112, 132, 152-153, 155, 167-168, 199, 227, 234, 236-240, 243, 247, 267, 272, 309, 329, 366, 368, 373, 375, 378, 385, 392, 405-406, 420-422, 432, 437, 505-506, 521-522, 525, 529, 541, 553, 561, 582, 587, 593, 604, 609, 619, 643, 653, 672-673, 682, 727-729, 748, 770, 777, 783, 794, 796, 836-837, 842, 846, 850-851, 855-856, 874, 878, 896, 921-922

SMJ: 3, 16, 18, 20, 22, 26, 29-30, 36-37, 48, 65, 67, 75-76, 109-110, 115-116, 130, 162-163, 182, 185-186, 188, 196, 213, 224-225, 236, 259, 264-265, 276, 299-300, 309, 340, 361, 375, 390, 400, 404, 411, 423

SRB: 1-296

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 8 – 10

Content Standard D: Reasoning

D1.2.1 Draw logical conclusions about mathematical situations.

Third Grade

TLG: 22, 61-64, 93, 99-100, 112, 129, 166, 169, 171, 182-183, 185, 189-190, 206, 249-250, 255, 264, 276, 294, 296, 305, 324, 328-329, 342, 351, 358-359, 361, 386, 398, 404, 417, 455-456, 461-463, 467-470, 552-553, 565, 606, 620, 635, 666, 681-682, 697, 751, 765, 779, 783-784, 803, 817, 821, 825-827, 829, 834, 837-838, 840, 843-845, 847-848, 863, 865-866

MM: 47, 62, 86, 88-89, 91, 96, 100, 104-105, 115, 118, 120-123, 130-131, 134, 138, 140, 142, 144, 146-147, 150, 152, 155, 157, 158-159

Fourth Grade

TLG: 18, 22, 29, 31-35, 39, 41, 45, 50, 55-56, 59, 80, 91, 96, 119, 174, 182, 191-193, 195-197, 221, 224-226, 230, 234, 245, 250, 259, 294, 296, 307, 320, 333, 347-348, 405, 444-446, 526, 539, 544, 547-548, 552, 560-561, 579, 581, 609, 612, 678, 691, 793, 796-828, 846, 856-859

SMJ: 3, 5, 7-10, 14, 18, 24, 27-28, 33, 61, 67, 70, 73-75, 85-86, 90, 93, 99, 102, 108, 120, 127, 133, 171, 206, 208, 212, 217-218, 229, 240, 242, 312, 327, 331-331

SRB: 42, 62-72, 82-86, 92-95, 129-146, 148-158

Fifth Grade

TLG: 35, 38, 77, 84, 105-109, 117, 133, 155, 157, 159, 167, 172, 176, 178-180, 189, 195, 199, 233, 278, 290, 303, 308, 314, 353, 359, 366, 368-369, 371, 373-374, 378, 381, 386, 405-406, 411-412, 672, 703, 780, 782-783, 801, 823-825

SMJ: 16, 31, 43-44, 52, 59, 67, 70, 75, 77, 82, 93, 114, 135, 142, 148, 151, 171, 177, 180, 182-183, 185, 188-189, 197, 299, 322, 368-369, 384-385

SRB: 200-228, 289, 293

D1.2.2 Given a rule or generalization, determine whether the example fits.

Third Grade

TLG: 41, 43, 79, 102, 167, 260-261, 265, 304, 398, 409, 416, 427, 431, 434, 439, 449-450, 468-470, 552-553, 615-616, 618, 637, 682-683, 706, 817-819, 839

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 8 – 10

Content Standard D: Reasoning

D1.2.2 Given a rule or generalization, determine whether the example fits.

Fourth Grade

TLG: 22, 31-34, 39, 41, 45, 50, 55-56, 59, 80, 83, 85-86, 91, 96, 119, 170, 174, 178, 182, 193, 314, 405, 415, 539, 548, 796-798, 802

SMJ: 5, 8-10, 14, 24, 28-29, 33-34, 59, 61, 64, 67, 72, 171, 716, 312-313

SRB: 136-146, 190

Fifth Grade

TLG: 43, 45, 102, 117, 153, 163, 201, 290, 303, 314, 392, 410-412, 506, 512, 514, 541, 552, 593, 609, 619- 620, 637, 677, 688, 729, 759, 761, 766, 776, 789, 847

SMJ: 18, 42, 52, 63, 73, 102, 142, 148, 154, 218, 236, 244, 259, 264, 276, 305, 313, 340, 352, 363, 372, 398

SRB: 214-218

D1.2.3 Justify answers and mathematical strategies as reasonable.

Third Grade

TLG: 111-112, 118-119, 123-124, 129-133, 135, 137-139, 141-143, 149, 191, 225-229, 312-313, 443, 553, 581, 606, 653-654, 662

Fourth Grade

TLG: 80, 218, 221, 224, 226, 228, 230, 234, 236, 263-264, 294, 296, 333, 337, 337, 347-348, 377-381, 548, 552, 579, 612, 614, 678, 691, 708, 744, 761, 767, 796-798, 828-829, 852-853, 856, 858-859

SMJ: 28, 85-86, 88, 90, 93, 120, 140, 153-154, 212, 242, 287, 296, 303, 305, 312, 330

SRB: 148-158

Fifth Grade

TLG: 75-78, 152-153, 179, 295, 351, 361, 624, 641-642, 682, 705

SMJ: 29-30, 63, 65, 83, 144, 279, 290-126-164, 289, 293291, 309, 323

SRB: 225, 228

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 8 – 10

Content Standard E: Connections

E1.2.1 Apply mathematical processes to social studies.

Third Grade

TLG: 17, 27-28, 63-64, 122, 126, 133, 139, 169, 201, 206-207, 225, 232, 260-262, 268, 271-274, 276, 296, 305, 309, 311-315, 320, 354, 405, 416, 427, 456, 458-459, 463, 467, 473, 537, 541, 564-566, 568, 571-572, 576, 581-582, 601, 623, 653-655, 657, 662, 675-678, 723, 743, 745-746, 774, 780, 795-797, 819, 823, 826-827, 829, 844, 847-848, 856, 858-861, 866

MM: 59, 63, 72, 85, 96, 104, 108, 119, 122-123, 135, 153

Fourth Grade

TLG: 77-81, 146, 167-170, 172-174, 179, 196, 200, 236, 293-294, 329, 339, 341-344, 396, 405, 407-411, 413-416, 424-428, 452-455, 520-521, 526, 539, 547, 557, 568, 633-636, 682-685, 745-755, 785-786, 798, 845

SMJ: 27, 60, 76, 119-120, 143, 175, 182-183, 199, 204, 209, 216, 222, 301, 308, 313

SRB: 210-257

Fifth Grade

TLG: 145-146, 148, 150-153, 225-229, 296, 328-330, 351-353, 357, 361, 363, 371, 383-386, 416-418, 553, 639-643, 675, 703-705, 847, 884-885, 915-917

SMJ: 60, 64-65, 109-110, 162-165, 170-171, 178, 194-195, 322, 415-416, 436-438

SRB: 256, 298-353

E1.2.2 Apply mathematical skills and processes to situations with friends and school.

Third Grade

TLG: 17-19, 27-29, 36-39, 65, 75, 80, 165-167, 170-171, 250, 258, 260-262, 265, 300, 307-308, 319, 325, 330, 336-337, 343, 348, 354, 359, 364, 382, 416, 421, 426, 433, 455-456, 458-459, 463, 465, 471-472, 546-548, 554-557, 562, 573, 582, 607, 616, 618, 621, 627, 632, 638, 667, 683-684, 688, 705, 710, 729, 776-779, 781, 788-791, 793, 817-819, 840, 845, 852-854, 861, 866

MM: 47, 80, 120

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 8 – 10

Content Standard E: Connections

E1.2.2 Apply mathematical skills and processes to situations with friends and school.

Fourth Grade

TLG: 22-23, 31, 34-35, 41, 45-46, 84, 95-97, 101-102, 104-108, 119, 155, 161, 165, 237, 248-251, 283-289, 300, 376, 444-446, 574-575, 577, 657, 660, 669, 671, 687-689, 693-697, 750, 760

SMJ: 5, 9, 37, 100-101, 115, 228, 277, 280, 302, 784

SRB: 184-208

Fifth Grade

TLG: 28, 31, 91, 96, 243, 248, 301-302, 309-310, 335-337, 359-360, 397, 504, 522, 540, 580, 599-600, 602, 608, 624, 642, 654, 671, 682, 705, 718, 825, 827, 846, 857, 901, 913

SMJ: 176-177, 308, 323

SRB: 254-296

Grade 6

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 11 – 14
Mathematics Standard A1: Numeration

A1.3.1 Read, write, model, and order real numbers explaining scientific notation, exponents, and percents.

Sixth Grade

TLG: 16-51, 53-56, 58-61, 63-66, 68-71, 86-136, 138-141, 154-200, 202-205, 218-228, 230-234, 236-262, 264-271, 273-277, 290-318, 321-325, 328-334, 337-340, 343-345, 349-351, 354-360, 362-364, 366-368, 370-371, 374-380, 382-386, 452-498, 500-516, 518-522, 524-527, 540-572, 574-584, 586-589, 603-614, 616-626, 628-633, 635-651, 653-658, 660-679, 681-685, 700-703, 705-719, 721-731, 733-748, 750-772, 774-777, 789-793, 798, 802-803, 807, 810, 813, 816, 819, 821, 824-825

SMJ: 2-80, 82-121, 123-204, 207-283, 285-337, 339-384, 386-390, 392-394, 399, 401, 405

SRB: 2-24, 26-60, 62-104, 106-124, 126-144, 190-218, 220-236, 238-246, 249-272, 276-301, 303-306, 308-310, 334-341

A1.3.2 Model counting in a different base system.

Sixth Grade

TLG: *Not applicable*

A1.3.4 Translate between equivalent representations of the same number. Select a representation that is appropriate for the situation.

Sixth Grade

TLG: 18, 36, 47, 93, 100-102, 105-107, 109-111, 113-124, 130, 135, 139, 154-156, 158, 162, 164, 166, 175, 185, 198, 203, 205, 219-223, 225-226, 228, 230-234, 236-247, 250-252, 254-257, 259-262, 267-271, 273-276, 290, 292, 295, 298-303, 307, 309, 312, 328, 333-334, 340, 345, 452, 454-458, 461, 467, 473, 475, 505, 509, 515, 521, 524, 527, 540, 544-545, 554, 565, 577, 587, 589, 603, 608, 610-613, 616-618, 625, 637-638, 642-651, 653, 664, 667-671, 677, 681-684, 700, 708, 713, 718, 721, 724, 730, 736, 755, 759, 761-763, 774-775, 793, 803, 810, 816

SMJ: 4, 18, 49, 54-58, 60, 62, 66-74, 77, 80, 83-84, 93, 102, 111, 123-126, 128-131, 133-137, 139-142, 145-148, 150-152, 156, 159-161, 165, 169-172, 177, 183, 194, 198-199, 204, 206, 209-214, 217, 221, 238-239, 246, 250, 252, 255, 267, 277, 285-286, 290-291, 294, 296, 303, 310-311, 314-315, 318-320, 328-331, 337, 344-345, 351, 355, 358, 361, 377-378, 387, 395, 399, 401

SRB: 5-8, 26-37, 55-58, 63-72, 287, 290-294, 303, 305

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 11 – 14
Mathematics Standard A1: Numeration

A1.3.5 Describe and model the relationship of fractions to decimals, percents, ratios, and proportions.

Sixth Grade

TLG: 47, 101, 109-110, 155-156, 158, 162, 164, 166, 175, 185, 198, 203, 205, 219-223, 236, 244, 252, 254-255, 257, 259-262, 264-266, 268-271, 274-276, 299-303, 307, 337, 454-455, 460, 473, 505, 515, 540, 554, 603, 606, 608, 610-613, 616-618, 625, 637-638, 642-651, 653, 721, 730, 738

SMJ: 55, 61-62, 83-84, 93, 102, 110-111, 123, 125-126, 146-147, 150, 152-154, 157-160, 170-172, 177, 209-210, 214, 221, 238, 246, 263, 286-287, 290-291, 293-294, 296-297, 303, 310-311, 314-315, 318-319, 358

SRB: 5-8, 27-37, 56, 57, 63-72, 287, 290-292, 303, 305

A1.3.6 Use, explain, and define the rules of divisibility, prime and composite numbers, multiples, and order of operations.

Sixth Grade

TLG: 17-18, 20, 25, 36, 45, 54, 123-124, 126, 157, 159-161, 169, 171, 176, 180, 183, 185, 187, 194, 198, 199, 203-205, 218, 220-221, 224, 226, 228, 230-234, 236-244, 247, 273-276, 293, 298, 308, 312, 325, 333, 345, 455-456, 460, 467, 472-474, 478-486, 489, 490, 496-497, 500, 505, 524, 527, 565, 577, 586, 604-607, 619, 638-639, 650, 664, 677, 685, 701-703, 705-709, 713, 716-718, 722-724, 726, 728, 730, 747, 753, 756, 758-759, 766, 771, 775, 798, 803, 810, 821

SMJ: 2-4, 9, 18, 26, 32, 72-73, 87-88, 97, 107, 110, 118-119, 123, 126, 129-131, 134-137, 139, 142, 161, 166, 169, 178, 183, 198, 206, 211, 214, 217, 220-221, 223, 225-227, 230, 232-233, 238, 252, 267, 277, 287, 289, 295, 312-313, 321, 329, 337, 339-343, 345, 349-350, 352-356, 373-374, 376, 381, 384, 393, 395, 399, 405

SRB: 10-12, 74, 77, 229, 281, 288-289, 301

A1.3.7 Use commutative identity associative and distributive properties with variables.

Sixth Grade

TLG: 155-157, 159-161, 163, 175, 180, 202-203, 477-478, 480, 705-709, 753, 766, 803, 821

SMJ: 84-89, 91, 102, 107, 222-223, 343, 373, 381, 395, 405

SRB: 230-231

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 11 – 14
Content Standard A2: Measurement

A2.3.1 Estimate and measure various dimensions to a specified degree of accuracy.

Sixth Grade

TLG: 19, 27, 49-50, 53, 56, 89, 97, 170, 236, 242-243, 247, 251, 291-294, 307-308, 312, 317, 322-324, 329, 343-344, 497, 544, 613, 625, 633, 651, 655-658, 663, 675-676, 702, 713, 724, 739-740, 770, 777

SMJ: 5, 13, 46, 53, 137, 139, 142, 145, 163-164, 166, 177-178, 182, 185-186, 188-189, 234, 255, 293, 303, 322-323, 327, 335-336, 342, 348, 355, 362, 364, 382, 386

SRB: 190-218

A2.3.2 Estimate and convert measurements within the same system.

Sixth Grade

TLG: 17-18, 56, 63, 66, 88-89, 97, 102, 302, 318, 628, 657-658, 673, 770

SMJ: 2-3, 38, 45-46, 53, 56, 173, 187, 325, 334, 382

SRB: 190-192

A2.3.3 Use a variety of methods and tools to construct and compare plane figures

Sixth Grade

TLG: 19, 27, 62, 141, 294, 315, 321-324, 327-329, 335, 338-339, 345, 554, 601, 671, 676, 730, 741, 759, 771, 777, 789-792, 808-811, 821, 825

SMJ: 5, 13, 82, 184, 188-189, 192-193, 200, 202, 263, 358, 363, 377, 384, 386, 388-389, 396-398, 408

SRB: 152-157, 164, 166-167, 174-181, 187, 302, 320

A2.3.4 Describe and apply the relationships between dimensions of geometric figures to solve problems using indirect measurement; describe and apply the concepts of rate and scale.

Sixth Grade

TLG: 53-56, 203, 304, 312, 317, 354-360, 651, 653-658, 660-663, 665, 668, 676-677, 684, 770, 772

SMJ: 32-33, 182, 186, 322-323, 326-327, 336, 383

SRB: 65, 106-124

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 11 – 14
Content Standard A2: Measurement

A2.3.5 Apply information about time zones and elapsed time to solve problems.

Sixth Grade

TLG: 36, 70, 175, 507

SMJ: 102

SRB: 337

*(*time zones are discussed in the 4th grade World Tour and the 5th grade American Tour)*

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 11 – 14
Content Standard A3: Estimation And Computation

A3.3.1 Apply, explain, and assess the appropriateness of a variety of estimation strategies including truncating and rounding to compatible numbers

Sixth Grade

TLG: 58-61, 64, 93-94, 96, 101-103, 106, 111, 115, 130, 132-133, 136, 164, 303, 366-368, 455, 460, 467, 473, 490, 554, 607, 650, 664, 672, 684, 739, 745, 761-762, 768, 803, 821

SMJ: 34-36, 39, 48-50, 55-56, 59-60, 64, 67, 78, 92, 211, 214, 217, 221, 232, 262-263, 289, 321, 328, 333, 362, 367, 378, 395, 408

SRB: 32-33, 45, 47, 50-51, 54, 239, 243-245, 285-286, 295

A3.3.2 Apply basic operations efficiently and accurately, using estimation to check the reasonableness of results.

Sixth Grade

TLG: 58-61, 93-94, 96, 102-103, 106-107, 115, 126-136, 139, 164, 362, 370, 607, 684, 768

SMJ: 34-36, 48-50, 56, 59-60, 67, 75-76, 78, 92, 289

SRB: 32-33, 45, 47, 50-51, 239, 243-245, 248-258, 286

A3.3.3 Add and subtract fractions, decimals, and percents.

Sixth Grade

TLG: 19, 25, 27, 45-46, 69, 71, 87-90, 92-93, 95, 102, 124, 135, 155-157, 161, 164, 169, 175, 180, 185-186, 188, 194, 203, 226, 230-234, 237, 240-244, 247, 251, 255, 273-275, 290, 312, 325, 333, 460, 473, 479-480, 485, 490-491, 497, 515, 524, 527, 543, 554, 563-564, 570, 575, 583-584, 586, 638-639, 677, 702, 705, 708-709, 711-716, 718, 722-724, 736, 746, 751-752, 771, 774-775

SMJ: 5, 9, 13, 43-45, 47, 49, 56, 74, 80, 83-85, 93, 102, 107, 111-112, 118, 129-131, 133-139, 142, 145, 148, 161, 183, 198, 214, 221, 225, 229, 232, 234, 252, 262, 273, 275, 278, 312-313, 337, 342, 344-347, 349, 351-352, 355, 361, 369, 370-371, 384

SRB: 38-42, 78, 80-82, 293, 301, 308

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 11 – 14

Content Standard A3: Estimation And Computation

A3.3.4 Multiply and divide rational numbers in various forms including fractions, decimals, and percents.

Sixth Grade

TLG: 16, 18, 20, 22, 24-25, 28, 32, 36, 41, 44-45, 50, 53-54, 56, 60, 66, 71, 89, 91, 93-94, 96-98, 102, 106, 108-113, 115, 118-121, 123-124, 126-136, 139-141, 156-157, 159-161, 164, 168-170, 172-175, 178-181, 185-186, 194, 203-204, 222, 226, 232, 238, 243, 246-252, 256, 258-262, 267, 267-271, 275-276, 292-293, 295, 298-299, 302, 307-309, 312, 314, 318, 323, 328, 334, 340, 345, 453, 456, 458-461, 467, 473, 475, 479-487, 489-490, 494-498, 500, 505, 507, 509, 511, 518, 521, 525-527, 544, 549, 551, 554, 559, 561, 563, 565, 568, 570, 575-577, 583, 587, 589, 603, 606-609, 612-614, 616-623, 626, 631-633, 635, 637-639, 642-645, 649-651, 656-657, 660, 664, 667, 672, 674, 677, 682-685, 700-703, 705-714, 716-719, 721-731, 738-739, 741-743, 747-748, 750, 753, 756-759, 761-766, 775-776, 793, 796, 798, 803, 810, 816, 819, 821

SMJ: 3, 8-9, 15, 18, 22, 25-27, 32, 37, 43, 46-51, 54-56, 60-62, 65-67, 69-80, 83, 86-89, 92-93, 95-102, 104, 106-107, 111, 118, 127, 129, 132-133, 139-145, 149-166, 169, 173, 177-178, 183, 187, 191, 194, 199, 204, 206-208, 212-214, 217, 221, 225-230, 232-234, 238-239, 250, 252, 255, 259, 262-263, 266-267, 273, 275-278, 285-286, 288-289, 291-299, 303, 305, 308-315, 317, 321, 324, 333, 337, 339-358, 362, 371, 373-375, 377-381, 387, 393, 395, 399, 401, 405

SRB: 5-12, 18-24, 43-53, 57-60, 68-70, 72-77, 84-90, 95-96, 106-124, 220-236, 242-243, 249-272, 276-277, 279-281, 284-286, 288-289, 301, 305, 308-309

A3.3.5 Convert between equivalent fractions, decimals, percents, and proportions. Convert from exact to decimal representations of irrational numbers.

Sixth Grade

TLG: 47, 101, 254-257, 259-262, 264-266, 268-271, 273-277, 292, 299-303, 307, 323, 455-456, 460, 473, 505, 515, 521, 525, 540, 554, 556, 603, 609, 613, 625, 630, 646-651, 653, 667, 681-682, 684, 708, 721, 771

SMJ: 55, 146-147, 150-154, 157-161, 165, 170-172, 177, 190, 211, 214, 221, 238, 246, 250, 263, 286, 293, 303, 307, 318-320, 344, 384

SRB: 27-37, 56-60, 64, 99-100, 109-118, 290-295, 305

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 11 – 14
Content Standard A3: Estimation And Computation

A3.3.6 Solve problems using ratios and proportions.

Sixth Grade

TLG: 219-223, 225, 455, 544, 554, 589, 603-606, 608, 610-613, 616-618, 622-626, 637, 638, 642-645, 670-671, 676, 683, 718, 727-731, 733, 735, 741, 770

SMJ: 125-126, 128, 210, 255, 263, 285-287, 290-291, 293-294, 296-297, 303, 310-311, 314-315, 330-331, 336, 351, 356, 358, 360, 363, 382-383

SRB: 106-122

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 11 – 14

Content Standard A4: Functions And Relationships

A4.3.1 Identify numeric and geometric patterns to find the next term and predict the nth term.

Sixth Grade

TLG: 44, 46, 54, 100, 106, 111, 115, 141, 155-157, 159-161, 164-165, 169, 175, 180, 190, 194, 246, 313, 455, 469, 478, 485, 493, 524, 549, 559, 604-606, 614, 638-639, 650, 679, 683, 702, 713, 724, 753, 790-794, 796-799, 825

SMJ: 25, 32, 54, 60, 64, 67, 82-89, 93, 96, 107, 118, 140-141, 211, 223, 229, 251, 259, 266, 286-287, 312-313, 321, 342, 345, 355, 372, 388-391

SRB: 101, 235

A4.3.2 Identify and describe how a change in one variable in a function affects the remaining variables (e.g., how changing the length affects the area and volume of a rectangular prism).

Sixth Grade

TLG: 106, 115, 141, 156, 164-165, 169, 172-175, 177-180, 190, 194, 197-199, 204, 455, 467, 469, 485, 497, 549, 559, 576, 614, 638-639, 650, 702, 713, 724, 736-737, 753

SMJ: 60, 67, 82-83, 93, 96, 98-101, 103-107, 118-121, 211, 217, 229, 234, 259, 266, 276, 312-313, 321, 342, 345, 355, 372

SRB: 235-236

A4.3.3 Use a calculator to find a missing item in an arithmetic and a geometric sequence; predict the graph of each function.

Sixth Grade

TLG: 100-101, 113-115, 169, 178, 679

SMJ: 54-55, 66-67, 96, 104

SRB: 270-272

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 11 – 14

Content Standard A4: Functions And Relationships

A4.3.4 Translate among and use tables of ordered pairs, graphs on coordinate planes, and linear equations as tools to represent and analyze patterns.

Sixth Grade

TLG: 106, 115, 141, 156, 164, 169, 172-175, 178-180, 190, 194, 199, 204, 455, 469, 485, 497, 549, 559, 576, 614, 638-639, 650, 702, 713, 724, 736-737, 753

SMJ: 60, 67, 82-83, 93, 96, 98-101, 104-107, 118, 211, 229, 234, 259, 266, 276, 312-313, 321, 342, 345, 355, 372

SRB: 233-236

A4.3.5 Find the value of a variable by evaluating formulas and algebraic expressions for given values.

Sixth Grade

TLG: 141, 155-157, 159-161, 163-165, 167-170, 172-175, 178-181, 185, 188-192, 194, 199, 202-204, 221-222, 225, 242, 246-247, 251, 254, 256, 267, 302, 318, 331-332, 339, 343, 345, 374-375, 453, 455-456, 467, 469, 474, 477-480, 482-485, 490-492, 496-498, 500-506, 508-516, 518-526, 544, 549, 554, 565, 576-577, 589, 607, 610-614, 635-639, 642-645, 650, 677, 685, 702, 706-714, 716-719, 721-724, 726-731, 733-737, 739-748, 750-760, 764-765, 771, 775-776, 793, 803, 807, 810, 821

SMJ: 82, 84-86, 87-91, 94-102, 104-107, 111-114, 118-119, 122, 126, 128, 138, 140-142, 144, 146, 149, 156, 173, 187, 203, 206-207, 210-211, 217, 222-223, 225, 227-228, 232-235, 237-238, 240-248, 255, 258, 263, 267, 276-277, 285, 291, 293, 310-315, 317, 321, 337, 339, 341-347, 349-356, 358-359, 362-365, 369-370, 379-380, 384, 387, 395, 399, 405

SRB: 220-236, 276-277, 289, 304

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 11 – 14
Content Standard A5: Geometry

A5.3.1 Identify, classify, compare, and sketch regular and irregular polygons.

Sixth Grade

TLG: 19, 27, 230, 306, 308, 311, 315, 335, 713, 730, 736, 741, 759, 765, 767, 770-771, 777, 789-794, 808-811, 816, 821

SMJ: 5, 13, 175, 179-181, 184, 348, 358, 363, 377, 383-384, 386, 388-389, 396-398, 403, 408

SRB: 146, 152-154, 156-158, 175, 178-181, 302

A5.3.2 Model, identify, draw, and describe 3-dimensional figures including tetrahedrons, dodecahedrons, triangular prisms, and rectangular prisms.

Sixth Grade

TLG: 757, 765, 767, 808-811, 825

SMJ: 375, 396-398

SRB: 146, 158-163, 165, 307

A5.3.3 Apply the properties of equality and proportionality to solve problems involving congruent or similar shapes.

Sixth Grade

TLG: 317, 655-658, 660-666, 668, 684, 769-770

SMJ: 186, 322-323, 326-327, 383

SRB: 119, 166-167

A5.3.4 Estimate and determine volume and surface areas of solid figures using manipulatives and formulas; estimate and find circumferences and areas of circles.

Sixth Grade

TLG: 170, 180, 203, 544, 739-740, 745-748, 750, 754, 757-759, 775-776, 810, 816

SMJ: 107, 255, 362, 365-367, 369, 375, 399, 401

SRB: 195-208

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 11 – 14
Content Standard A5: Geometry

A5.3.5 Draw and describe the results of transformations including translations (slides), rotations (turns), reflections (flips), and dilations (shrinking or enlarging).

Sixth Grade

TLG: 277, 310-313, 318, 328, 653-658, 684, 790-794, 796-799, 801-805, 825

SMJ: 179-181, 322-323, 325, 388-389, 391, 394

SRB: 168-169, 322-326

A5.3.6 Use coordinate geometry to represent and interpret relationships defined by equations and formulas including distance and midpoint.

Sixth Grade

TLG: 34-37, 40, 45, 54, 60, 69, 172-174, 180, 194, 198-199, 204, 307, 497, 549, 559, 736-737, 753

SMJ: 16-18, 21, 26, 32-33, 36, 99-101, 107, 118, 176, 234, 259, 266, 372-373

SRB: 236

A5.3.7 Draw, measure, and construct geometric figures including perpendicular bisectors, polygons with given dimensions and angles, circles with given dimensions, perpendicular and parallel lines.

Sixth Grade

TLG: 17, 19, 22, 27, 32, 56, 88, 141, 239, 262, 271, 293-294, 297-298, 306-308, 312, 317-318, 323-324, 327-329, 331, 334, 337-339, 343-344, 354-359, 554, 665-666, 675-676, 678, 713, 730, 736, 741-742, 746, 764, 766, 771-772, 777, 792-794, 797, 799, 808-811, 821

SMJ: 2, 5, 8, 13, 15, 45, 82, 152, 160, 168, 175-176, 182, 186-187, 189, 192-193, 195, 200-203, 263, 335-336, 348, 358, 361, 363, 369, 379, 381, 384, 386, 388-389, 391, 396-398, 408

SRB: 174-188

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 11 – 14
Content Standard A6: Statistics/Probability

A6.3.1 Collect, analyze, and display data in a variety of visual displays including frequency distributions, circle graphs, box and whisker plots, stem and leaf plots, histograms, and scatter plots with and without technology.

Sixth Grade

TLG: 21-23, 25-28, 30-32, 34-37, 39-41, 43-46, 48-51, 54-55, 59-61, 65-66, 69-71, 97, 106, 115, 141, 156, 164-165, 169, 172-175, 177-180, 183-186, 188-190, 192-195, 197-199, 203-205, 222, 226, 232, 238, 264-267, 275, 277, 300-303, 307, 323, 334, 344, 350-351, 366-368, 370-371, 455, 467, 479, 485, 497, 522, 549, 553, 559, 604-607, 613-614, 625, 633, 638-639, 644, 650, 683, 702, 713, 724, 736-737, 746, 753, 759, 771

SMJ: 6-7, 10-11, 14, 16-23, 25, 28-33, 35-37, 40-41, 52, 60, 67, 82-83, 93, 96, 98-101, 103-109, 112-121, 127, 129, 132-133, 153-155, 162, 170-172, 176-177, 190-191, 199, 211, 217, 229, 234, 259, 261, 266, 286-287, 293, 303, 312-313, 317, 320-321, 342, 345, 355, 368, 372, 377, 384

SRB: 126-144, 235-236

A6.3.2 Interpret and analyze information found in newspapers, magazines, and graphical displays.

Sixth Grade

TLG: 26, 35, 39-41, 45, 48, 58-61, 64, 66, 71, 105, 107, 192, 266-267, 269-270, 303, 607, 620, 622, 633, 645, 816

SMJ: 10, 17, 19-22, 26, 28-29, 34-35, 39, 41, 58, 115, 154, 157-158, 401

SRB: 55, 126-127, 132-135

A6.3.3 Determine and justify a choice of mean, median, or mode as the best representation of data for a practical situation.

Sixth Grade

TLG: 18, 21-23, 25-28, 30-32, 35-36, 38-39, 41, 50, 55, 65-66, 69-70, 106, 115, 160, 169, 222, 232, 323, 344, 380, 383, 639, 644, 650, 746

SMJ: 3, 6-7, 10-12, 14, 17-19, 27, 31, 40-41, 60, 67, 87, 97, 127, 132, 191, 199, 313, 316, 321, 368

SRB: 130-131, 299-300

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 11 – 14
Content Standard A6: Statistics/Probability

A6.3.4 Make projections based on available data and evaluate whether or not inferences can be made given the parameters of the data.

Sixth Grade

TLG: 22-23, 26-28, 32, 36, 39-41, 43-46, 48-51, 54-55, 58-61, 64-66, 69-71, 97, 106, 172-175, 179-180, 192-195, 204-205, 222, 232, 238, 266, 303, 521, 625, 639, 644, 746, 769

SMJ: 7, 10, 12, 19-26, 27-37, 39-41, 52, 59, 98-101, 105-107, 115-118, 127, 132, 155, 250, 302, 316, 368

SRB: 126-141

A6.3.5 Use tree diagrams and sample spaces to make predictions about independent events.

Sixth Grade

TLG: 455, 467, 527, 541-545, 547-548, 550, 552-553, 555, 557-560, 562-566, 568-572, 574-578, 580-584, 586-588, 632, 644, 813

SMJ: 211, 217, 252-254, 256-257, 260-261, 264-265, 268-272, 274-275, 279-284, 305, 317

SRB: 142-144

A6.3.6 Design and conduct a simulation to study a problem and communicate the results.

Sixth Grade

TLG: 544-545, 547-548, 550, 552-553, 555, 560, 565-566, 574-578, 580-584

SMJ: 256-257, 260-261, 269, 274-275, 279-283

SRB: 142-144

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 11 – 14
Content Standard B: Problem-Solving

B1.3.1 Analyze and summarize a problem using the relationships between the known facts and unknown information.

Sixth Grade

TLG: 26, 36, 41, 43, 45-46, 50, 54, 61, 69-70, 88, 92-93, 97-98, 102, 106, 111, 115, 119-120, 123, 129, 134, 136, 139, 141, 163-165, 168-170, 172-175, 178-181, 185-186, 189-192, 194-195, 197-199, 202-205, 238-239, 242-243, 247-248, 251-252, 262, 269, 271, 274, 338-339, 455-456, 467, 478, 480, 485, 489-492, 497, 505, 522, 545, 549-550, 554-555, 559, 566, 587-589, 603-608, 610-614, 618-619, 623, 637-639, 642-645, 658, 677, 683, 708-709, 718, 726-728, 730-731, 741, 746, 754, 757, 759, 764, 766, 770- 772, 775-777, 793, 798-799, 803, 816, 821

SMJ: 10, 23, 27, 32, 45, 47-49, 52-53, 56, 59-60, 64-65, 67, 71, 73, 76, 79, 82, 90-91, 94-95, 98-102, 104-107, 111, 113, 117-121, 135, 137-138, 144, 152, 157, 160, 200-203, 211, 217, 224, 228-229, 231-232, 234, 238, 259, 262, 266, 285-287, 290-291, 295-297, 299, 310-312, 314-316, 337, 344, 351, 356, 358, 363, 368, 375, 377, 379, 382-384, 387, 393, 395, 401, 405

SRB: 106-124, 220-236, 238-246

B1.3.2 Select, modify, and apply a variety of problem-solving strategies including graphing, inductive and deductive reasoning, Venn diagram, and spreadsheets.

Sixth Grade

TLG: 18, 26, 36, 40, 44-46, 50, 54, 61, 69-70, 88-89, 92-93, 97-98, 102, 106, 111, 115, 119-120, 123, 129, 134, 136, 139, 141, 168, 170, 172-175, 178-181, 185-186, 189-190, 194-195, 197-199, 202-205, 238-239, 242-243, 247-248, 251-252, 262, 269, 271, 274, 293, 308, 323, 338-339, 453, 455-456, 467, 469, 478, 480, 485, 489-492, 497, 505, 515, 545, 549-550, 553-555, 557-560, 562-566, 568-572, 574-578, 587-588, 607, 614, 625, 633, 638-639, 644, 677, 709, 718, 726-728, 730-731, 734-737, 741, 754, 759, 766, 770- 772, 775-777, 793, 798-799, 803, 816-817, 821

SMJ: 3, 10, 21, 24-25, 27, 32-33, 45-49, 52-53, 56, 59-60, 64-65, 67, 71, 73, 76, 79, 82, 94-95, 98-102, 104-107, 111, 113, 117-121, 135, 137-138, 144, 152, 157, 160, 166, 178, 190, 200-203, 207, 211, 217, 224, 228-229, 231-232, 234, 238, 246, 259, 261-262, 264-266, 268-272, 274-276, 289, 303, 311-312, 316, 337, 351, 356, 358-361, 363, 377, 382-384, 387, 390, 393, 395, 401, 405

SRB: 238-246

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 11 – 14
Content Standard B: Problem-Solving

B1.3.3 Evaluate, interpret, and justify solutions to problems.

Sixth Grade

TLG: 27-28, 36, 43, 45-46, 50, 61, 69-70, 92-93, 106-107, 115, 119-120, 123, 134, 136, 139, 141, 163, 165, 172-175, 178-181, 185-186, 190, 194-195, 197-199, 202-205, 238-239, 242-243, 247-248, 251-252, 262, 274, 338-339, 364, 368, 380, 453, 455-456, 460, 466-467, 478, 480, 485-486, 490-491, 509, 514-515, 521, 524, 545, 550, 553-555, 565-566, 574, 577-578, 580, 587-588, 614, 619-620, 632, 638, 644, 656, 663, 665, 684, 718, 723, 730-731, 737, 741, 757, 766, 770- 772, 775-777, 793, 798-799, 816-817, 821

SMJ: 12, 23, 27, 47-49, 59-60, 67, 71, 73, 79, 82, 90-91, 98-102, 104-107, 111, 117-121, 135, 137-138, 144, 152, 200-203, 207, 210-211, 213, 216-217, 224, 228-229, 232, 239, 244-245, 249-251, 261-262, 269, 274, 279, 295, 305, 311-312, 316, 324, 326-327, 351, 353, 358, 363, 375, 382-384, 390, 393, 401, 405

SRB: 238-246

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 11 – 14
Content Standard C: Communication

C1.3.1 Use math vocabulary, symbols, and notation to represent information in the problem.

Sixth Grade

TLG: 2-886

SMJ: 2-409

SRB: 1-370

C1.3.2 Represent a problem numerically, graphically, and symbolically; translate among these alternative representations.

Sixth Grade

TLG: 16-51, 53-56, 58-61, 63-66, 68-71, 86-136, 138-141, 154-200, 202-205, 218-228, 230-234, 236-262, 264-271, 273-277, 290-318, 321-325, 328-334, 337-340, 343-345, 349-351, 354-360, 362-364, 366-368, 370-371, 374-380, 382-386, 452-498, 500-516, 518-522, 524-527, 540-572, 574-584, 586-589, 603-614, 616-626, 628-633, 635-651, 653-658, 660-679, 681-685, 700-703, 705-719, 721-731, 733-748, 750-772, 774-777, 789-793, 798, 802-803, 807, 810, 813, 816, 819, 821, 824-825

SMJ: 2-80, 82-121, 123-204, 207-283, 285-337, 339-384, 386-390, 392-394, 399, 401, 405

SRB: 2-24, 26-60, 62-104, 106-124, 126-144, 190-218, 220-236, 238-246, 249-272, 276-301, 303-306, 308-310, 334-341

C1.3.3 Use appropriate vocabulary, symbols, and technology to explain, justify, and defend mathematical solutions.

Sixth Grade

TLG: 16-51, 53-56, 58-61, 63-66, 68-71, 86-136, 138-141, 154-200, 202-205, 218-228, 230-234, 236-262, 264-271, 273-277, 290-318, 321-325, 328-334, 337-340, 343-345, 349-351, 354-360, 362-364, 366-368, 370-371, 374-380, 382-386, 452-498, 500-516, 518-522, 524-527, 540-572, 574-584, 586-589, 603-614, 616-626, 628-633, 635-651, 653-658, 660-679, 681-685, 700-703, 705-719, 721-731, 733-748, 750-772, 774-777, 789-793, 798, 802-803, 807, 810, 813, 816, 819, 821, 824-825

SMJ: 2-80, 82-121, 123-204, 207-283, 285-337, 339-384, 386-390, 392-394, 399, 401, 405

SRB: 2-24, 26-60, 62-104, 106-124, 126-144, 190-218, 220-236, 238-246, 249-272, 276-301, 303-306, 308-310, 334-341

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 11 – 14
Content Standard D: Reasoning

D1.3.1 Use informal deductive and inductive reasoning in both concrete and abstract contexts.

Sixth Grade

TLG: 22-24, 28, 36, 43, 45, 60-61, 65-66, 69-71, 106, 107, 141, 172, 174-175, 178-180, 192-195, 204-205, 273, 331-334, 338-340, 343, 453, 518-522, 524-527, 614, 644, 708, 714, 718, 726-731, 733, 755, 762-772, 774-777, 798

SMJ: 7, 23, 36, 40, 59-60, 82, 98-101, 104-107, 115-118, 161, 195-196, 199, 200-203, 207-208, 247-251, 316-317, 344, 351, 356, 358, 378-380, 382-386, 392-393

SRB: 101-104, 106-124, 126-144, 233-236, 238-246, 334-335

D1.3.2 State counterexamples to disprove statements.

Sixth Grade

TLG: 59, 69-70, 161, 233, 315, 480, 524, 550, 588, 619, 663, 765, 777, 792-794

SMJ: 35, 184, 251, 295, 327, 380, 386, 388-389

D1.3.3 Justify and defend the validity of mathematical strategies and solutions using examples and counterexamples.

Sixth Grade

TLG: 58-61, 87-88, 96-97, 100-101, 107, 128, 139, 141, 155-157, 159-161, 165, 169, 175, 180, 185, 194, 203, 233, 246, 298, 315, 453, 479-480, 524, 545, 547, 549-550, 566, 574, 580-584, 588, 616, 658, 764-765, 792-794, 797, 799

SMJ: 34-36, 54-55, 82, 84-89, 96-97, 102, 107, 111, 118, 140-141, 184, 208, 251, 256, 259, 274, 279-283, 294, 379-380, 388-389, 391

SRB: 238-246

ALASKA MATHEMATICS PERFORMANCE STANDARDS, AGES 11 – 14
Content Standard E: Connections

E1.3.1 Apply mathematical skills and processes to science and humanities.

Sixth Grade

TLG: 40, 117-120, 122-124, 172-173, 177-181, 189, 242, 266, 348-352, 354-360, 362-364,
366-368, 370-371, 374-377, 379-386, 668-669, 745

SMJ: 21, 68-69, 72-74, 98-99, 103-106, 113, 138, 154-155, 366-367

SRB: 328-333

E1.3.2 Apply mathematical skills and processes to situations with peers and community.

Sixth Grade

TLG: 69, 101-102, 111, 114, 119, 131, 204, 228, 234, 292, 308, 335, 345, 469, 473, 491, 520-
522, 526, 545, 555, 559, 565, 583, 665, 668-669, 702-703, 708, 754, 765, 816

SRB: 274-310