



SuccessMaker[®]

Nebraska State Standards Alignments for Mathematics

Providing rigorous mathematics intervention
for K-8 learners with unparalleled precision

NE Standard(s) Number	NE Standard(s) Description	Item Description	Item ID
0.1.1.a	Perform the counting sequence by counting forward from any given number to 100, by ones. Count by tens to 100 starting at any decade number.	Enter the missing date on a calendar.	smma_lo_00700
		Find the next number in a sequence, counting by 1's (1 to 5).	smma_lo_00939
		Find the next number in a sequence, counting by 1's (1 to 5).	smma_lo_00940
		Find the next number in a sequence, counting by 1's (1 to 9).	smma_lo_00948
		Find the number that comes before a given number, counting by 1's (1 to 9).	smma_lo_00949
		Order four numbers from least to greatest (1 to 9).	smma_lo_00950
		Find a missing number in a sequence, counting by 1's (1 to 20).	smma_lo_00951
		Find a missing number in a sequence, counting by 1's (1 to 9).	smma_lo_00960
		Find a missing number in a sequence, counting by 1's (10 to 20).	smma_lo_00970
		Find a missing number in a sequence, counting by 10's (10 to 100, visual support).	smma_lo_00971
		Find a missing number in a sequence, counting by 10's (10 to 100).	smma_lo_00981
		Find a missing number in a sequence, counting by 1's (11 to 50).	smma_lo_00982
		Find a missing number in a sequence, counting by 1's (51 to 99).	smma_lo_00983
		Identify four numbers ordered from least to greatest (two-digit).	smma_lo_00985
		0.1.1.c	Use one-to-one correspondence (pairing each object with one and only one spoken number name, and each spoken number name with one and only one object) when counting objects to show the relationship between numbers and quantities of 0 to 20.
Count two sets of objects to find the total (sums 4 to 6).	smma_lo_00004		
Match objects to show a one-to-one correspondence (2 to 5 objects).	smma_lo_00921		
Identify a set with the same number of objects as a given set (1 to 5 objects).	smma_lo_00922		
Move objects to show a one-to-one correspondence (1 to 5 objects).	smma_lo_00925		
Count specific objects within a larger set (1 to 6 objects).	smma_lo_00936		
Identify a number that is greater than or less than a spoken number (1 to 9).	smma_lo_00946		
Count specific objects within a larger set (6 to 9 objects).	smma_lo_00958		
Count objects by pairing each object with one number 1 to 10; determine how many objects there are.	smma_lo_02092		
Count objects by pairing each object with one number 1 to 10; determine how many objects there are when 1 more is added.	smma_lo_02093		

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0.1.1.e	Count up to 20 objects arranged in a line, a rectangular array, or a circle. Count up to 10 objects in a scattered configuration. Count out the number of objects, given a number from 1 to 20.	Count objects arranged in a row (1-5 objects).	smma_lo_00933
		Count objects not arranged in a row (1 to 5 objects).	smma_lo_00935
		Count objects not arranged in a row (6 to 9 objects).	smma_lo_00943
		Count objects arranged in a row (one to nine objects).	smma_lo_00957
0.1.1.f	Write numbers 0 to 20 and represent a number of objects with a written numeral 0 to 20.	Enter the number shown (1 to 5).	smma_lo_00932
		Match a digit to a set with that number of objects (1 to 5).	smma_lo_00934
		Enter the number shown (1 to 9).	smma_lo_00942
		Identify the group of objects that represent a number (1 to 5 objects).	smma_lo_00956
		Identify the number of objects for a word name. (1 to 9 objects).	smma_lo_00964
		Identify a number, model, or word with the same value (1 to 9).	smma_lo_00965
		R: Enter the number shown (0 to 4).	smma_lo_00001
		R: Enter the number shown (5 to 9).	smma_lo_00002
		R: Identify a number from a spoken number (1 to 5).	smma_lo_00937
		R: Identify a number from a spoken number (6 to 9).	smma_lo_00944
0.1.1.g	Compose and decompose numbers from 11 to 19 into ten ones and some more ones by a drawing, model, or equation (e.g., $14 = 10 + 4$) to record each composition and decomposition.	Decompose numbers from 11 to 19 into ten ones and some further ones.	smma_lo_02094
		Compose numbers from 11 to 19 given ten ones and some further ones by using objects.	smma_lo_02095
		Decompose numbers 2-10 into pairs in more than one way by using objects.	smma_lo_02096
		R: Find a number equal to 2 to 9 ones.	smma_lo_00972
		R: Enter the number of ones equal to number 1 to 9.	smma_lo_00973
0.1.1.h	Compare the number of objects in two groups by identifying the comparison as greater than, less than, or equal to by using strategies of matching and counting.	Identify a group with more objects than a given group (1 to 5 objects).	smma_lo_00923
		Identify a group with fewer objects than a given group (1 to 5 objects).	smma_lo_00924
		Make a set with the same number of objects as a given set (1 to 5 objects).	smma_lo_00926
		Make a group with one more object than a given group (one to five objects).	smma_lo_00927
		Make a group with one fewer object than a given group (1 to 5 objects).	smma_lo_00928
		Make a group with the same number of objects as a given group (6 to 9 objects).	smma_lo_00929
		Make a group with one more object than a given group (six to nine objects).	smma_lo_00930
		Make a group with one fewer object than a given group (6 to 9 objects).	smma_lo_00931
		Make a group with one to five objects.	smma_lo_00938

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0.1.1.h	Compare the number of objects in two groups by identifying the comparison as greater than, less than, or equal to by using strategies of matching and counting.	Make a group with 6 to 9 objects.	smma_lo_00945
		Create a set with the same, more, or fewer number of objects than a given group (1 to 9 objects).	smma_lo_00953
		Create a set with one more object than a given set (1 to 9 objects).	smma_lo_00954
		Create a set with one fewer object than a given set (1 to 9 objects).	smma_lo_00955
0.1.1.i	Compare the value of two written numerals between 1 and 10	Compare sums (sums 1 to 9).	smma_lo_00326
		Identify the number with the greatest value (1 to 9).	smma_lo_00947
		Identify whole numbers on a number line that satisfy the inequality (0 to 10).	smma_lo_01023
0.1.2.a	Fluently (i.e. automatic recall based on understanding) add and subtract within 5.	Count two sets of objects to find the total (sums 2 to 5).	smma_lo_00005
		Count objects in two sets and add (sums 1 to 5).	smma_lo_00007
		Add using basic math facts (sums 1 to 5).	smma_lo_00010
		Add using basic math facts displayed horizontally (sums 2 to 5).	smma_lo_00011
		Add two addends (sums 6 to 10).	smma_lo_00012
		Add using basic math facts (addends 0 to 5, sums 1 to 5).	smma_lo_00014
		Add zero to a number (sums 1 to 9).	smma_lo_00035
		Subtract using basic math facts displayed horizontally (minuends 0 to 5).	smma_lo_01415
		Subtract using basic math facts (minuends 0 to 5).	smma_lo_01416
0.2.1.b	For any number from 1 to 9, find the number that makes 10 when added to the given number, showing the answer with a model, drawing, or equation.	Given a number (1-9) of objects, determine how many more objects are needed to make a ten.	smma_lo_02017
		Model the number that makes 10 when added to a given number from 1 to 9; then identify the number.	smma_lo_02097
0.2.3.a	Solve real-world problems that involve addition and subtraction within 10 (e.g., by using objects, drawings or equations to represent the problem).	Count two sets of objects to find the total (sums 6 to 10).	smma_lo_00006
		Count the objects in two sets and add (sums 6 to 10).	smma_lo_00008
		Add using basic math facts displayed horizontally (sums 6 to 10).	smma_lo_00013
		Write an addition number sentence to represent a picture (sums 1 to 9).	smma_lo_00036
		Identify the operation from pictures and contexts (sums 6 to 9, minuends 6 to 9).	smma_lo_00321
		Identify sets of objects that combined have a given sum (sums 6 to 9).	smma_lo_00726
		Add nonstandard units of capacity (sums 2 to 8).	smma_lo_00739

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0.2.3.a	Solve real-world problems that involve addition and subtraction within 10 (e.g., by using objects, drawings or equations to represent the problem).	Subtract nonstandard units of capacity (differences 0 to 3).	smma_lo_00742
		Identify a picture that represents an addition problem (sums 2 to 6).	smma_lo_01228
		Write a number sentence for an addition problem (sums 2 to 5).	smma_lo_01229
		Write a number sentence for an addition problem (sums 2 to 10).	smma_lo_01230
		Identify a picture that represents a subtraction problem (minuends 5 to 10).	smma_lo_01235
		Choose the expression that can represent a problem with extra information; then solve (addition or subtraction).	smma_lo_01239
		Use guess and check to solve an addition and subtraction problem (basic facts).	smma_lo_01240
		Solve a subtraction problem in context (minuends 2 to 5, pictorial models).	smma_lo_01411
		Solve a subtraction problem in context (minuends 2 to 5, pictorial models).	smma_lo_01412
		Identify the expression that represents a picture (minuends 2 to 9).	smma_lo_01414
		Identify the pictorial solution to a subtraction problem (minuends 2 to 9).	smma_lo_01422
		Identify the pictorial solution to a problem in context (minuends 4 to 9).	smma_lo_01423
		Solve a problem in context by adding or subtracting 1.	smma_lo_01535
		Act out the solution to a subtraction problem in context (minuends 1 to 6).	smma_lo_01536
		Solve an addition problem in context (same objects, sums 2 to 5).	smma_lo_01540
		Identify the picture that represents a subtraction problem in context (minuends 2 to 10).	smma_lo_01542
		Solve an addition problem in context (different objects, sums 2 to 5).	smma_lo_01544
		Solve a subtraction problem in context (minuends 2 to 5).	smma_lo_01545
		Identify and solve a number sentence for an addition problem in context (sums 2 to 9).	smma_lo_01553
		Identify and solve a number sentence for an addition problem in context (sums 2 to 9).	smma_lo_01555
Identify the expression that represents a subtraction problem in context (minuends 2 to 5).	smma_lo_01559		

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0.2.3.a	Solve real-world problems that involve addition and subtraction within 10 (e.g., by using objects, drawings or equations to represent the problem).	Identify and solve the number sentence for a subtraction problem in context (minuends 2 to 5).	smma_lo_01562
		Identify and solve a number sentence for a subtraction problem in context (minuends 2 to 5).	smma_lo_01568
0.3.1.a	Describe real-world objects using names of shapes, regardless of their orientation or size (e.g., squares, circles, triangles, rectangles, hexagons, cubes, cones, spheres, and cylinders).	Identify circles or squares by name.	smma_lo_00529
		Identify triangles or rectangles by name.	smma_lo_00530
		Identify a geometric figure (circle, triangle, rectangle, or square).	smma_lo_00531
		Identify circles or squares by name.	smma_lo_00544
		Identify triangles or rectangles by name.	smma_lo_00546
		Identify triangles, squares, rectangles, and pentagons.	smma_lo_00550
		Match a geometric figure to its name (circle, triangle, square, or rectangle).	smma_lo_00568
		Identify the object modeled by a geometric figure.	smma_lo_00570
		Identify the figure that is not of a given type (rectangle or triangle).	smma_lo_00571
		Count the geometric figures in a picture.	smma_lo_00572
		Identify polygons and circles (pentagons, hexagons, octagons, parallelograms).	smma_lo_00627
0.3.1.b	Identify shapes as two-dimensional ("flat") or three-dimensional ("solid").	Sort two-dimensional and three-dimensional shapes.	smma_lo_01677
0.3.1.c	Compare and analyze two- and three-dimensional shapes, with different sizes and orientations to describe their similarities, differences, parts (e.g., number "corners"/vertices), and other attributes (e.g., sides of equal length).	Identify shapes that are alike.	smma_lo_00549
		Identify the figure that has a different number of sides from a given figure.	smma_lo_00553
		Match similar irregular polygons.	smma_lo_00555
		Identify matching congruent figures under rotation and/or reflection.	smma_lo_00557
		Match similar figures in different orientations.	smma_lo_00566
		Match complex congruent figures in different orientations.	smma_lo_00581
		Match compound figures that have the same shape (different sizes).	smma_lo_00594
		Identify the rectangle with the same size and shape as a given rectangle.	smma_lo_00736
		Identify the smaller or bigger rectangle.	smma_lo_00747
		R: Match pictures with shapes that are alike.	smma_lo_00517
		R: Match the face of a geometric solid to a plane figure.	smma_lo_00518
R: Identify matching congruent geometric solids.	smma_lo_00567		
0.3.1.d	Model shapes found in the real world by building shapes from materials (e.g., clay and pipe cleaners) and drawing shapes.	Identify similar three-dimensional figures.	smma_lo_00592

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0.3.1.e	Combine simple shapes to compose larger shapes (e.g., use triangle pattern blocks to build a hexagon).	Identify puzzle pieces needed to make a given shape, and then complete the puzzle (4 to 6 pieces).	smma_lo_00564
0.3.2.a	Describe the relative positions of objects (e.g., above, below, beside, in front of, behind, next to, between).	Identify the object on the top, in the middle, or on the bottom.	smma_lo_00524
		Identify the object on the left or the right.	smma_lo_00525
		Identify the picture on the left or right.	smma_lo_00526
		Identify the object inside or outside a convex figure.	smma_lo_00532
		Identify the object that is the top, middle or bottom one.	smma_lo_00540
		Identify the object that is the top, middle, or bottom one.	smma_lo_00543
		Determine whether points are outside, inside, or on a geometric figure.	smma_lo_00552
		Identify the object that is near or far from another object.	smma_lo_00574
		Identify objects inside or outside a convex figure.	smma_lo_00575
		Identify the object behind or in front of another object in a three-dimensional perspective.	smma_lo_00584
0.3.3.b	Compare length and weight of two objects (e.g., longer/shorter, heavier/lighter).	Identify the tallest object.	smma_lo_00694
		Identify the biggest or smallest object.	smma_lo_00695
		Identify the object that is a different length.	smma_lo_00709
		Identify the object that is a different height.	smma_lo_00712
		Identify the objects that are taller or shorter than a nonstandard unit.	smma_lo_00743
		Identify which familiar object is heavier.	smma_lo_00781
0.4.2.a	Identify, sort, and classify objects by size, shape, color, and other attributes. Identify objects that do not belong to a particular group and explain the reasoning used.	Match simple geometric figures that have the same size, shape, and color.	smma_lo_00514
		Match geometric figures that have the same size and shape (simple figures).	smma_lo_00516
		Identify the figure that is a different color from a given figure.	smma_lo_00541
		Match same size and shape (congruent) irregular polygons.	smma_lo_00545
		Identify the figure with a different shape.	smma_lo_00547
		Identify a shape by two positive tests e.g. red, circle.	smma_lo_00565
		Classify geometric figures by a shape	smma_lo_00576
		Identify figures with more or fewer than a given number of sides.	smma_lo_00587
		Identify the figure that is the same size and shape as a given figure.	smma_lo_00600

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0.4.2.a	Identify, sort, and classify objects by size, shape, color, and other attributes. Identify objects that do not belong to a particular group and explain the reasoning used.	Identify a pair of objects that are not the same size.	smma_lo_00692
		Identify the group with the greatest number of shapes of a given type (1 to 6).	smma_lo_00959
		R: Use logical reasoning to identify the item that does not belong in a group.	smma_lo_01227
		R: Formulate questions around numerical data.	smma_lo_01642
1.1.1.a	Count to 120 by ones and tens, starting at any given number.	Find a missing number in a sequence, counting by 10's (two-digit, non multiples of 10).	smma_lo_00992
1.1.1.b	Read and write numerals within the range of 0 - 120.	Identify a written number from a spoken number (two-digit).	smma_lo_00977
1.1.1.d	Demonstrate that each digit of a two-digit number represents amounts of tens and ones, knowing 10 can be considered as one unit made of ten ones which is called a "ten" and any two-digit number can be composed of some tens and some ones (e.g., 19 is one ten and nine ones, 83 is eight tens and three ones) and can be recorded as an equation (e.g., $19 = 10 + 9$).	Find the number of a set of objects (grouped tens and ones; two-digit).	smma_lo_00976
		Show a number using base-ten blocks (two-digit).	smma_lo_00978
		Enter the number equal to a given number of ones and tens (0 to 9 tens, 1 to 9 ones).	smma_lo_00979
		Enter how many tens and ones for a number (two-digit).	smma_lo_00980
		Find two numbers when given place value clues (two-digit).	smma_lo_00990
		Identify a number with a given digit in the ones or tens place.	smma_lo_00995
		Find two numbers when given place value clues (two-digit).	smma_lo_01049

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1.1.1.d	Demonstrate that each digit of a two-digit number represents amounts of tens and ones, knowing 10 can be considered as one unit made of ten ones which is called a “ten” and any two-digit number can be composed of some tens and some ones (e.g., 19 is one ten and nine ones, 83 is eight tens and three ones) and	Model multiples of 10 (from 10 to 90) with place value blocks.	smma_lo_02019
1.1.1.e	Demonstrate that decade numbers represent a number of tens and 0 ones (e.g., 50 = 5 tens	Enter the number equal to 1 to 9 tens.	smma_lo_00974
		Enter the number of tens for a given multiple of ten (10 to 90).	smma_lo_00975
1.1.1.f	Compare two two-digit numbers by using symbols <, =, and > and justify the comparison based on the number of tens and ones.	Compare numbers using < or > symbols (1 to 19).	smma_lo_00325
		Compare numbers using < or > symbols (20 to 99).	smma_lo_00328
		Identify two numbers that make an inequality true (two-digit).	smma_lo_00997
		Find two numbers within a range (two-digit).	smma_lo_00998
		Identify the greatest or least number (two-digit).	smma_lo_00999
		Identify the value that is greater than one number and less than another in context.	smma_lo_01554
		R: Compare differences (minuends 1 to 9).	smma_lo_00337
		R: Identify two numbers within a range (1 to 9), number line in feedback.	smma_lo_00963
		R: Identify two numbers that make an inequality true (0 to 9).	smma_lo_00994
1.1.2.a	Fluently (i.e., automatic recall based on understanding) add and subtract within 10.	Add 1 to a number (sums 1 to 10).	smma_lo_00015
1.1.2.b	Add and subtract within 20, using a variety of strategies (e.g., count on to make a ten).	Add two addends in words (one-digit addends, sums 6 to 10).	smma_lo_00016
		Add doubles (sums 2 to 18).	smma_lo_00017
		Add doubles (sums 4 to 18).	smma_lo_00019
		Add two consecutive addends (one-digit addends, sums 1 to 17).	smma_lo_00020
		Add two consecutive addends displayed horizontally (one-digit addends, sums 1 to 17).	smma_lo_00021
		Add vertically using basic math facts (sums 11 to 18).	smma_lo_00022
		Add using basic math facts displayed horizontally (sums 10 to 18).	smma_lo_00023
		Add two numbers presented in words using basic math facts (sums 1 to 18).	smma_lo_00024

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1.1.2.b	Add and subtract within 20, using a variety of strategies (e.g., count on to make a ten).	Add four addends (one-digit addends, sums 3 to 10).	smma_lo_00030
		Add ten to a number (sums 11 to 19), given in words.	smma_lo_00038
		Add a two-digit number to a one-digit number by counting (sums up to 18), given in words.	smma_lo_00039
		Add two addends vertically (sums 10 to 18).	smma_lo_00041
		Add using basic math facts displayed horizontally (sums 10 to 18).	smma_lo_00042
		Add 9 to a number (sums 10 to 18), given in words.	smma_lo_00045
		Act out the problem to find the sum (basic facts).	smma_lo_01241
		Identify a number sentence that can be used to solve a word problem with extra information (addition or subtraction, basic facts).	smma_lo_01242
		Act out a problem to find the sum of three numbers (one-digit addends).	smma_lo_01249
		Identify a number sentence that can be used to solve a problem with extra information (addition or subtraction, basic facts).	smma_lo_01250
		Subtract using basic math facts (minuends 2 to 10).	smma_lo_01413
		Subtract using basic math facts displayed horizontally (minuends 6 to 9).	smma_lo_01417
		Subtract using basic math facts (minuends 6 to 9).	smma_lo_01418
		Subtract using basic math facts (minuends 1 to 9).	smma_lo_01419
		Subtract using basic math facts (differences are 0).	smma_lo_01420
		Subtract 1 from a number (minuends 1 to 9).	smma_lo_01421
		Subtract a number from 10 (subtrahends 1 to 9).	smma_lo_01424
		Subtract a number from its double (differences 1 to 9).	smma_lo_01425
		Subtract 1 from a number (two-digit minuends, no regrouping, presented vertically).	smma_lo_01427
		Subtract using basic math facts displayed horizontally (minuends 10 to 14, subtrahends 1 to 9).	smma_lo_01429
Subtract (student choice, minuends 10 to 15, subtrahends 0 to 5, no regrouping).	smma_lo_01430		

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1.1.2.b	Add and subtract within 20, using a variety of strategies (e.g., count on to make a ten).	Subtract using basic math facts (student choice, minuends 16 to 19, subtrahends 1 to 9).	smma_lo_01433
		Subtract using basic math facts (minuends 15 to 18, subtrahends 6 to 9).	smma_lo_01434
		Subtract using basic math facts (minuends 11 to 19, subtrahends 1 to 8).	smma_lo_01435
		Subtract using basic math facts (minuends 11 to 18, subtrahends 1 to 9).	smma_lo_01436
		Identify the number sentence that solves a subtraction problem in context (minuends 11 to 18, subtrahends 1 to 9).	smma_lo_01439
		Subtract a one-digit number from a two-digit number displayed horizontally (minuends 11 to 19, subtrahends 1 to 9).	smma_lo_01443
		Subtract vertically using basic math facts (minuends 15 to 18, subtrahends 6 to 9).	smma_lo_01444
		Subtract vertically (minuends 11 to 19, subtrahends 1 to 9, no regrouping).	smma_lo_01445
		Act out the solution to an addition problem in context (three addends, sums 1 to 9).	smma_lo_01537
		Act out the solution to multi-step problem in context (addends, minuends 1 to 4).	smma_lo_01538
		Model and apply joining stories to solve problems (sums 1 to 9).	smma_lo_01863
		Solve for c in $a + b = c$ (sums 0 to 9).	smma_lo_00323
		Solve for c in $a - b = c$ (differences 1 to 9).	smma_lo_00324
		Solve for c in $a + b = c$ (sums 10 to 18).	smma_lo_00327
		Solve for c in $a - b = c$ (differences 1 to 9).	smma_lo_00329
1.1.2.d	Mentally find 10 more or 10 less than a two-digit number without having to count and explain the reasoning used (e.g., 33 is 10 less than 43).	Subtract 10 from a two-digit number (student choice, minuends 11 to 19).	smma_lo_01441
		Subtract 10 from a number (minuends 11 to 19, horizontal presentation).	smma_lo_01442
		Mentally find 10 more or 10 less than a given two-digit number; model the solution with place value blocks.	smma_lo_02020
1.1.2.e	Add within 100, which may include adding a two-digit number and a one-digit number, and adding a twodigit number and a multiple of ten using concrete models, drawings, and strategies which reflect understanding of	Explain how to solve an addition problem, either by using place value blocks or by rewriting the problem.	smma_lo_02012
		Explain how to solve a subtraction problem, either by using place value blocks or by rewriting the problem as an addition problem.	smma_lo_02013
1.2.1.a	Use the meaning of the equal sign to determine if equations are true and give examples of equations that are true (e.g., $4 = 4$, $6 = 7 - 1$, $6 + 3 = 3 + 6$, and 7	Determine if equations involving addition and subtraction are true or false.	smma_lo_02024

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NE Standard(s) Number	NE Standard(s) Description	Item Description	Item ID
1.2.1.b	Use the relationship of addition and subtraction to solve subtraction problems (e.g., find $12 - 9 = \underline{\quad}$, using the addition fact $9 + 3 = 12$).	Complete fact families with four facts (sums 3 to 10).	smma_lo_00322
		Identify a missing number in an addition and subtraction fact family.	smma_lo_01035
		Create a fact family (addition and subtraction).	smma_lo_01857
1.2.1.d	Determine the unknown whole number in an addition or subtraction equation (e.g. $7 + ? = 13$).	Find the missing addend in a number sentence. (sums 2 to 9)	smma_lo_00037
		Find the missing addend in a number sentence (sums 10 to 18).	smma_lo_00048
		Find the missing addend in a number sentence (three addends, sums 1 to 9).	smma_lo_00052
		Find the missing addend in a number sentence (three addends, sums 10 to 19).	smma_lo_00066
		Solve for a or b in $a + b = c$ (sums 0 to 9).	smma_lo_00330
		Solve for a or b in $a - b = c$ differences 0 to 9).	smma_lo_00331
		Solve for a or b in $a + b = c$ (sums 10 to 18).	smma_lo_00332
		Solve for a or b in $a - b = c$ (differences 0 to 18).	smma_lo_00333
		Find the missing subtrahend in a subtraction number sentence (minuends 0 to 9).	smma_lo_01432
		Find the missing minuend in a subtraction number sentence (minuends 0 to 9).	smma_lo_01440

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1.2.1.d	Determine the unknown whole number in an addition or subtraction equation (e.g. $7 + ? = 13$).	Find the missing subtrahend in a subtraction number sentence (minuends 10 to 14).	smma_lo_01446
		Find the missing subtrahend in a subtraction number sentence (minuends 15 to 18).	smma_lo_01449
		Find the missing minuend in a subtraction number sentence (minuends 10 to 14).	smma_lo_01451
		Find the missing minuend in a subtraction number sentence (minuends 15 to 18).	smma_lo_01455
		Find the missing subtrahend in a subtraction number sentence (minuends 11 to 19).	smma_lo_01464
		Find the missing minuend in a subtraction number sentence (minuends 11 to 19).	smma_lo_01468
		Solve for the unknown in an addition equation (addends and sums less than 16).	smma_lo_01656
1.2.2.a	Decompose numbers and use the commutative and associative properties of addition to develop addition and subtraction strategies including (making 10's and counting on from the larger number) to add and subtract basic facts within 20 (e.g., decomposing to make 10, $7 + 5 = 7 + 3 + 2 = 10 + 2 = 12$; using the commutative property to count on $2 + 6 = 6 + 2$; and using the associative property to make 10, $5 + 3 + 7 = 5 + (3 + 7) = 5 + 10$).	Use the commutative and associative properties of addition to find the missing number.	smma_lo_01090
		Apply the Commutative Property of Addition as a strategy to add two numbers; use fact families as a strategy to subtract two numbers.	smma_lo_02021
		Use the Associative Property of Addition to add two numbers by regrouping the numbers into a ten and some ones.	smma_lo_02022
		Apply the Associative Property of Addition to add three numbers.	smma_lo_02135
1.2.3.a	Solve real-world problems involving addition and subtraction within 20 in situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all parts of the addition or subtraction problem (e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem).	Use a picture to solve a missing addend problem (sums 2 to 6).	smma_lo_01232
		Solve a problem in context by finding a missing addend (sums 2 to 5).	smma_lo_01546
		Solve a problem in context by finding a missing addend (sums 2 to 5).	smma_lo_01550
		Solve a subtraction problem by finding the missing addend.	smma_lo_02023

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NE Standard(s) Number	NE Standard(s) Description	Item Description	Item ID
1.2.3.b	Solve real-world problems that include addition of three whole numbers whose sum is less than or equal to 20 by using objects, drawings, and equations with a symbol to represent the unknown number in the problem.	Use a picture to solve an addition problem with three addends.	mma_lo_01286
		Solve an addition problem with three addends in context (sums 3 to 10).	mma_lo_01549
		Solve an addition problem with three addends in context (sums 3 to 10).	mma_lo_01557
		Solve an addition problem in context (three addends, sums 9 to 18).	mma_lo_01576
1.3.1.a	Determine defining and non-defining attributes of two-dimensional shapes; build and draw shapes that match the given definition.	Connect points on a geoboard to copy a figure.	mma_lo_00611
1.3.3.a	Identify, name, and understand the value of dimes and pennies (e.g., a dime is equal to ten pennies) relating to tens and ones, and solve real-world problems involving dimes and pennies, using ¢ symbol appropriately (e.g., If you have four dimes and two pennies, how many cents do you have?).	Determine the number of cents in 1 to 100 pennies, 1 to 20 nickels, or 1 to 10 dimes.	mma_lo_00143
		Identify nickels or dimes.	mma_lo_00698
		Enter the amount of money shown (1 to 5 cents in pennies).	mma_lo_00699
		Identify the coin worth 1, 5, 10, or 25 cents.	mma_lo_00702
		Enter the amount of money shown (6 to 9 cents in pennies).	mma_lo_00704
		Enter the amount of money shown (11 to 50 cents in pennies and dimes).	mma_lo_00715
		Identify the coin equivalent to 5, 10, or 25 pennies.	mma_lo_00727
1.3.3.b	Tell and write time to the half hour and hour using analog and digital clocks.	Tell time to the hour using an analog clock.	mma_lo_00714
		Tell time to the hour using digital and analog clocks.	mma_lo_00716
		Tell time to the half-hour using an analog clock.	mma_lo_00724
		R: Identify the hour or minute hand of a clock.	mma_lo_00697

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1.3.3.c	Measure objects by using a shorter object end-to-end and know that the length of the object is the amount of same-size objects that span it lined up end-to-end.	Count to find how long or tall (2 to 9 nonstandard units).	smma_lo_00705
		Find the height (2 to 9 nonstandard units).	smma_lo_00710
		Count to find the height and width (2 to 5 nonstandard units).	smma_lo_00713
		Find the total length of two objects (nonstandard units, sums 2 to 5).	smma_lo_00720
		Estimate the height and width (2 to 5 nonstandard units).	smma_lo_00721
		Measure the length of an object (2 to 7 nonstandard units).	smma_lo_00777
		R: Identify the group of objects that is 1 to 5 nonstandard units long or tall.	smma_lo_00701
		R: Identify an object given the height and width in nonstandard units.	smma_lo_00725
		R: Find the distance between two objects (2 to 8 nonstandard units).	smma_lo_00732
1.3.3.d	Order three objects by directly comparing their lengths, or indirectly by using a third object.	Match objects of the same height (3 heights).	smma_lo_00687
		Match objects of the same length (3 lengths).	smma_lo_00688
		Given 3 objects, Identify the shortest or longest object.	smma_lo_00693
		Order three objects by length.	smma_lo_02147
2.1.1.a	Count within 1000, including skip-counting by 5s, 10s, and 100s starting at a variety of multiples of 5, 10 or 100.	Find the missing two-digit number in a sequence of odd or even numbers.	smma_lo_01002
		Find a missing number in a sequence, counting by 5's (5 to 50).	smma_lo_01003
		Find a missing number in a sequence, counting up or down by 5's (two-digit).	smma_lo_01004
		Count by 2's, 4's, 5's, or 10's (2 to 20, 4 to 40, 5 to 50, 80 to 200).	smma_lo_01030
		Find the missing number in a sequence, counting by 5's or 10's.	smma_lo_01231
2.1.1.b	Read and write numbers within the range of 0 – 1,000 using standard, word, and expanded forms.	Enter the number for a word name (two-digit).	smma_lo_01001
		Identify the word name for a three-digit number.	smma_lo_01009
		Enter the number for a word name (100 to 999).	smma_lo_01042

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2.1.1.c	Demonstrate that each digit of a three-digit number represents amounts of hundreds, tens and ones (e.g., 387 is 3 hundreds, 8 tens, 7 ones).	Find a number equal to 1 to 9 hundreds.	smma_lo_01007
		Find the number of hundreds equivalent to a multiple of 100 (100 to 900).	smma_lo_01008
		Identify the number represented by a set of objects (pictorial models of hundreds, tens, and ones; three-digit).	smma_lo_01010
		Use base-ten blocks to show a number (three-digit).	smma_lo_01012
		Enter a three-digit number in a place-value chart (base-ten block models, three-digit).	smma_lo_01013
		Identify a number with a given digit in the ones, tens, or hundreds place.	smma_lo_01014
		Find a number equal to 1 to 9 hundreds, 0 to 9 tens, and 0 to 9 ones.	smma_lo_01015
		Enter a three-digit number in a place-value chart (base-ten block models, three-digit).	smma_lo_01025
		Identify a number with a given digit in the ones, tens, hundreds, or thousands place.	smma_lo_01033
		Find a number equal to 1 to 9 hundreds, 0 to 9 tens, and 0 to 9 ones.	smma_lo_01047
2.1.1.d	Demonstrate that 100 represents a group of ten tens.	Given a number (1-9) of groups of 10 objects, determine how many more groups of 10 objects are needed to make a hundred.	smma_lo_02011
2.1.1.e	Compare two three-digit numbers by using symbols $<$, $=$, and $>$ and justify the comparison based on the meanings of the hundreds, tens, and ones.	Compare sums (two-digit addends, multiples of 10).	smma_lo_00334
		Identify the greatest or least number (three-digit).	smma_lo_01019
		Find a number between two given numbers (1 to 999).	smma_lo_01020
		Identify four numbers that are in consecutive order (three-digit).	smma_lo_01021
		Identify the greatest or least number (three-digit).	smma_lo_01026
		Identify a number that is between two numbers, or before, after, or closer to a number (101 to 999).	smma_lo_01027
		Identify four numbers that are in consecutive order (three-digit).	smma_lo_01029
2.1.2.a	Fluently (i.e. automatic recall based on understanding) add and subtract within 20.	Find a number that is one fewer or one greater than a given number (1 to 9), number line in feedback.	smma_lo_00962

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2.1.2.b	Add and subtract within 100 using strategies based on place value, including the standard algorithm, properties of operations, and/or the relationship between addition and subtraction.	Add two multiples of 10 (student choice, sums 20 to 90).	smma_lo_00025
		Add two addends (one- and two-digit addends, sums 11 to 99, no regrouping).	smma_lo_00033
		Add a multiple of 10 and a one-digit number displayed horizontally (sums 11 to 99) using place value.	smma_lo_00040
		Add three multiples of 10 (student choice, sums 30 to 90).	smma_lo_00043
		Add two multiples of 10 displayed horizontally (sums 20 to 90).	smma_lo_00044
		Add two addends displayed horizontally (one-digit and a two-digit addend, sums 11 to 99).	smma_lo_00049
		2.1.2.b	Add and subtract within 100 using strategies based on place value, including the standard algorithm, properties of operations, and/or the relationship between addition and subtraction.
Add two addends (student choice, a one-digit and a two-digit addend, sums 20 to 98, regrouping).	smma_lo_00054		
Find the sum of two numbers displayed horizontally (a one-digit and a two-digit addend, sums 20 to 98, regrouping), given horizontally.	smma_lo_00055		
Add three addends (two-digit addends, sums 33 to 99, no regrouping).	smma_lo_00056		
Add three addends displayed horizontally (one-digit addends, sums 20 to 27).	smma_lo_00062		
Add two addends displayed horizontally (two digit addends, sums 21 to 99).	smma_lo_00064		
Add two addends (student choice, two-digit addends, sums 30 to 98, regrouping ones).	smma_lo_00067		
Add three addends (student choice, one-digit addends, sums 20 to 27).	smma_lo_00069		
Add three addends (student choice, one-digit and two-digit addends, sums 21 to 99, no regrouping).	smma_lo_00079		
Add three addends (student choice, one- and two-digit addends, sums 20 to 99, no regrouping).	smma_lo_00087		
Add three addends (student choice, one- and two-digit addends, sums 30 to 98, regrouping ones).	smma_lo_00090		
Solve for a or b in $a + b = c$ (sums 10 to 108).	smma_lo_00336		
Solve for c in $a - b = c$ (minuends 20 to 99, subtrahends 1 to 9, no regrouping).	smma_lo_00338		
Solve for c in $a - b = c$ (minuends 20 to 99, two-digit subtrahends, no regrouping).	smma_lo_00340		
Solve for a or b in $a + b = c$ (sums 12 to 98).	smma_lo_00341		

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2.1.2.b	Add and subtract within 100 using strategies based on place value, including the standard algorithm, properties of operations, and/or the relationship between addition and subtraction.	Solve for c in $a - b = c$ (minuends 20 to 99, regrouping).	smma_lo_00342
		Solve for a or b in $a - b = c$ (minuends 20 to 99, no regrouping).	smma_lo_00343
		Solve for a or b in $a - b = c$ (minuends 21 to 99, subtrahends 1 to 9, no regrouping).	smma_lo_00347
		Find a number that is one less or one more than a given number (two-digit), number line in feedback.	smma_lo_00984
		Find the sum or difference when a two-digit number is added to or subtracted from a number (base-ten block models).	smma_lo_00989
		Subtract two multiples of 10 (student choice, minuends 20 to 90, subtrahends 10 to 80).	smma_lo_01426
		Subtract (student choice, minuends 21 to 95, subtrahends 1 to 9, no regrouping).	smma_lo_01428
		Subtract multiples of 10 (student choice, minuends 20 to 90, subtrahends 10 to 80).	smma_lo_01437
		Subtract multiples of 10 (minuends 20 to 90, subtrahends 10 to 80, horizontal presentation).	smma_lo_01438
		Subtract (minuends 21 to 99, subtrahends 1 to 9, no regrouping).	smma_lo_01450
		Subtract a multiple of 10 from a 2-digit number (minuends 11-99, vertical presentation).	smma_lo_01452
		Subtract (student choice, minuends 21 to 99, no regrouping).	smma_lo_01454
		Subtract two numbers displayed horizontally (counting up strategy, minuends 21 to 98, subtrahends 2 to 9, regrouping).	smma_lo_01462
		Subtract two-digit numbers with regrouping (vertical presentation).	smma_lo_01463
		Subtract two numbers displayed horizontally (counting up strategy, minuends 25 to 98, subtrahends 6 to 9, regrouping).	smma_lo_01472
		Find the missing minuend in a number sentence (minuends 21 to 99).	smma_lo_01478
		Find the missing subtrahend in a number sentence (minuends 10 to 99).	smma_lo_01480
		Find the missing minuend in a subtraction number sentence (minuends 10 to 99, no regrouping).	smma_lo_01486

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2.1.2.b	Add and subtract within 100 using strategies based on place value, including the standard algorithm, properties of operations, and/or the relationship between addition and subtraction.	Subtract with regrouping (minuends 25-98).	smma_lo_01488
		Find the missing minuend in a subtraction number sentence (minuends 20-98, subtrahends 11-89)	smma_lo_01491
		Subtract two numbers by regrouping the numbers into a ten and some ones.	smma_lo_02026
2.1.2.c	Mentally add or subtract 10 or 100 to/from a given number 100-900.	Add two addends (100 and a three-digit number, sums 200 to 900).	smma_lo_00057
		Subtract 100 from a three-digit number presented in a sentence.	smma_lo_01459
2.1.2.d	Add up to three two-digit numbers using strategies based on place value and understanding of properties.	Add three addends (sums 2 to 5).	smma_lo_00026
		Add three addends (audio presentation, sums 3 to 5).	smma_lo_00027
		Add three addends (sums 6 to 10).	smma_lo_00028
		Add three addends displayed horizontally (sums 6 to 10).	smma_lo_00029
		Add three addends (one-digit addends, sums 11 to 19).	smma_lo_00031
		Add three addends presented horizontally (one-digit addends, sums 10 to 19).	smma_lo_00032
2.1.2.e	Add and subtract within 1000, using concrete models, drawings, and strategies, which reflect understanding of place value and properties of operations.	Find the sum or difference when ones, tens, or hundreds are added to or subtracted from a three-digit number (base-ten block models).	smma_lo_01017
		Identify a picture that represents a subtraction problem (one or two-digit).	smma_lo_01244
		Identify the picture that can be used to solve an addition or subtraction problem.	smma_lo_01255
2.1.2.f	Use addition to find the total number of objects arranged in an array no larger than five rows and five columns and write an equation to express the total (e.g., $3 + 3 + 3 = 9$).	Solve addition problems with doubles as prelude to multiplication.	smma_lo_00853

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2.2.3.a	Solve real-world problems involving addition and subtraction within 100 in situations of addition and subtraction, including adding to, subtracting from, joining and separating, and comparing situations with unknowns in all positions using objects, models, drawings, verbal explanations, expressions and equations.	Find the missing addend in a number sentence (a one-digit and a two-digit addend, sums 10 to 99, no regrouping).	smma_lo_00070
		Find the difference between two numbers (two-digit, presented as a sentence)	smma_lo_01000
		Choose an operation to solve a problem with extra information; then solve (addition or subtraction, basic facts).	smma_lo_01247
		Calculate the difference between the life spans of two animals (differences 2 to 59).	smma_lo_01310
		Make a picture to solve a two-step problem in context (addition and subtraction).	smma_lo_01551
		Make a picture to solve a two-step problem in context (addition and subtraction).	smma_lo_01552
		Solve an addition problem in context (two-digit addends, sums less than 100, no regrouping).	smma_lo_01556
		Solve a problem with extra information (addition).	smma_lo_01558
		Solve a subtraction problem in context (two-digit minuends, one-digit subtrahends, no regrouping).	smma_lo_01560
		Solve a subtraction problem involving coins to find how much is left (two-digit numbers, no regrouping).	smma_lo_01561
		Solve a subtraction problem to find a person's age (minuends 1 to 99, subtrahends 1 to 9, no regrouping).	smma_lo_01563
		Solve an addition problem in context (extra information, sums to 50, no regrouping).	smma_lo_01567
		Solve a problem in context by finding a missing addend (three addends, sums to 20).	smma_lo_01574
		Solve a subtraction problem in context (extra information, minuends 2 to 99, no regrouping).	smma_lo_01581
		Solve an addition problem in context (four addends, sums 0 to 25).	smma_lo_01587
2.3.1.a	Recognize and draw shapes having a specific number of angles, faces, or other attributes, including triangles, quadrilaterals, pentagons, and hexagons	Identify the quadrilaterals in a set of figures.	smma_lo_00615
		Identify parallelograms, rhombuses, and trapezoids.	smma_lo_00620
		Identify the quadrilaterals that are trapezoids or rhombuses.	smma_lo_00659

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2.3.3.a	Solve real-world problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately	Determine the value of a combination of nickels, dimes, and quarters (values to \$5.00).	smma_lo_00165
		Identify the number of dollars and dimes that represent a given amount (\$1.10 to \$3.50).	smma_lo_00180
		Write the value of a set of dimes in dollar form (\$1.10 to \$3.90).	smma_lo_00183
		Enter the amount of money shown (10 to 19 cents in pennies, nickels, and dimes).	smma_lo_00722
		Find equivalence of nickels and dimes (1 to 5 dimes).	smma_lo_00738
		Identify the given amount of money in coins (5 to 50 cents in nickels and dimes).	smma_lo_00740
		Show another way to represent an amount of money (10 to 24 cents in pennies, nickels, and dimes).	smma_lo_00745
		Enter the amount of money shown (10 to 99 cents).	smma_lo_00760
		Identify the set of coins that has greater value (16 to 75 cents in pennies, nickels, dimes, and quarters).	smma_lo_00765
		Show a decimal money amount in dollars and coins (\$1.00 to \$5.00).	smma_lo_00774
		Show the given amount of money in coins (25 to 90 cents in pennies, nickels, dimes, and quarters).	smma_lo_00778
		Write the value of a set of coins as a decimal amount (\$1.00 to \$3.20).	smma_lo_00784
		Identify items that can be purchased for a nickel.	smma_lo_01541
		Solve an addition problem involving money (sums 3 to 9 cents).	smma_lo_01543
		Find twice the amount of the money shown (products to 20).	smma_lo_01571
		Solve a subtraction problem involving coins (two-digit numbers, no regrouping).	smma_lo_01579
		Make a picture to find the change received from a purchase (change back from \$1.00).	smma_lo_01583
		Make a picture to solve a multiplication problem involving total cost (2 to 5 items, 5, 10, or 15 cents each).	smma_lo_01584
		Find the change from one dollar (item costs 55 to 99 cents).	smma_lo_01598
		Solve a problem in context that involves adding three amounts expressed as dollars	smma_lo_01608

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2.3.3.a	Solve real-world problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately	Find the change from one dollar for two to four items (each 10, 15, or 20 cents).	smma_lo_01609
		Find the total value of a group of quarters, dimes, nickels, and pennies (sums to \$1.65).	smma_lo_01611
		Determine the number of dollar bills needed to buy three to five items).	smma_lo_01623
2.3.3.b	Identify and write time to five-minute intervals using analog and digital clocks and both a.m. and p.m	Set time to 5-minute intervals using digital and analog clocks.	smma_lo_00744
		Match digital times with descriptions (e.g., quarter to or quarter past).	smma_lo_00806
2.3.3.d	Measure the length of an object using two different length units and describe how the measurements relate to the size of the specific unit.	Measure the length of an object in cm and inches; relate the two measurements to the sizes of the units.	smma_lo_02003
2.3.3.e	Measure and estimate lengths using inches, feet, centimeters, and meters.	Measure the length of an object to the nearest inch (2 to 6 inches).	smma_lo_00703
		Measure the length of an object to the nearest centimeter (3 to 12 cm).	smma_lo_00750
		Measure two lengths and find the sum (metric, sums 2 to 9).	smma_lo_00753
		Measure the length of an object to the nearest inch (1 to 6 inches).	smma_lo_00755
2.3.3.e	Measure and estimate lengths using inches, feet, centimeters, and meters.	Measure two metric lengths, write an addition problem, and find the sum (sums 2 to 12 centimeters).	smma_lo_00756
		Identify the reasonable length of an object (inches, feet, and yards).	smma_lo_00780
		Measure the length of an object in centimeters or inches (whole numbers).	smma_lo_00785
		Identify the reasonable length, width, or height of an object (millimeters, centimeters, and meters).	smma_lo_00803
2.3.3.f	Compare the difference in length of objects using inches and feet or centimeters and meters.	Measure two objects in inches; determine how much longer one object is than the other.	smma_lo_02015
2.3.3.g	Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, etc., and represent whole number sums and differences within 100 on a number line.	Find a missing number on a number line (0 to 9).	smma_lo_00961
		Identify a number on a number line between two given numbers (1 to 9).	smma_lo_00993
		Find a missing number for a point on a number line (two-digit).	smma_lo_00996
		Find the missing numbers on a number line, counting by 3s, 4s, 5, etc., to 9s.	smma_lo_01034

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NE Standard(s) Number	NE Standard(s) Description	Item Description	Item ID
2.4.1.a	Create and represent a data set using pictographs and bar graphs to represent a data set with up to four categories.	Create a vertical bar graph from a table and interpret data in the graph.	smma_lo_01130
		Create a table from a vertical bar graph.	smma_lo_01132
		Identify the table that represents the data in a vertical bar graph.	smma_lo_01136
		Label the categories of a vertical bar graph based on data from a table.	smma_lo_01138
		Construct a vertical bar graph based on data from a horizontal bar graph.	smma_lo_01146
		Construct a horizontal bar graph based on data from a vertical bar graph.	smma_lo_01150
		Create a table based on data from a bar	smma_lo_01645
2.4.2.a	Interpret data using bar graphs with up to four categories. Solve simple comparison problems using information from the graphs	Interpret the shorter or taller bar of a vertical bar graph as having fewer or more items.	smma_lo_01131
		Identify a vertical bar graph that represents data in a table.	smma_lo_01134
		Identify the vertical bar graph that shows a strictly increasing or decreasing trend.	smma_lo_01135
		Analyze a bar graph to find the number of bars that fall within a given range.	smma_lo_01154
		Read and interpret data about tree growth from a bar graph.	smma_lo_01302
		Given a bar graph of tree growth, calculate the height a tree grew from one year to another.	smma_lo_01303
		Read a bar graph and answer questions about tree growth over time.	smma_lo_01304
3.1.1.a	Read, write and demonstrate multiple equivalent representations for numbers up to 100,000 using objects, visual representations, including standard form, word form, expanded form, and expanded notation.	Identify a two-digit number, model, or expression that has a different value.	smma_lo_00991
		Identify the number, model, word name, or expanded notation that has a different value (three-digit).	smma_lo_01018
		Show a four-digit number with base-ten blocks.	smma_lo_01032
3.1.1.a	Read, write and demonstrate multiple equivalent representations for numbers up to 100,000 using objects, visual representations, including standard form, word form, expanded form, and expanded notation.	Identify the expanded notation of a four-digit number.	smma_lo_01038
		Find a number equal to 1 to 9 thousands, 0 to 9 hundreds, 0 to 9 tens, and 0 to 9 ones.	smma_lo_01051
		Enter the number for a word name (1000 to 9999).	smma_lo_01065
3.1.1.b	Compare whole numbers through the hundred thousands and represent the comparisons using the symbols $>$, $<$ or $=$.	Compare three-digit numbers.	smma_lo_00350
		Compare quotients (combinations $2 \div 2$ to $9 \div 9$).	smma_lo_00355
		Compare numbers (1,000 to 9,999).	smma_lo_01039

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3.1.1.c	Round a whole number to the tens or hundreds place, using place value understanding or a visual representation.	Round a two-digit number to the nearest ten.	smma_lo_01028
		Round a three-digit number to the nearest hundred.	smma_lo_01036
		Identify the best estimate for a sum of two numbers (two-digit addends, round to the nearest 10).	smma_lo_01052
		Round a two-digit or three-digit number to the nearest ten.	smma_lo_01059
		Round a three- to five-digit number to the nearest hundred.	smma_lo_01081
		Estimate the sum by rounding to the nearest 10 (two-digit addends).	smma_lo_01615
		Round two-digit numbers to the nearest ten.	smma_lo_01647
		Round a two-digit number to the nearest ten (hundreds chart).	smma_lo_01648
		Round a two-digit number to the nearest ten.	smma_lo_01649
		Round a three-digit number to the nearest hundred.	smma_lo_01650
		Round a three-digit number to the nearest hundred.	smma_lo_01651
		Round a three-digit number to the nearest hundred.	smma_lo_01652
		3.1.1.d	Represent and understand a fraction as a number on a number line.
Identify a fraction for a given point on a number line divided into tenths, twelfths, or sixteenths.	smma_lo_00431		
Model equivalent fractions; identify equivalent fractions on a number line.	smma_lo_02035		
Describe fractions in terms of the number of parts in a whole and the relative size of those parts (e.g., larger, smaller).	smma_lo_02137		
Represent a unit fraction $1/b$ by partitioning a number line and then finding $1/b$ on it.	smma_lo_02148		
3.1.1.e	Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers.	Find a fraction equal to 1 (halves to eighths).	smma_lo_00427
		Using a model, rewrite a whole number as a fraction (halves to eighths).	smma_lo_00443
3.1.1.f	Show and identify equivalent fractions using visual representations including pictures, manipulatives, and number lines.	Identify the model that is divided into equal parts (2 to 8 parts).	smma_lo_00400
		Count the number of equal parts in a fractional model (2 to 8 parts).	smma_lo_00402
		Identify a model that represents a fraction (halves, thirds, fourths).	smma_lo_00404

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NE Standard(s) Number	NE Standard(s) Description	Item Description	Item ID
3.1.1.f	Show and identify equivalent fractions using visual representations including pictures, manipulatives, and number lines.	Identify a fraction that represents a model (halves, thirds, fourths).	smma_lo_00405
		Identify the figure divided into equal parts (halves to eighths in words).	smma_lo_00417
		Using models, find equivalent fractions (halves to twelfths).	smma_lo_00433
		Find three equivalent fractions (simplified fractions $\frac{1}{2}$ to $\frac{8}{9}$).	smma_lo_00458
		Identify the figures with the equivalent fractional parts shaded.	smma_lo_00483
		Draw one to two segments to divide a figure into two to four congruent parts.	smma_lo_00640
		Identify two equivalent fractions for $\frac{1}{2}$.	smma_lo_01708
		Identify the fraction equivalent to the given fraction.	smma_lo_01793
		Partition shapes into equal parts.	smma_lo_02000
3.1.1.g	Find parts of a whole and parts of a set using visual representations.	Count the fractional parts and total number of parts in a region (halves, thirds, fourths).	smma_lo_00403
		Identify the set of shapes that represents a fraction (halves, thirds, fourths).	smma_lo_00406
		Count the fractional parts and total number of parts in a set (halves, thirds, fourths).	smma_lo_00412
		Identify the figure showing the fraction of a set shaded (halves, thirds, fourths).	smma_lo_00413
		Identify the fraction representing shaded items in a set (halves, thirds, fourths).	smma_lo_00414
		Identify a fractional portion of a set (halves, thirds, fourths).	smma_lo_00415
		Identify the picture that shows one number is one-half of another number.	smma_lo_00418
		Count shaded parts and the total number of parts (halves to eighths).	smma_lo_00419
		Identify a fraction representing the shaded part (halves to eighths).	smma_lo_00421
		Enter the fraction representing the shaded amount (halves to eighths).	smma_lo_00422
		Count the shaded and total number of elements in a set (halves to eighths).	smma_lo_00423
		Solve a problem by finding the fractional amount of a set (halves to eighths).	smma_lo_00424
		Identify a fractional portion of a set (halves to eighths).	smma_lo_00425
		Using pictures, find a fractional amount of a whole number (product of halves to fourths and 2 to 16).	smma_lo_00428
3.1.1.h	Explain and demonstrate how fractions $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$ and a whole relate to time, measurement, and money, and demonstrate using visual representation.	Identify the fraction of a dollar a coin is worth (penny to half-dollar).	smma_lo_00809

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3.1.1.i	Compare and order fractions having the same numerators or denominators using visual representations, comparison symbols, and verbal reasoning.	Using a number line, compare fractions (like denominators, halves to sixteenths).	smma_lo_00434
		Compare fractions (like denominators, thirds to sixteenths).	smma_lo_00447
3.1.2.a	Add and subtract within 1,000 with or without regrouping.	Add two multiples of 100 (student choice, sums 200 to 900).	smma_lo_00046
		Add two multiples of 10 (student choice, sums 20 to 180).	smma_lo_00047
		Add two addends (student choice, two-digit addends, sums 100 to 189, regrouping 10's to 100's).	smma_lo_00053
		Add two numbers (student choice, three-digit addends, sums 200 to 999, no regrouping).	smma_lo_00058
		Add two addends (student choice, a two-digit and a three-digit addend, sums 120 to 998, regrouping).	smma_lo_00059
		Add three addends (student choice, two-digit addends, sums 100 to 199, regrouping from tens to hundreds place).	smma_lo_00060
		Add two addends (student choice, three-digit addends, sums 200 to 998, regrouping).	smma_lo_00061
		Add two addends (student choice, a two-digit and a three-digit addend, sums 100 to 999, no regrouping).	smma_lo_00065
		Add two addends displayed horizontally (multiples of 10, sums 100 to 180, regrouping).	smma_lo_00068
		Add two addends (student choice, three-digit addends, sums 200 to 999, no regrouping).	smma_lo_00071
		Find the missing addend in a number sentence (multiples of 10, sums 100 to 180).	smma_lo_00074
		Add two addends (student choice, two-digit addends, sums 100 to 198, regrouping ones and tens).	smma_lo_00075
		Add two addends (student choice, three-digit addends, sums 300 to 989, regrouping tens).	smma_lo_00081
		Add two addends (student choice, a two-digit and a three-digit addend, sums 120 to 999, regrouping ones and tens).	smma_lo_00083
		Add two addends (student choice, three-digit addends, sums 210 to 999, regrouping ones).	smma_lo_00085
Add two addends (a two-digit and a three-digit addend, sums 111 to 899, regrouping).	smma_lo_00089		

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3.1.2.a	Add and subtract within 1,000 with or without regrouping.	Add three addends (student choice, one- and two-digit addends, sums 100 to 207, regrouping).	smma_lo_00092
		Add three addends (student choice, two-digit addends, sums 40 to 297, regrouping).	smma_lo_00095
		Solve for a or b in $a + b = c$ (sums 101 to 199, no regrouping).	smma_lo_00345
		Find a number that is one fewer, one greater, just before, or just after a three-digit number.	smma_lo_01016
		Subtract two multiples of 100 (student choice, minuends 200 to 900, subtrahends 100 to 800).	smma_lo_01447
		Subtract two multiples of 10 (minuends 100 to 180, subtrahends 10 to 90).	smma_lo_01448
		Subtract (student choice, minuends 110 to 199, two-digit subtrahends, no regrouping).	smma_lo_01456
		Subtract (student choice, minuends 122 to 199, subtrahends 11 to 88, no regrouping).	smma_lo_01457
		Subtract a three-digit multiple of 10 from a number (student choice, minuends 222 to 999, no regrouping).	smma_lo_01458
		Subtract (student choice, minuends and subtrahends 110 to 999).	smma_lo_01460
		Find the difference of two three-digit numbers.	smma_lo_01467
		Find the difference of two three-digit numbers (no regrouping).	smma_lo_01469
		Find the difference of two whole numbers (student choice, three-digit minuends, two-digit subtrahends, regrouping from hundreds place to tens place).	smma_lo_01471
		Find the difference of two whole numbers (student choice, three-digit minuends, two-digit subtrahends, regrouping from tens place to ones place).	smma_lo_01475
		Find the difference of two three-digit numbers (student choice, no regrouping).	smma_lo_01477
		Find the difference of two whole numbers (student choice, minuends 201 to 999, subtrahends 11 to 99, regrouping).	smma_lo_01479
		Find the difference of two whole numbers (student choice, three-digit minuends, two-digit subtrahends, regrouping from hundreds place to tens place).	smma_lo_01481
Find the difference of two three-digit numbers (student choice, regrouping from the tens to the ones place).	smma_lo_01483		

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3.1.2.a	Add and subtract within 1,000 with or without regrouping.	Find the difference of two three-digit numbers (student choice, regrouping from the tens to the ones place).	smma_lo_01485
		Find the difference of two three-digit numbers (student choice, regrouping from the tens to the ones place).	smma_lo_01487
		Find the difference of two whole numbers (student choice, regrouping from tens place to ones place and hundreds place to tens place).	smma_lo_01489
		Find the difference of two three-digit numbers (student choice, regrouping from the tens to the ones place and the hundreds to the tens place).	smma_lo_01490
		Subtract a two-digit number from a three-digit number (regrouping from the tens place and hundreds place).	smma_lo_01492
		Solve an addition problem using data in a table (sums 100 to 198).	smma_lo_01595
		Solve a problem in context that involves finding the difference of 2 three-digit numbers.	smma_lo_01610
		3.1.2.b	Select and apply the appropriate methods of computation when solving one- and two- step addition and subtraction problems with four-digit whole numbers through the thousands (e.g., visual representations, mental computation, paper-pencil).
3.1.2.c	Use drawings, words, arrays, symbols, repeated addition, equal groups, and number lines to explain the meaning of multiplication.	Use repeated addition to multiply (products 2×2 to 5×5).	smma_lo_00852
		Make a picture to solve a multiplication problem (basic facts).	smma_lo_01237
		Identify a picture that represents a multiplication problem (basic facts).	smma_lo_01246
		Make a picture to solve a multistep addition and multiplication problem in context.	smma_lo_01592
		Identify equivalent arrays with different factors.	smma_lo_01715
		Use partial sums and arrays to solve a two-digit by a one-digit multiplication problem.	smma_lo_01716
		Identify equivalent arrays with different factors (two-digit factors).	smma_lo_01733
		Identify four arrays for a given product (products 6 to 30).	smma_lo_01858
		Create arrays for a given product (products 6 to 30).	smma_lo_01859

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3.1.2.c	Use drawings, words, arrays, symbols, repeated addition, equal groups, and number lines to explain the meaning of multiplication.	Translate a verbal statement of a multiplicative comparison into a multiplication equation.	smma_lo_02008
		Use a model to represents a word problem involving multiplicative comparison. Then, use an equation to represent the solution to the word problem.	smma_lo_02009
		Interpret a multiplication equation by writing a comparison statement.	smma_lo_02025
3.1.2.e	Multiply one digit whole numbers by multiples of 10 in the range of 10 to 90.	Multiply whole numbers (student choice, 2-digit multiple of 10 x 1-digit, products 20 x 2 to 90 x 9).	smma_lo_00878
		Multiply whole numbers (products 2 x 20 to 90 x 9, multiples of 10).	smma_lo_00885
3.1.2.f	Use objects, drawings, arrays, words and symbols to explain the relationship between multiplication and division (e.g., if $3 \times 4 = 12$ then $12 \div 3 = 4$).	Divide using graphic models (combinations to 5 x 5).	smma_lo_00279
		Make a picture to solve a division problem (math facts).	smma_lo_01238
		Identify a picture that represents a division problem (math facts).	smma_lo_01245
		Make a picture to solve a partitive division problem (dividends to 20).	smma_lo_01564
		Make a picture to solve a quotitive division problem (dividends to 20).	smma_lo_01565
		Solve a multiplication problem in context (counting feedback, products 2 x 2 to 5 x 5).	smma_lo_01572

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NE Standard(s) Number	NE Standard(s) Description	Item Description	Item ID
3.1.2.f	Use objects, drawings, arrays, words and symbols to explain the relationship between multiplication and division (e.g., if $3 \times 4 = 12$ then $12 \div 3 = 4$).	Solve a multiplication problem in context (repeated addition feedback, products 2×2 to 5×5).	smma_lo_01578
3.1.2.g	Fluently (i.e. automatic recall based on understanding) multiply and divide within 100.	Divide using basic facts (combinations to 5×5).	smma_lo_00280
		Divide using basic facts (combinations 2×6 to 9×5).	smma_lo_00282
		Divide (combinations 6×6 to 9×9 , no remainder).	smma_lo_00284
		Divide (combinations 2×10 to 5×12 , no remainder).	smma_lo_00286
		Divide (combinations 5×9 to 6×12 , no remainder).	smma_lo_00288
		Divide (combinations 2×13 to 5×19 , no remainder).	smma_lo_00305
		Solve for c in $a \times b = c$ (products 1×2 to 5×5).	smma_lo_00346
		Find the quotient (dividends $6 \div 6$ to $9 \div 9$).	smma_lo_00349
		Solve for c in $a \times b = c$ (products 6×2 to 9×12).	smma_lo_00353
		Solve addition and multiplication problems (products 2×6 to 2×9).	smma_lo_00854
		Multiply whole numbers (products to 5×5).	smma_lo_00855
		Multiply two one-digit numbers (products 6×1 to 9×5).	smma_lo_00857
		Multiply two one-digit numbers (displayed horizontally (products 1×6 to 5×9)).	smma_lo_00859
		Multiply two one-digit numbers (products 1×2 to 5×5).	smma_lo_00861
		Multiply two one-digit numbers (products 1×6 to 5×9).	smma_lo_00863
		Multiply two one-digit numbers (products 6×2 to 9×5).	smma_lo_00865
		Multiply two one-digit numbers (products 6×6 to 9×9).	smma_lo_00867
Multiply two one-digit numbers displayed horizontally (products 6×6 to 9×9).	smma_lo_00868		
3.1.2.h	Determine the reasonableness of whole number sums and differences in real-world problems using estimation, compatible numbers, mental computations, or other strategies.	Determine the reasonableness of a sum or difference (two- and three-digit numbers).	smma_lo_01259
		Estimate the difference (three-digit, differences 100 to 800).	smma_lo_01676

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3.2.2.a	Apply the commutative, associative, and distributive properties as strategies to multiply and divide.	Apply the Commutative Property of Multiplication as a strategy to multiply and divide whole numbers.	smma_lo_02036
		Apply the Associative Property of Multiplication as a strategy to multiply whole numbers.	smma_lo_02037
		Apply the Distributive Property as a strategy to multiply whole numbers.	smma_lo_02038
3.2.2.b	Solve one-step whole number equations involving addition, subtraction, multiplication, or division, including the use of a letter to represent the unknown quantity.	Find the missing addend in a number sentence (a multiple of 10 and a one-digit addend, sums 11 to 99, no regrouping).	smma_lo_00050
		Find the missing addend in a number sentence (three addends, sums 20 to 27,	smma_lo_00082
		Find the missing addend in a number sentence (two addends, sums 20 to 98,	smma_lo_00084
		Find the missing addend in a number sentence (two addends, sums 100 to 199, regrouping), given horizontally.	smma_lo_00086
		Find the missing addend in an number sentence (a two-digit and a three-digit addend, multiples of 10, sums 110 to 990).	smma_lo_00088
		Find the missing dividend or divisor (combinations 4×4 to 7×7 , no remainder).	smma_lo_00285
		Find the missing dividend or divisor (combinations 2×13 to 5×19).	smma_lo_00309
		Finding the missing dividend or divisor (combinations 6×13 to 9×19).	smma_lo_00310
		Solve for a, b, or c in $a + b + c = d$ (sums 10 to 19).	smma_lo_00335
		Solve for d in $a + b + c = d$ (one-digit addends, sums 20 to 27).	smma_lo_00339
		Solve for a or b in $a \times b = c$ (products 1×2 to 5×9).	smma_lo_00351
		Solve for a or b in $a \div b = c$.	smma_lo_00352
		Solve for a or b in $a \div b = c$.	smma_lo_00354
		Solve for a or b in $a \times b = c$ (products 6×2 to 9×12).	smma_lo_00357
		Solve for a or b in $a \div b = c$ (combinations $2 \div 10$ to $5 \div 12$).	smma_lo_00359
		Solve for a or b in $a \div b = c$ (combinations $6 \div 10$ to $9 \div 12$).	smma_lo_00361
		Solve for a or b in $a \times b = x$ (products 2×10 to 12×12).	smma_lo_00363
		Solve for a or b in $a \div b = c$ (combinations $6 \div 20$ to $9 \div 90$, multiples of 10).	smma_lo_00365
		Solve for a or b in $a \times b = x$ (products 2×20 to 12×90 , multiples of 10).	smma_lo_00366

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3.2.2.b	Solve one-step whole number equations involving addition, subtraction, multiplication, or division, including the use of a letter to represent the unknown quantity.	Identify the missing operation in a subtraction or addition number sentence (basic facts).	smma_lo_01031
		Identify the missing operation (sums 20 to 99, differences 10 to 70).	smma_lo_01055
		Identify a missing number in related addition and subtraction number sentences (two-digit sums, two-digit differences).	smma_lo_01060
		Identify the missing operation in a number sentence (all operations).	smma_lo_01074
		Identify a number sentence that can be used to solve an addition, a subtraction, or a multiplication problem (one- or two-digit).	smma_lo_01254
		Identify a number sentence that could be used to solve a multiplication problem.	smma_lo_01270
		Find the missing subtrahend in a subtraction number sentence (minuends 21 to 99).	smma_lo_01470
		Identify the number sentence that represents a division problem in context (model shown, dividends to 20).	smma_lo_01569
		Solve a one-step equation (addition, sums to 100).	smma_lo_01686
		Identify the missing variable of addition or subtraction equations (sums 10 to 50, minuends 10 to 50).	smma_lo_01687
		Identify the missing number (addend or sum) in an addition equation, for numbers 20 and less.	smma_lo_02010
		Identify the missing number (minuend, subtrahend, or difference) in a subtraction equation, for numbers 20 and less.	smma_lo_02014
		3.2.3.a	Solve real-world problems involving two-step equations (involving two operations) involving whole numbers using addition and subtraction.
3.3.1.a	Identify the number of sides, angles, and vertices of two-dimensional shapes.	Count the number of sides in a polygon.	smma_lo_00586
		Identify corners (vertices) of polygons.	smma_lo_00589
		Count the corners (vertices) of a polygon (3 to 7 corners).	smma_lo_00596
3.3.1.b	Sort quadrilaterals into categories (e.g., rhombuses, squares, and rectangles).	In a set of quadrilaterals, identify all the parallelograms.	smma_lo_00621

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3.3.1.c	Draw lines to separate two-dimensional figures into equal areas, and express the area of each part as a unit fraction of the whole.	Identify the figure showing a fractional part shaded (halves, thirds, fourths).	smma_lo_00409
		Identify the fraction representing a shaded region (halves, thirds, fourths).	smma_lo_00410
		Identify the figure showing a fraction of a region shaded (halves to eighths).	smma_lo_00420
		Model a fraction a/b by filling in a out of b sections in a fraction model.	smma_lo_02034
3.3.3.a	Find the perimeter of polygons given the side lengths, and find an unknown side length.	Find the perimeter of a rectangle (24 to 48 customary or metric units).	smma_lo_00169
		Count to find the perimeter (3 to 9 nonstandard units).	smma_lo_00708
		Identify the shape with the greater perimeter (3 to 11 nonstandard units).	smma_lo_00734
		Find the perimeter of a figure (3 to 10 nonstandard units).	smma_lo_00757
		Given the length of one side of a rectangle, measure another side, and then find the perimeter.	smma_lo_00788
		Given the lengths of all sides, find the perimeter of a rectangle.	smma_lo_00821
3.3.3.b	Tell and write time to the minute using both analog and digital clocks.	Show time to the minute using digital and analog clocks.	smma_lo_00771
		Set the digital clock to match the time on the analog clock to the exact minute.	smma_lo_01670
3.3.3.c	Solve real-world problems involving addition and subtraction of time intervals and find elapsed time.	Find the elapsed time (differences from 1 to 6 hours, does not cross 12 o'clock).	smma_lo_00142
		Find the time one to five hours before or after a given time (not crossing 12 o'clock).	smma_lo_00153
		Compare the difference of two times to a given time (1 to 24 hours, across 12	smma_lo_00155
		Find the time one to five hours before or after a given time (across 12 o'clock).	smma_lo_00162
		Find the time one to twelve hours and ten to fifty-five minutes from a starting time.	smma_lo_00175
		Determine elapsed time (1 to 6 hours, start and end times on the hour, can cross 12	smma_lo_00731
		Find the elapsed time ($1\frac{1}{2}$ to $6\frac{1}{2}$ hours, start times and end times on the hour or half-hour, can cross 12 o'clock).	smma_lo_00770
		Show time 1 to 11 hours and 5 to 55 minutes before or after the time shown (analog and digital clocks).	smma_lo_00775
		Identify another way to state the time (minutes before or after the hour).	smma_lo_00779
		Find the time 5 to 50 minutes after the time shown (analog clock).	smma_lo_00798
Solve a problem by identifying the time 1 to 2 hours after a given time (not crossing 12 o'clock).	smma_lo_01547		

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NE Standard(s) Number	NE Standard(s) Description	Item Description	Item ID
3.3.3.c	Solve real-world problems involving addition and subtraction of time intervals and find elapsed time.	Given the ending time and the elapsed time, find the starting time.	smma_lo_01613
		Show time 1 to 11 hours and 5 to 55 minutes before or after the time shown (analog and digital clocks).	smma_lo_02155
3.3.3.d	Identify and use the appropriate tools and units of measurement, both customary and metric, to solve real-world problems involving length, weight, mass, liquid volume, and capacity (within the same system and unit).	Identify the container with the greatest or least capacity.	smma_lo_00696
		Select the appropriate standard unit of measurement for length, capacity, and weight (customary).	smma_lo_00729
		Identify the tool for a particular use (thermometer, scale, clock).	smma_lo_00761
		Add units of capacity (pints, sums 2 to 6).	smma_lo_00764
		Select the appropriate standard unit of measurement for length, capacity, and weight (metric).	smma_lo_00767
		Identify the reasonable weight of an object (ounces, pounds, and tons).	smma_lo_00787
		Identify the reasonable customary capacity of an object (cups, pints, quarts, and	smma_lo_00794
		Identify the reasonable mass for an object (grams, kilograms, and milligrams).	smma_lo_00807
		Identify the reasonable capacity of an object (milliliters and liters).	smma_lo_00811

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NE Standard(s) Number	NE Standard(s) Description	Item Description	Item ID
3.3.3.d	Identify and use the appropriate tools and units of measurement, both customary and metric, to solve real-world problems involving length, weight, mass, liquid volume, and capacity (within the same system and unit).	Select the appropriate ruler to measure vertical or horizontal lengths.	smma_lo_00812
		Choose the appropriate customary units of liquid measure (cups, quarts, and gallons).	smma_lo_01674
		Identify distances or objects that would be measured in cm, m, or km.	smma_lo_01703
3.3.3.e	Estimate and measure length to the nearest half inch, quarter inch, and centimeter.	Identify an object given the estimated height and width in customary units.	smma_lo_00728
		Identify a vertical distance (2 to 9 centimeters).	smma_lo_00758
		Measure the length of an object to the nearest centimeter (4 to 12 centimeters).	smma_lo_00762
		Measure the length of a bar to the nearest 1/4 inch or 0.5 cm.	smma_lo_00822
3.3.3.f	Use concrete and pictorial models to measure areas in square units by counting square units.	Find the sum of the areas of two figures (sums 3 to 8, nonstandard units).	smma_lo_00752
		Find the area of a rectangle (5 to 25 square centimeters).	smma_lo_00773
		Identify the figure in a set with the least or greatest area (figures are made up of squares).	smma_lo_00776
		Count squares and half squares to find the area of a figure in square centimeters.	smma_lo_00783
		Using a grid, find the area of a simple figure (8 to 60 nonstandard units).	smma_lo_00786
		Identify a figure with a given area on a geoboard (4 to 15 square units).	smma_lo_00802
		Estimate the area of a figure on a grid (3 to 11 square units).	smma_lo_00808
		Find the area of an irregular figure displayed on a grid (12 to 50 square units).	smma_lo_01280
		Identify a unit square and what attribute it is used to measure.	smma_lo_02027
		Find the area of a plane figure made up of square units and halves of square units.	smma_lo_02028
3.3.3.g	Find the area of a rectangle with whole-number side lengths by modeling with unit squares, and show that the area is the same as would be found by multiplying the side lengths.	Find the area of a rectangle by tiling it; complete an equation to show that the area is the same as would be found by multiplying the side lengths.	smma_lo_02029
		Multiply side lengths to find the area of a rectangle in a real-world context; use area to represent a whole-number product by arranging tiles in a rectangle.	smma_lo_02030
3.3.3.h	Identify and draw rectangles with the same perimeter and different areas or with the same area and different perimeters.	Identify rectangles that have equal areas, but different dimensions.	smma_lo_00823
		Identify examples of relationships between area and perimeter.	smma_lo_00850

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NE Standard(s) Number	NE Standard(s) Description	Item Description	Item ID
3.4.1.a	Create scaled pictographs and scaled bar graphs to represent a data set—including data collected through observations, surveys, and experiments—with several categories.	Make a pictograph from a set of data.	smma_lo_00146
		Create a bar graph using data from a chart of values.	smma_lo_01696
		Create a bar graph.	smma_lo_01769
3.4.1.b	Represent data using line plots where the horizontal scale is marked off in appropriate units—whole numbers, halves, or quarters.	Choose a title for a line plot and label the units.	smma_lo_01643
3.4.2.a	Solve problems and make simple statements about quantity differences (e.g., how many more and how many less) using information represented in pictographs and bar graphs.	Read and interpret a horizontal or vertical pictograph (four to six items).	smma_lo_00131
		Determine the most or the least from a horizontal or vertical pictograph (four to six items).	smma_lo_00135
		Read and interpret a horizontal or vertical pictograph (four to six items).	smma_lo_00138
		Read and interpret a horizontal pictograph with a scale of 2 (five items).	smma_lo_00140
		Read and interpret a horizontal or vertical pictograph (six items).	smma_lo_00150
		Read a pictograph (3 categories, 1 to 9 items per category).	smma_lo_01124
		Identify the two-column vertical bar graph that shows one category has fewer than, the same number as, or more than the other category.	smma_lo_01133
		Identify the number of categories in a vertical bar graph that are less than, equal to, and greater than a given value.	smma_lo_01148
		Read and interpret a pictograph with a scale of 2, 5 or 10.	smma_lo_01158
		Compare the amounts of two rows in a pictograph whose scale is 2, 5, or 10 items per picture.	smma_lo_01172
		Compare the amounts of two rows in a pictograph whose scale is 2, 5, or 10 items per picture.	smma_lo_01174
		Complete and interpret a pictograph (partial pictures included).	smma_lo_01207
		Read and interpret a pictograph about birds counted (2 to 5 birds in each row).	smma_lo_01299
4.1.1.a	Read, write, and demonstrate multiple equivalent representations for whole numbers up to one million and decimals to the hundredths, using objects, visual representations, standard form, word form, and	Determine the fraction and decimal that represent a model (base-ten blocks, tenths, 0.1 to 0.9).	smma_lo_00185
		Identify the decimal number with a 0 to 9 in the tenths or hundredths place.	smma_lo_00202
		Identify a word name for a four-, five- or six-digit numbers.	smma_lo_01043

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NE Standard(s) Number	NE Standard(s) Description	Item Description	Item ID
4.1.1.a	Read, write, and demonstrate multiple equivalent representations for whole numbers up to one million and decimals to the hundredths, using objects, visual representations, standard form, word form, and expanded notation.	Identify a number with a given digit in the ones to hundred thousands place.	smma_lo_01045
		Identify the expanded notation of a five- or six-digit number.	smma_lo_01046
		Enter a number in a place-value chart (10,000 to 999,999).	smma_lo_01070
		Identify the number when given the word name (10,000 to 999,999).	smma_lo_01076
		Identify the digits in the period (hundreds, thousands, millions, and billions).	smma_lo_01083
		Express a number in expanded notation or determine the number from an expanded notation.	smma_lo_01097
4.1.1.b	Recognize a digit in one place represents ten times what it represents in the place to its right and $\frac{1}{10}$ what it represents in the place to its left.	Identify the value of a given digit in a four-digit number.	smma_lo_01062
		Identify the place and the value of a digit in a number; for that value, identify the number 10 times as much and the number $\frac{1}{10}$ as much.	smma_lo_02045
4.1.1.c	Classify a number up to 100 as prime or composite.	Find the factors of a number and determine if the number is prime or composite (3 to 30).	smma_lo_01073
		Identify prime and composite numbers (one- or two-digit).	smma_lo_01105
		Identify sets of prime and composite numbers.	smma_lo_01119
4.1.1.e	Determine factors of any whole number up to 100.	Identify the complete set of factors for a number (2 to 25).	smma_lo_01071
		R: Identify the number that is divisible by a given factor (numbers 2 to 81, factors 2 to 9).	smma_lo_01066
		R: Identify which numbers are divisible by another number (divisors 2 to 10).	smma_lo_01101
4.1.1.f	Compare whole numbers up to one million and decimals through the hundredths place using $>$, $<$, and $=$ symbols, and visual representations.	Find a decimal number that is either greater than or less than two decimal numbers.	smma_lo_01118
		Compare two whole numbers (three to seven-digit numbers).	smma_lo_01711

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4.1.1.g	Round a multi-digit whole number to any given place.	Round four- to five-digit numbers in context (to the nearest thousand).	smma_lo_01106
		Estimate the product by rounding the second factor. (two-digit number to the nearest 10)	smma_lo_01603
		Estimate the sum by rounding to the nearest hundred (three-digit addends).	smma_lo_01621
		Estimate the product by rounding each factor (a two-digit number by a three-digit number)	smma_lo_01622
		Estimate the sum by rounding to the nearest hundred (three-digit addends).	smma_lo_01675
		R: Identify the multiple of 5 that is closest to a given number.	smma_lo_01005
		R: Identify the multiple of 5 that is closer to a number (25 to 94).	smma_lo_01006
4.1.1.h	Use decimal notation for fractions with denominators of 10 or 100.	Match a fraction to a decimal (tenths, 0.1 to 0.9).	smma_lo_00184
		Enter a decimal number for a mixed number (tenths, 1.1 to 9.9).	smma_lo_00187
		Enter the decimal equivalent for a mixed number (hundredths, 100 in denominator).	smma_lo_00205
		Determine the equivalent fraction for a decimal (the denominator is a factor of	smma_lo_00259
4.1.1.j	Explain how to change a mixed number to a fraction and how to change a fraction to a mixed number.	Using a model, rewrite a mixed number as a fraction (halves to eighths).	smma_lo_00446
		Rewrite a fraction as a mixed number (halves to eighths).	smma_lo_00449
		Rewrite a mixed number as a fraction (fifths to ninths).	smma_lo_00450
4.1.1.k	Compare and order fractions having unlike numerators and unlike denominators using visual representations (number line), comparison symbols and verbal reasoning (e.g., using benchmarks or common numerators or common denominators).	Use a model to compare two fractions (halves to eighths, unlike denominators).	smma_lo_00429
		Using models, compare fractions (unlike denominators, numerators equal to one, halves to sixteenths).	smma_lo_00435
		Identify the fraction that is greater than a given fraction (unlike denominators, halves to eighths).	smma_lo_00437
		Using models, compare fractions (unlike denominators, halves to eighths).	smma_lo_00438
		Compare fractions (unlike denominators).	smma_lo_00462
		Identify the greatest or least fraction in a problem (unlike denominators).	smma_lo_00482
		Compare fractions (unlike denominators, to ninths).	smma_lo_00495
		Identify the fraction that is between two fractions	smma_lo_00503

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NE Standard(s) Number	NE Standard(s) Description	Item Description	Item ID
4.1.1.l	Decompose a fraction into a sum of fractions with the same denominator in more than one way and record each decomposition with an equation and a visual representation.	Determine addition expressions that are equivalent to a given fraction.	smma_lo_02146
4.1.2.a	Add and subtract multi-digit numbers using the standard algorithm.	Add two addends (student choice, three-digit addends, sums 1000 to 1899, regrouping hundreds).	smma_lo_00077
		Add two addends (student choice, three-digit addends, sums 1010 to 1898, regrouping).	smma_lo_00091
		Add two addends (student choice, three-digit addends, sums 1000 to 1989, regrouping).	smma_lo_00093
		Add two addends (student choice, three-digit addends, sums 1000 to 1998, regrouping in all places).	smma_lo_00096
		Add three addends (student choice, a two-digit and 2 three-digit addends, sums 211 to 2097, regrouping in all places).	smma_lo_00097
		Add three addends (student choice, three-digit addends, sums 311 to 2997, regrouping in all places).	smma_lo_00098
		Add two addends (student choice, a three-digit and a four-digit addends, sums 1111 to 10998, regrouping in all places).	smma_lo_00099
		Add two addends (student choice, four-digit addends, sums 2111 to 19998, regrouping in all places).	smma_lo_00100
		Add two addends (student choice, three-digit addends, sums 1000 to 1989, regrouping)	smma_lo_01473

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NE Standard(s) Number	NE Standard(s) Description	Item Description	Item ID
4.1.2.a	Add and subtract multi-digit numbers using the standard algorithm.	Subtract a three-digit number from a four-digit number (regrouping from the tens place).	smma_lo_01493
		Subtract a three-digit number from a four-digit number (regrouping from the tens and thousands places).	smma_lo_01494
		Subtract a three-digit number from a four-digit number (regrouping from the tens and thousands places).	smma_lo_01495
		Subtract a three-digit number from a four-digit number (regrouping from the tens and hundreds places).	smma_lo_01496
		Subtract a three-digit number from a four-digit number (regrouping from the tens and hundreds places).	smma_lo_01497
		Find the difference of two whole numbers (student choice, four-digit numbers, regrouping from tens and hundreds places).	smma_lo_01498
		Subtract a three-digit number from a four-digit number (student choice, regrouping from tens, hundreds, and thousands places).	smma_lo_01499
		Subtract a three-digit number from a four-digit number (student choice, regrouping from tens, hundreds, and thousands places).	smma_lo_01500
		Find the difference of two whole numbers (student choice, four-digit numbers, regrouping from tens and thousands places).	smma_lo_01501
		Subtract across zero (student choice, four-digit minuends with a 0 in the tens place, regrouping from the tens, hundreds, and thousands places).	smma_lo_01502
		Subtract across zero (student choice, four-digit minuends with a 0 in the tens place, regrouping from the tens, hundreds, and thousands places).	smma_lo_01503
		Find the difference of two whole numbers (student choice, four-digit numbers, regrouping from tens, hundreds, and thousands places).	smma_lo_01504
		4.1.2.b	Multiply a four-digit whole number by a one-digit whole number.

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4.1.2.c	Multiply a four-digit whole number by a one-digit whole number.	Multiply a two-digit number by a one-digit number (student choice, vertical, products 10 x 1 to 12 x 4).	smma_lo_00869
		Multiply a two-digit number by a one-digit number (student choice, products 10 x 2 to 15 x 5).	smma_lo_00870
		Multiply a two-digit number by a one-digit number (products 10 x 2 to 12 x 12).	smma_lo_00871
		Multiply a two-digit number by a one-digit number (student choice, products 16 x 2 to 19 x 5).	smma_lo_00872
		Multiply a two-digit number by a one-digit number (student choice, products 10 x 6 to 15 x 9).	smma_lo_00874
		Multiply a one-digit number by a two-digit number (products 2 x 12 to 9 x 12).	smma_lo_00875
		Multiply a two-digit number by a one-digit number (student choice, products 16 x 6 to 19 x 9).	smma_lo_00876
		Multiply a two-digit number by a one-digit number (student choice, products 21 x 2 to 99 x 9).	smma_lo_00880
		Multiply a three-digit number by a one-digit number (student choice, products 100 x 2 to 990 x 9, multiples of 10).	smma_lo_00882
		Multiply a two-digit number by a two-digit number (student choice, products 10 x 10 to 15 x 90, multiples of 10).	smma_lo_00884
		Multiply whole numbers (products 20 x 20 to 90 x 90, multiples of 10).	smma_lo_00889
		Multiply a four-digit number by a one-digit number (student choice, products 1000 x 2 to 9999 x 9).	smma_lo_00892
		Multiply a 1-digit number by a 2-digit number (products 13 x 1 to 19 x 5).	smma_lo_00894
		Multiply a 1-digit number by a 2-digit number (products 12 x 6 to 19 x 9).	smma_lo_00896
		Multiply a two-digit number by a two-digit number (student choice, products 16 x 11 to 19 x 99).	smma_lo_00901
4.1.2.d	Divide up to a four-digit whole number by a one-digit divisor with and without a remainder.	Divide two numbers (one-digit divisor, no remainder).	smma_lo_00290
		Divide (combinations 2 x 20 to 5 x 90, three-digit dividend, one or two-digit divisor, no remainder).	smma_lo_00291
		Divide using the long division algorithm (one-digit divisor, remainder).	smma_lo_00292
		Divide (combinations 6 x 20 to 9 x 90).	smma_lo_00293
		Divide using the long division algorithm (one-digit divisor, no remainder).	smma_lo_00294

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NE Standard(s) Number	NE Standard(s) Description	Item Description	Item ID
4.1.2.d	Divide up to a four-digit whole number by a one-digit divisor with and without a remainder.	Divide using the long division algorithm (one-digit divisor, remainder).	smma_lo_00295
		Divide using the long division algorithm (three-digit dividend, one-digit divisor, no remainder).	smma_lo_00296
		Divide using the long division algorithm (three-digit dividend, one-digit divisor, remainder).	smma_lo_00297
		Divide using the long division algorithm (three-digit dividend, one-digit divisor, remainder).	smma_lo_00298
		Multiply multiples of 10 using mental math (20 x 20 to 90 x 90).	smma_lo_00299
		Divide using the long division algorithm (four-digit dividend, one-digit divisor, remainder).	smma_lo_00300
		Find the missing dividend or divisor (combinations 20 _ 20 to 90 _ 90).	smma_lo_00303
		Find the quotient of b divided by a (combinations 6 x 13 to 9 x 19).	smma_lo_00312
		Identify extra information in a problem.	smma_lo_01272
		Identify the missing information needed to solve a two-step problem; then solve the problem.	smma_lo_01274
		Solve a division problem in context by rounding the quotient to the next whole number (model shown).	smma_lo_01573
		Solve a one-step division problem (math facts 2 ÷ 2 to 9 ÷ 9).	smma_lo_01600
		Solve a division problem in context (remainder).	smma_lo_01616
		Share a set of objects equally to show a division problem (6, 7, 10, or 12 objects).	smma_lo_01663
		Use repeated subtraction to solve a division problem (dividends 4 to 24).	smma_lo_01664
4.1.2.e	Use drawings, words, and symbols to explain the meaning of addition and subtraction of fractions with like denominators.	Use a model and an equation to solve word problems involving the addition of fractions with like denominators.	smma_lo_02004
		Use a model and an equation to solve word problems involving the subtraction of fractions with like denominators.	smma_lo_02016
4.1.2.f	Add and subtract fractions and mixed numbers with like denominators.	Using models, add fractions, no simplifying (like denominators, thirds to eighths).	smma_lo_00441
		Using models, subtract fractions, no simplifying (like denominators, halves to eighths).	smma_lo_00442
		Add fractions with like denominators (no simplifying).	smma_lo_01709

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4.1.2.g	Multiply a fraction by a whole number.	Determine the sale price of an item when the price is reduced by one-half, one-third, or one-fourth.	smma_lo_01285
		Use fraction models to relate a fraction to a whole number times a unit fraction. Then, write an equation for this relationship.	smma_lo_02005
		Use fraction models to rewrite the product of a whole number and a fraction as the product of a whole number and a unit fraction. Then, find the product.	smma_lo_02006
4.1.2.h	Determine the reasonableness of whole number products and quotients in real-world problems using estimation, compatible numbers, mental computations, or other strategies.	Estimate the distance by rounding ($d = rt$).	smma_lo_01606
		Interpret the quotient and remainder of a division problem in context (three-digit dividends).	smma_lo_01617
4.2.1.b	Generate and analyze a number or shape pattern to follow a given rule, such as $y = 3x + 5$ is a rule to describe a relationship between two variables and can be used to find a second number when a first number is given.	Determine the output of one-function machine, given an input and sample inputs and outputs (combinations 2×2 to 9×9).	smma_lo_00358
		Count by 2's, 3's, or 10's (11 to 209, not multiples of 2, 3, 10).	smma_lo_01056
		Find a missing number in a geometric sequence (first number 1 to 5, factors 2 to 5).	smma_lo_01117
		Look for a pattern to solve a problem.	smma_lo_01276
		Extend a geometric pattern.	smma_lo_01691
		R: Extend a 1-2-1-2 pattern of pictures.	smma_lo_00519
		R: Extend a 1-2-1-2 pattern of geometric figures.	smma_lo_00520

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NE Standard(s) Number	NE Standard(s) Description	Item Description	Item ID
4.2.1.b	Generate and analyze a number or shape pattern to follow a given rule, such as $y = 3x + 5$ is a rule to describe a relationship between two variables and can be used to find a second number when a first number is given.	R: Extend a 1-1-2-2 pattern of pictures.	smma_lo_00521
		R: Extend a 1-1-2-2 pattern of geometric figures.	smma_lo_00522
		R: Match patterns of geometric figures.	smma_lo_00539
		R: Extend a 1-2-2 pattern of pictures.	smma_lo_00556
		R: Extend a 1-1-2 or 1-2-2 pattern of congruent shapes.	smma_lo_00558
		R: Extend a 1-2-3 pattern of similar figures.	smma_lo_00560
		R: Extend a 1-2-3 pattern of geometric figures.	smma_lo_00585
		R: Identify the missing geometric figure in a 1-2-1-2 pattern.	smma_lo_00591
		R: Identify the missing picture in a 1-2-3-1-2-3 pattern.	smma_lo_00607
		R: Identify an even or odd number (2 to 99).	smma_lo_01050
		R: Identify the expression whose sum is odd or even (basic facts).	smma_lo_01053
		R: Identify odd or even numbers (two- and three-digit).	smma_lo_01054
		R: Count by 5's, 6's, or 7's (through 70).	smma_lo_01058
R: Count by 8's or 9's (up to 90).	smma_lo_01061		
4.2.2.a	Solve one- and two-step problems which use any or all of the four basic operations and include the use of a letter to represent the unknown quantity.	Solve for a, b, c, or d in $a/b \times c/d = e/f$ (combinations to 12×12).	smma_lo_00372
		Solve for a in $a + b = c$ or $a - b = c$ in steps (whole number sums and differences 2 to 20).	smma_lo_00379
		Solve for x in $ax = c$ in steps (products 4×4 to 9×10).	smma_lo_00380
		Complete the steps to solve for a in $a \div b = c$ (combinations 4×4 to 9×10).	smma_lo_00381
		Complete the steps to solve for x in $ax + b = c$.	smma_lo_00383
		Find the missing factor (products to 5×5).	smma_lo_00856; smma_lo_00858
		Find the missing factor (products 1×6 to 5)	smma_lo_00860;
		Find the missing factor (products 1×6 to 9×5).	smma_lo_00864
		Find the missing factor (products 6×1 to 9×5).	smma_lo_00866
		Find the missing factor (products 6×6 to 9×9).	smma_lo_00873; smma_lo_00877
		Find the missing factor (products 2×2 to 12×12).	smma_lo_00881
		Find the missing factor (products 20×11 to 90×99 , multiples of 10).	smma_lo_00891
		Find the missing factor (products 20×20 to 90×90 , multiples of 10).	smma_lo_00893

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4.2.2.a	Solve one- and two-step problems which use any or all of the four basic operations and include the use of a letter to represent the unknown quantity.	Estimate the missing factor in a number sentence (round to the nearest ten,	smma_lo_00913
		Use logical reasoning to complete an addition puzzle with two three-digit addends.	smma_lo_01261
		Work backwards to solve a problem with a missing number.	smma_lo_01266
		Work backward to solve a two-step problem.	smma_lo_01288
		Find the missing information needed to solve a problem; then solve.	smma_lo_01293
		Solve a two-step multiplication and addition problem in context.	smma_lo_01633
		Solve a one-step equation (subtraction).	smma_lo_01688
		Solve a one-step equation (multiplication).	smma_lo_01690
		Solve a one-step equation (division).	smma_lo_01692
		Solve a one-step equation in context (addition, two-digit whole numbers).	smma_lo_01743
		Solve a one-step equation in context (subtraction, two-digit whole numbers).	smma_lo_01744
		Represent a division problem as an unknown-factor problem; then find the	smma_lo_02039
		Solve for a, b, or c in $a/b \div c = d/e$ (combinations to $12 \div 12$).	smma_lo_00375
		Identify the number sentence that can be used to solve a two-step problem in context.	smma_lo_01297
		Add mixed numbers; no simplifying (like denominators, thirds to twelfths).	smma_lo_00460
4.2.2.c	Solve one- and two-step problems which use any or all of the four basic operations and include the use of a letter to represent the unknown quantity.	Subtract mixed numbers; no simplifying (like denominators, thirds to twelfths).	smma_lo_00461
4.2.3.a	Solve real-world problems involving multi-step equations comprised of whole numbers using the four operations, including interpreting remainders.	Add mixed numbers; simplify if necessary (like denominators, halves to sixteenths).	smma_lo_00463

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4.2.3.b	Solve real-world problems involving addition and subtraction of fractions and mixed numbers with like denominators.	Add mixed numbers within a context; simplify if necessary (like denominators).	mma_lo_00480
		Subtract mixed numbers in context; simplify if necessary (like denominators).	mma_lo_00481
		Add mixed numbers; simplify if necessary (like denominators).	mma_lo_00484
		Subtract mixed numbers; simplify if necessary (like denominators).	mma_lo_00485
		Add mixed numbers with like denominators in context; simplify if necessary.	mma_lo_01624
		R: Match the labeled angles to the correct angle notation.	mma_lo_00617
		Determine whether an angle is larger than, smaller than, or the same size as a right	mma_lo_00624
		Identify an angle as acute, right, or obtuse.	mma_lo_00628
4.3.1.a	Recognize angles as geometric shapes that are formed where two rays share a common	Identify right, acute, and obtuse angles in polygons.	mma_lo_00630
4.3.1.b	Classify an angle as acute, obtuse, or right.	Identify line segments in three- and four-sided figures.	mma_lo_00579
		Identify line segments.	mma_lo_00605
		Identify parallel and perpendicular streets on a map.	mma_lo_00619
4.3.1.c	Identify and draw points, lines, line segments, rays, angles, parallel lines, perpendicular lines, and intersecting lines, and recognize them in two-dimensional figures.	Count the points of intersection of two or more lines (0 to 5 intersection points).	mma_lo_00635
		Draw parallel, perpendicular, or intersecting lines on a grid.	mma_lo_00638
		Identify the pairs of parallel line segments in a geometric drawing.	mma_lo_00639
		Measure complementary or supplementary angles and find the sum of the angle measures.	mma_lo_00663
		Draw a line segment using a ruler (to 1/4 inch and 0.5 cm).	mma_lo_00800
		Classify and sort 2D geometric figures by properties and attributes.	mma_lo_01728
		Identify acute, obtuse, and right triangles.	mma_lo_00655
		Identify all triangles of a particular class (acute, right, or obtuse).	mma_lo_01774
4.3.1.d	Classify two-dimensional shapes based on the presence or absence of parallel and perpendicular lines, or the presence or absence of specific angles.	Use a protractor to measure an angle.	mma_lo_00631
4.3.1.e	Identify right triangles.	Use a protractor to measure an angle.	mma_lo_00636
		Select the appropriate protractor to measure an angle.	mma_lo_00644

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4.3.1.f	Measure angles in whole number degrees using a protractor.	Measure an angle using the appropriate protractor.	smma_lo_00646
		Use a protractor to measure an angle in a triangle or quadrilateral; then find the sum of all the angles in the figure.	smma_lo_00650
		Measure complementary or supplementary angles and find the sum of the angle measures.	smma_lo_00661
		R: Identify the better estimate for an angle measure.	smma_lo_00657
		Identify the vertical line of symmetry.	smma_lo_00595
		Identify the horizontal line of symmetry.	smma_lo_00597
		Draw a vertical or horizontal line of symmetry.	smma_lo_00608
4.3.1.h	Recognize and draw lines of symmetry in two-dimensional shapes.	Identify lines that are lines of symmetry.	smma_lo_00623
		Complete a symmetrical drawing.	smma_lo_00647
		Identify the lines of symmetry in an object.	smma_lo_01699
		Identify the shape with a given number of lines of symmetry.	smma_lo_01773
		Find the area of a rectangle (36 to 144 customary or metric square units).	smma_lo_00173
		Find the area of a rectangle using a formula.	smma_lo_00810
		Tile a rectangle to find its area; represent the area of the rectangle in two different ways (length times width and the sum of the areas of two smaller rectangles).	smma_lo_02031
4.3.3.a	Apply perimeter and area formulas for rectangles.	Express yards and feet as an equivalent number of feet, or feet and inches as an equivalent number of inches.	smma_lo_00166
		Add metric measurements with unlike units and express the sum in terms of the smaller unit.	smma_lo_00168
		Add metric measurements with unlike units and express the sum in terms of the larger unit.	smma_lo_00172

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4.3.3.b	Identify and use the appropriate tools, operations, and units of measurement, both customary and metric, to solve real-world problems involving time, length, weight, mass, capacity, and volume.	Compare unlike customary units of length (inches, feet, and yards).	smma_lo_00792
		Compare unlike customary units of capacity (cups, pints, quarts, and gallons).	smma_lo_00799
		Compare unlike customary units of weight and identify the correct statement (ounces and pounds).	smma_lo_00801
		Find a fraction of an hour in minutes ($\frac{1}{4}$, $\frac{1}{3}$, $\frac{1}{2}$, $\frac{2}{3}$, or $\frac{3}{4}$ hour).	smma_lo_00817
		Compare unlike metric units and identify the correct statement (mm, cm, m, km; mL, L; mg, g, kg).	smma_lo_00820
		Convert units of time (seconds, minutes, hours, days, weeks, months, and years).	smma_lo_00837
		Measure topsoil in a soil sample; calculate how long it took to form.	smma_lo_01323
		Solve an addition problem in context (3 three-digit addends, regrouping).	smma_lo_01597
		Convert hours to minutes.	smma_lo_01672
		Identify the appropriate unit of measure (l, kl, g, kg, m, km).	smma_lo_01704
		Identify the appropriate unit of weight.	smma_lo_01730
		Choose the appropriate unit of capacity (ounce, cup, pint, quart, and gallon).	smma_lo_01864
		Match the word name with the decimal number (0.10 to 9.99).	smma_lo_00204
		Match a decimal number to its word name (to thousandths).	smma_lo_00227
		Identify the place value of a digit in a decimal number (tenths to ten thousandths).	smma_lo_00241
5.1.1.a	Determine multiple equivalent representations for whole numbers and decimals through the thousandths place using standard form, word form, and expanded notation.	Match a decimal number to a model (thousandths).	smma_lo_00242
		Enter a decimal number in a place-value chart (tenths to thousandths).	smma_lo_01089
		Compare decimal numbers (0.1 to 9.9).	smma_lo_00191
		Compare decimals (to hundredths) to benchmark fractions.	smma_lo_00209
		Compare two decimal numbers (10.01 to 99.99).	smma_lo_00216
5.1.1.b	Compare whole numbers, fractions, mixed numbers, and decimals through the thousandths place and represent comparisons using symbols $<$, $>$, or $=$.	Compare decimal numbers (to thousandths).	smma_lo_00225
		Identify the symbol ($<$ or $>$) needed to complete the inequality.	smma_lo_00254
		Find an equivalent mixed number for a decimal (tenths to ten thousandths).	smma_lo_00255
		Compare fractions to 1 on the number line (halves to eighths).	smma_lo_00432

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NE Standard(s) Number	NE Standard(s) Description	Item Description	Item ID
5.1.1.b	Compare whole numbers, fractions, mixed numbers, and decimals through the thousandths place and represent comparisons using symbols $<$, $>$, or $=$.	Using models, compare fractions (unlike denominators, halves to sixteenths).	smma_lo_00436
		Compare fractions to 1 (halves to sixteenths).	smma_lo_00448
		Round a decimal to the nearest tenth, hundredth, or whole number.	smma_lo_00230
		Identify the most reasonable answer to a multiplication problem involving money.	smma_lo_01278
		Identify the most reasonable answer to a division problem involving money.	smma_lo_01279
5.1.1.c	Round whole numbers and decimals to any given place.	Estimate the total cost of four items by rounding to the nearest dollar (sums to \$15.00).	smma_lo_01591
		Estimate the difference by rounding to the nearest dollar (minuends \$5.00 to \$20.00, subtrahends \$3.00 to \$15.00).	smma_lo_01669
		Match a decimal number to an equivalent fraction (tenths to thousandths).	smma_lo_00224
		Find the missing numerator or denominator in an equivalent fraction (simplified fractions $1/2$ to $3/4$).	smma_lo_00451
		Determine if a fraction can be simplified; simplify if possible (simplified fractions $1/2$ to $3/4$).	smma_lo_00452
5.1.1.d	Recognize and generate equivalent forms of commonly used fractions, decimals, and percents (e.g., halves, thirds, fourths, fifths, and tenths).	Find the missing numerator or denominator in an equivalent fraction (simplified fractions $1/2$ to $7/8$).	smma_lo_00453
		Determine if a fraction can be simplified; simplify if possible (simplified fractions $1/2$ to $7/8$).	smma_lo_00454; smma_lo_00456
		Write a fraction in simplest form (simplified fractions $1/2$ to $7/8$).	smma_lo_00455
		Find an equivalent fraction of a simplified fraction (simplified fractions $1/2$ to $8/9$).	smma_lo_00457
		Determine the least common denominator of two fractions.	smma_lo_00493
		Determine the equivalent fractions using the least common denominator of two given fractions.	smma_lo_00494
		Identify decimals or fractions that are not equivalent to a given decimal or fraction.	smma_lo_01094
		Generate a table of equivalent fractions for a fraction in simplest form.	smma_lo_01791
		Generate a table of equivalent fractions for a fraction not in simplest form.	smma_lo_01792
Explain patterns in the number of zeroes of the product and in the placement of the decimal point when multiplying a number by powers of ten.	smma_lo_02046		

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NE Standard(s) Number	NE Standard(s) Description	Item Description	Item ID
5.1.1.d	Recognize and generate equivalent forms of commonly used fractions, decimals, and percents (e.g., halves, thirds, fourths, fifths, and tenths).	Multiply whole numbers (student choice, products 11 x 11 to 15 x 99).	smma_lo_00899
		Multiply whole numbers (student choice, products 10,000 x 2 to 99,999 x 9).	smma_lo_00900
		Multiply whole numbers (student choice, products 100 x 20 to 990 x 90, multiples of 10).	smma_lo_00902
5.1.1.e	Write powers of 10 with exponents.	Multiply whole numbers (student choice, products 21 x 11 to 99 x 99).	smma_lo_00903
5.1.2.a	Multiply multi-digit whole numbers using the standard algorithm.	Multiply whole numbers (student choice, products 101 x 20 to 999 x 90, multiples of 10).	smma_lo_00904
		Multiply whole numbers (student choice, products 100 x 21 to 990 x 90, multiples of 10).	smma_lo_00905
		Multiply (student choice, products 1000 x 20 to 9999 x 90, multiples of 10).	smma_lo_00906
		Multiply whole numbers (student choice, products 101 x 21 to 999 x 99).	smma_lo_00907
		Multiply by a multiple of 10 (student choice, 10,000 x 20 to 99,999 x 90).	smma_lo_00908
		Multiply whole numbers (student choice, products 1000 x 21 to 9999 x 99).	smma_lo_00909
		Multiply whole numbers (student choice, 10,000 x 21 to 99,999 x 99).	smma_lo_00910
		Multiply whole numbers (multiples of 10 or 100).	smma_lo_00911
		Multiply one- to five-digit whole numbers by powers of ten (10 to 100,000).	smma_lo_01078
		Solve a multiplication problem in context (one-, two-, and three-digit factors).	smma_lo_01604
		Multiply fractions; no simplifying.	smma_lo_00469
		Multiply a whole number by a proper fraction; no simplifying.	smma_lo_00470
		Multiply fractions; simplify.	smma_lo_00475
		Multiply fractions; simplify first.	smma_lo_00476
5.1.2.c	Multiply a whole number by a fraction or a fraction by a fraction using models and visual representations.	Multiply a fraction and a whole number; simplify.	smma_lo_00477
		Multiply a fraction and a whole number; simplify first.	smma_lo_00478
		Find a fractional part of a fraction.	smma_lo_00498
		Multiply three fractions; simplify if necessary.	smma_lo_00506
		Model multiplication of a whole number by a fraction; complete an equation to show the product; interpret a real-world context that can be modeled by this equation.	smma_lo_02048

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NE Standard(s) Number	NE Standard(s) Description	Item Description	Item ID
5.1.2.c	Multiply a whole number by a fraction or a fraction by a fraction using models and visual representations.	Find the area of a rectangle with fractional side lengths in two ways: by multiplying its side lengths and by tiling it with smaller rectangles.	smma_lo_02049
		Model the multiplication of two fractions; complete an equation to show the product; interpret a real-world context that can be modeled by this equation.	smma_lo_02054
		Divide a whole number by a fraction.	smma_lo_00492
		Divide a whole number by a fraction; simplify if necessary.	smma_lo_01787
		Model the division of a unit fraction by a nonzero whole number, and compute the quotient.	smma_lo_02052
		Use models to solve real-world problems involving division of whole numbers by unit fractions.	smma_lo_02053
5.1.2.d	Divide a unit fraction by a whole number and a whole number by a unit fraction.	Use models to solve real-world problems involving division of unit fractions by nonzero whole numbers.	smma_lo_02156
		Model a division word problem that results in a rational quotient; then express the word problem with an equation.	smma_lo_02047
		Subtract metric length or weight measurements expressed as decimals (to tenths, difference 1.2 to 8.9, regrouping).	smma_lo_00159
		Solve an addition problem by finding the total cost of two items (prices expressed as decimals, total < \$0.50, no regrouping).	smma_lo_00181
		Subtract money amounts (sums less than \$17.00, regrouping).	smma_lo_00208
5.1.2.f	Interpret a fraction as division of the numerator by the denominator.	Add or subtract decimals using mental math (sums less than 1.00, with or without regrouping).	smma_lo_00210
5.1.2.g	Add, subtract, multiply, and divide decimals to the hundredths using concrete models or drawings and strategies based on place value, properties of operations (i.e. Commutative, Associative, Distributive, Identity, Zero), and/or relationships between operations.	Subtract money amounts (sums less than \$50.00, regrouping).	smma_lo_00214
		Add decimals numbers using mental math (sums 1.0 to 99.8, regrouping).	smma_lo_00217
		Find the missing factor and quotient in two related number sentences (products 0.2 x 2 to 0.9 x 5).	smma_lo_00219
		Multiply a decimal and a whole number displayed horizontally (0.02 x 2 to 0.09 x 5).	smma_lo_00221
		Multiply two decimals or multiply a decimal by a whole number (tenths to hundredths).	smma_lo_00223
		Multiply decimals displayed horizontally (0.2 x 0.6 to 0.9 x 0.12).	smma_lo_00232

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NE Standard(s) Number	NE Standard(s) Description	Item Description	Item ID
5.1.2.g	Add, subtract, multiply, and divide decimals to the hundredths using concrete models or drawings and strategies based on place value, properties of operations (i.e. Commutative, Associative, Distributive, Identity, Zero), and/or relationships between operations.	Divide a decimal by a decimal (horizontal division; dividends to tenths).	smma_lo_00237
		Determine the missing factor in the multiplication number sentence (decimals, to ten-thousandths).	smma_lo_00240
		Divide decimals (0.3 x 0.3 to 0.9 x 0.09).	smma_lo_00245
		Divide decimals (0 x 2 to 2 x 5).	smma_lo_00251
		Multiply a whole number or a decimal by 0.1, 0.01, or 0.001.	smma_lo_00252
		Divide a decimal by 0.1, 0.01, or 0.001.	smma_lo_00263
		Divide a decimal by 0.1, 0.01, or 0.001 (dividends 0.001 to 0.999).	smma_lo_00267
		Find the perimeter of a polygon (decimal numbers, metric units).	smma_lo_00790
		Find the perimeter of a polygon (decimal numbers, metric units).	smma_lo_00805
		Measure the amount of rainfall for the week; then complete the chart and determine the total amount of rainfall for the month.	smma_lo_01327
		Solve a division problem about money with extra information (round quotient to the nearest whole number).	smma_lo_01585
		Solve a decimal subtraction problem in context (tenths, regrouping).	smma_lo_01599
		Find the number of dollar bills needed to buy two to four items (each \$1.79 to \$3.99 each).	smma_lo_01629
		R: Identify the location of the decimal point of the product of two decimals (factors, tenths to hundredths).	smma_lo_00222
		Identify the difference when a fraction is subtracted from 1 (fourths to twelfths).	smma_lo_00445
		Subtract a fraction from 1; simplify (halves to sixteenths).	smma_lo_00464
		Add fractions; no simplifying (unlike denominators).	smma_lo_00465
		Subtract fractions; no simplifying (unlike denominators).	smma_lo_00466
5.1.2.h	Add and subtract fractions and mixed numbers with unlike denominators.	Add fractions; no simplifying (unlike denominators).	smma_lo_00467
		Subtract fractions; no simplifying (unlike denominators).	smma_lo_00468
		Add fractions; simplify if necessary (unlike denominators).	smma_lo_00471
		Subtract fractions; simplify if necessary (unlike denominators).	smma_lo_00472
		Add fractions; simplify if necessary (unlike denominators).	smma_lo_00473
		Subtract fractions; simplify if necessary (unlike denominators).	smma_lo_00474

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NE Standard(s) Number	NE Standard(s) Description	Item Description	Item ID
5.1.2.h	Add and subtract fractions and mixed numbers with unlike denominators.	Add mixed numbers; simplify if necessary (unlike denominators).	smma_lo_00499
		Subtract mixed numbers; simplify if necessary (unlike denominators).	smma_lo_00500
		Add mixed numbers; simplify if necessary (unlike denominators).	smma_lo_00504
		Subtract mixed numbers; simplify if necessary (unlike denominators).	smma_lo_00505
		Add mixed numbers within a context; simplify if necessary (unlike denominators).	smma_lo_00509
		Subtract mixed numbers within a context; simplify if necessary (unlike denominators).	smma_lo_00510
		Express a fraction with denominator 10 as an equivalent fraction with denominator 100. Then, add that fraction to another fraction with denominator 100.	smma_lo_02007
		Identify the probable error in a multiplication calculation with decimals.	smma_lo_00250
		Identify the best estimate for a quotient or a product using compatible numbers (factors less than 10 with two to four decimal places, divisors less than 10 with two to three decimal places).	smma_lo_01123
		Estimate the difference of two fractions.	smma_lo_01707
5.1.2.i	Determine the reasonableness of computations involving whole numbers, fractions, and decimals.	Graph a set of ordered pairs from a table on a coordinate plane (Quadrant I).	smma_lo_01808
		Make a table and a graph when given a rule in the form $y = ax$ or $y = x + a$.	smma_lo_02139
		Identify the expression for the perimeter of a figure.	smma_lo_00818
5.2.1.a	Form ordered pairs from a rule such as $y=2x$, and graph the ordered pairs on a coordinate plane.	Evaluate an expression using the order of operations.	smma_lo_01091
		Match expressions with repeated factors to numbers in exponential form to create equations.	smma_lo_01100
5.2.2.a	Interpret and evaluate numerical or algebraic expressions using order of operations (excluding exponents).	Identify the method to solve a multiplication problem with extra information.	smma_lo_01267
		Identify the method to solve a division problem with extra information.	smma_lo_01268
		Identify an expression that can be used to solve a problem (inverse operations).	smma_lo_01275
		Identify the expression that gives the best estimate for an addition or subtraction problem in context (two-digit numbers).	smma_lo_01566
		Identify and solve an expression that represents a multiplication problem in context (model shown, products to 32).	smma_lo_01570

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NE Standard(s) Number	NE Standard(s) Description	Item Description	Item ID
5.2.2.a	Interpret and evaluate numerical or algebraic expressions using order of operations (excluding exponents).	Identify and solve an expression that represents a multiplication problem in context (products 3 x 4 to 9 x 9).	smma_lo_01590
		Identify the expression that represents a division problem in context; then solve the problem (dividends 12 to 81).	smma_lo_01605
		Subtract two fractions from a whole within a context.	smma_lo_01634
		Add two fractional parts of whole numbers in context.	smma_lo_01640
		Use addition to find an equivalent fraction for 1/2.	smma_lo_01706
		Identify a geometric solid (cylinder, pyramid, or rectangular prism).	smma_lo_00616
5.2.3.a	Solve real-world problems involving addition and subtraction of fractions and mixed numbers with like and unlike denominators.	Identify geometric solids (cones, cubes, cylinders, pyramids, rectangular prisms, spheres).	smma_lo_00622
		Identify geometric solids (prisms, pyramids, cones, or spheres).	smma_lo_00667
		Identify faces, edges, and vertices of solids.	smma_lo_00632
5.3.1.a	Identify three-dimensional figures including cubes, cones, pyramids, prisms, spheres, and cylinders.	Count the vertices, edges, or faces of a prism or pyramid.	smma_lo_00643
		Complete sentences about bases, faces, edges, and vertices of geometric solids.	smma_lo_00652
		Identify the set of faces for a geometric solid.	smma_lo_00664

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5.3.1.b	Identify faces, edges, and vertices of rectangular prisms.	Identify the regular polygons.	smma_lo_00651
		Identify the true statement about a relationship among quadrilaterals.	smma_lo_00656
		Identify equilateral, isosceles, and scalene triangles.	smma_lo_00658
		Find the coordinates for a point on a grid.	smma_lo_01077
5.3.1.c	Justify the classification of two-dimensional figures based on their properties.	Identify a point on a coordinate grid given the ordered pair.	smma_lo_01092
		Graph a point on a coordinate grid (Quadrant I).	smma_lo_01735
		Find the volume of a rectangular solid by counting cubes.	smma_lo_00829
5.3.2.b	Graph and name points in the first quadrant of the coordinate plane using ordered pairs of whole numbers.	Find the volume of a rectangular solid by counting cubes.	smma_lo_00833
		Identify a unit cube and what attribute it is used to measure.	smma_lo_02041
		Find the volume of a prism by packing the prism with unit cubes.	smma_lo_02042
5.3.3.a	Recognize that solid figures have volume that is measured in cubic units.	R: Determine if the perimeter, area, or volume is needed to solve the problem.	smma_lo_00826
		Convert customary units of length (inches, feet, and yards).	smma_lo_00791
		Convert customary units of capacity (cups, pints, quarts, and gallons).	smma_lo_00796
		Convert between customary units of weight (ounces and pounds).	smma_lo_00797
		Convert metric units of length (mm, cm, m, and km; whole numbers).	smma_lo_00814
5.3.3.c	Generate conversions within the customary and metric systems of measurement.	Graph and interpret rainfall data in a chart.	smma_lo_01328
		Determine the number of calories in multiple servings given data in a chart.	smma_lo_01333
		Read and interpret a table about temperature.	smma_lo_01646
		Read and interpret a table.	smma_lo_01695
5.4.2.a	Use observations, surveys, and experiments to collect, represent, and interpret the data using tables (e.g., frequency charts) and bar graphs.	Make predictions based on a sample.	smma_lo_01223
		Predict the effect of changing temperatures on the weather.	smma_lo_01312
		Identify numbers that are multiples of a given number.	smma_lo_01069
		Using a factor tree, find the prime factors of a number (2 to 32).	smma_lo_01087
5.4.2.b	Formulate questions that can be addressed with data and make predictions about the data.	Identify a common factor of two numbers (4 to 81).	smma_lo_01088
		Identify the prime factorization of a two-digit number.	smma_lo_01093
6.1.1.a	Determine common factors and common multiples using prime factorization of numbers with and without exponents.	Identify the common multiples for two to three numbers (2 to 20).	smma_lo_01096
		Determine three factors of a given number.	smma_lo_01107
		Given the prime factorization of two numbers, find the common multiple.	smma_lo_01108

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6.1.1.a	Determine common factors and common multiples using prime factorization of numbers with and without exponents.	Find the greatest common factor for two to three numbers.	smma_lo_01110
		Find the least common multiple of two or three numbers.	smma_lo_01112
		Locate the missing integer on a number line (-3 to -12).	smma_lo_00101
		Mark the point on a number line that represents a decimal number (0.1 to 0.9).	smma_lo_00186
		Find the missing decimal number on a number line (tenths, 0.1 to 0.9).	smma_lo_00188
		Enter a decimal number on a number line (1.11 to 9.89).	smma_lo_00213
6.1.1.c	Compare and order rational numbers both on the number line and not on the number line.	Find the missing decimal number on a number line (1.0 to 9.89).	smma_lo_00215
		Order three decimal numbers (tenths to hundredths).	smma_lo_00218
		Find the missing decimal number on a number line; then count by multiples of tenths to find the product.	smma_lo_00220
		Order three decimals from least to greatest (to thousandths).	smma_lo_00236
		Find the missing decimal number in a pattern (addition).	smma_lo_00253
		Order three fractions from least to greatest (unlike denominators, halves to twelfths).	smma_lo_00440
		Identify a list of fractions that is ordered from least to greatest (to sixths).	smma_lo_00497
		Order four numbers from least to greatest (1,000 to 9,999).	smma_lo_01040
		Identify a set of numbers between two numbers, or less than or greater than a given number (101 to 999).	smma_lo_01068
		Identify a number that is one or two greater than or less than a five- or six-digit number.	smma_lo_01072
		Determine the least or greatest integer (-10 to 10).	smma_lo_01102
		Identify a list of decimal numbers ordered from least to greatest.	smma_lo_01103
		Order five numbers from least to greatest (three- to six-digit numbers).	smma_lo_01710
		Determine whether multiplying a number by a factor results in scaling the number up or down.	smma_lo_02050
		Determine whether multiplying a number by a factor results in scaling the number up or down.	smma_lo_02051

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NE Standard(s) Number	NE Standard(s) Description	Item Description	Item ID
6.1.1.c	Compare and order rational numbers both on the number line and not on the number line.	Compare rational numbers in real-world contexts.	smma_lo_02109
		Complete statements of order for rational numbers in real-world contexts.	smma_lo_02110
		R: Enter a number on a partially numbered number line (100 to 999).	smma_lo_01037
		Determine the decimal and percent that is represented by a model (base-ten blocks, hundredths).	smma_lo_00256
		Identify the division problem that can be used to rewrite a fraction as a decimal.	smma_lo_00257
		Divide to convert from a fraction to a decimal equivalent.	smma_lo_00258
		Determine the equivalent decimal for a mixed number.	smma_lo_00260
6.1.1.d	Convert among fractions, decimals, and percents using multiple representations.	Express a percent as a fraction and simplify.	smma_lo_00269
		Identify equivalent representations of numbers.	smma_lo_01114
		Identify a number not equivalent to four others.	smma_lo_01116
		Express a fraction as a percent (denominator is 100).	smma_lo_01714
		Complete the equivalence table by expressing a decimal number as a fraction and a percent.	smma_lo_01820
		Complete the equivalence table by	smma_lo_01821
		Complete the equivalence table by expressing a fraction as a decimal number and a percent (round answer to the nearest hundredth).	smma_lo_01822
		Identify the ratio.	smma_lo_01712
		Write a ratio in three different forms.	smma_lo_01825
		Identify the unit rate given a table, a graph, an equation, a diagram, or a word problem.	smma_lo_02001
		Read the temperature on a thermometer to nearest degree –10 to 10 degrees).	smma_lo_00804
6.1.1.e	Determine ratios from drawings, words, and manipulatives.	Read and interpret data in a table to determine the wind chill temperature.	smma_lo_01314
		Read and interpret data in a table to determine the time it would take for skin to freeze.	smma_lo_01315
6.1.1.f	Explain and determine unit rates.	Use positive and negative numbers together to represent quantities having opposite directions or values.	smma_lo_02066

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NE Standard(s) Number	NE Standard(s) Description	Item Description	Item ID
6.1.1.g	Model integers using drawings, words, manipulatives, number lines, and symbols.	Describe situations that can be represented by opposite quantities.	smma_lo_02086
		R: Read a thermometer to the nearest 10 degrees (Fahrenheit).	smma_lo_00768
		Identify absolute value as a distance from zero on a number line.	smma_lo_01823
		Compare the absolute values of positive and negative quantities in a real-world situation.	smma_lo_02111
		Evaluate the absolute value of a number.	smma_lo_01824
		Divide fractions; simplify if necessary.	smma_lo_00487
6.1.1.h	Compare and order integers and absolute value both on the number line and not on the number line.	Divide a fraction by a mixed number; simplify if necessary.	smma_lo_00491
		Multiply mixed numbers; simplify if necessary.	smma_lo_00501
6.1.1.i	Determine absolute value of rational numbers.	Divide a mixed number by a whole number; simplify if necessary.	smma_lo_00502
6.1.2.a	Multiply and divide non-negative fractions and mixed numbers.	Multiply mixed numbers to determine the area of a rectangle or triangle; simplify if necessary.	smma_lo_00508
		Divide fractions; simplify.	smma_lo_00512
		Find the fractional part of a recipe (multiply a fraction and a mixed number).	smma_lo_00835
		Divide a fraction by a fraction; simplify if necessary.	smma_lo_01788
		Divide a mixed number by a fraction; simplify if necessary.	smma_lo_01789
		Divide a mixed number by a mixed number; simplify if necessary.	smma_lo_01790
		R: Identify the equivalent expression for a fraction, whole number, or a mixed numbers being divided by a fraction, a whole number, or a mixed number.	smma_lo_00511
		Give the value of a number (1 to 10) raised to a power (1 to 5).	smma_lo_01098
		Divide using the long division algorithm (three-digit number, two-digit divisor, remainder).	smma_lo_00304
		Extend an iterative pattern.	smma_lo_01754
		Add two decimal numbers (tenths, sums 1.0 to 2.0, regrouping).	smma_lo_00192
6.1.2.b	Evaluate expressions with positive exponents.	Add two decimal numbers using mental math (sums 1.1 to 9.9, no regrouping).	smma_lo_00193
6.1.2.c	Divide multi-digit whole numbers using the standard algorithm.	Subtract decimal numbers (minuends and subtrahends 0.1 to 9.9, no regrouping).	smma_lo_00195
		Add two decimal numbers using mental math (sums 10.1 to 99.9, no regrouping).	smma_lo_00196

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NE Standard(s) Number	NE Standard(s) Description	Item Description	Item ID
6.1.2.d	Add, subtract, multiply, and divide decimals using the standard algorithms.	Subtract decimal numbers using mental math (minuends and subtrahends 10.1 to 99.9, no regrouping).	smma_lo_00197
		Subtract decimal numbers (minuends 2.0 to 9.9, subtrahends 0.1 to 0.9, regrouping).	smma_lo_00198
		Add decimal numbers (sums less than 10.0, regrouping).	smma_lo_00199
		Add two decimal numbers (sums 1.0 to 98.9, regrouping).	smma_lo_00201
		Subtract decimal numbers (minuends and subtrahends 0.1 to 99.9, with or without regrouping).	smma_lo_00203
		Add decimals using addition facts (sums 0.02-0.99).	smma_lo_00206
		Subtract decimals numbers (minuends and subtrahends 0.01 to 9.99).	smma_lo_00207
		Align the decimal numbers in a vertical addition problem; then solve (hundredths, regrouping).	smma_lo_00211
		Align the decimal numbers in a vertical subtraction problem; then solve (hundredths, regrouping).	smma_lo_00212
		Align the decimal numbers for a vertical addition problem; then solve (to thousandths).	smma_lo_00226
		Align the decimal numbers for a vertical subtraction problem; then solve (to thousandths).	smma_lo_00228
		Align the decimal numbers in a vertical subtraction problem; then solve (decimals to thousandths).	smma_lo_00233
		Multiply decimals (to thousandths x hundredths).	smma_lo_00234
		Multiply decimals by 10, 100, or 1000.	smma_lo_00235
		Subtract decimals with regrouping (to ten-thousandths).	smma_lo_00243
		Multiply decimals (to ten-thousandths x ten-thousandths).	smma_lo_00244
		Move the decimal point in the divisor and dividend in a long division problem.	smma_lo_00247
		Divide a decimal by a whole number.	smma_lo_00248
		Move the decimal point in the divisor and dividend in a long division problem; then find the quotient.	smma_lo_00249
		Convert light years to kilometers and kilometers to light years.	smma_lo_01339
Add the decimal numbers provided on a data table.	smma_lo_01785		
Subtract the decimal numbers provided on a data table.	smma_lo_01786		

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NE Standard(s) Number	NE Standard(s) Description	Item Description	Item ID
6.1.2.d	Add, subtract, multiply, and divide decimals using the standard algorithms.	Identify the best estimate of a sum, difference, or product.	smma_lo_00231
		Identify the best estimate for a quotient (decimal divided by a whole number).	smma_lo_00238
		Identify a reasonable answer for a division problem.	smma_lo_00246
		Estimate the quotient in a long division problem (three-digit dividend, two-digit divisor, remainder).	smma_lo_00301
6.1.2.e	Estimate and check reasonableness of answers using appropriate strategies and tools.	Estimate the quotient to the nearest ten (three-digit dividends, one-digit divisors).	smma_lo_00314
		Choose the best estimate for a long division problem (three-digit dividends, two-digit divisors).	smma_lo_00315
		Estimate the product of two numbers (factors 101 to 949).	smma_lo_00912
		Estimate the sum, product, or quotient in problems with fractions.	smma_lo_01095
		Estimate the product of three factors (1,000 to 350,000).	smma_lo_01099
		Estimate the sum, difference, product or quotient to solve a problem in context (round to the nearest thousand).	smma_lo_01109
		Estimate the sum or difference in a money problem by rounding to the nearest 10 (two-digit sums and differences).	smma_lo_01580
		Estimate the difference of 2 four-digit numbers by rounding each to the nearest thousand.	smma_lo_01614
		Identify the best estimate for a sum using data in a table (three- and four-digit addends).	smma_lo_01620
		Identify related multiplication and division number sentences that can be used to solve a problem.	smma_lo_01080
		Identify the addition or subtraction rule of the function.	smma_lo_01682
		Identify the multiplication or division rule of the function.	smma_lo_01684
		Identify the written phrase that is a translation of a expression or inequality.	smma_lo_01815
6.2.1.a	Create algebraic expressions (e.g., one operation, one variable as well as multiple operations, one variable) from word phrases.	Translate an expression into a written phrase (two-step).	smma_lo_01816
		Write expressions that record operations with numbers and variables.	smma_lo_02056
		Write an expression to represent a real-world problem, using variables to represent numbers.	smma_lo_02062
		Apply the properties of operations to generate equivalent expressions.	smma_lo_02059

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NE Standard(s) Number	NE Standard(s) Description	Item Description	Item ID
6.2.1.a	Create algebraic expressions (e.g., one operation, one variable as well as multiple operations, one variable) from word phrases.	Choose all expressions that are equivalent to a given expression.	smma_lo_02060
		Describe the relationship between two sets of numbers in a relation or function using multiplication, addition, or subtraction.	smma_lo_01653
		Describe the relationship between two sets of numbers in a relation or function using subtraction (minuends 30 to 50, subtrahends 2 to 5).	smma_lo_01654
6.2.1.b	Recognize and generate equivalent algebraic expressions involving distributive property and combining like terms.	Describe the relationship between two sets of numbers in a relation or function using multiplication (factors 2 – 5).	smma_lo_01655
		Identify the one-step rule in the relation or function (addition and subtraction).	smma_lo_01722
6.2.1.c	Represent and analyze the relationship between two variables using graphs, tables, and one-step equations.	Identify the one-step rule in the relation or function (multiplication and division).	smma_lo_01723
		Generate a table of values given a rule.	smma_lo_01724
		Complete a table given a two-step rule (single-digit whole numbers).	smma_lo_01750
		Complete a table given a two-step rule (whole numbers).	smma_lo_01751
		Generate a table of values given a one-step rule.	smma_lo_01755
		Generate a table of values given a two-step rule.	smma_lo_01756
		Complete an input/output table given a one-step rule; then plot the ordered pairs on a coordinate grid.	smma_lo_01757
		Complete an input/output table given a two-step rule; then plot the ordered pairs on coordinate grid.	smma_lo_01758
		Find missing values in a table that represents a proportional relationship, and plot the pairs of values on the coordinate plane.	smma_lo_02115
		Use substitution to determine whether a given number in a specified set makes an equation or inequality true.	smma_lo_02061
		Identify an equivalent expression for $a(x + b + c)$ with variables.	smma_lo_00129
		Given the value for the variable, evaluate an addition expression (sums 4 to 12).	smma_lo_01683
Evaluate an expression with variables using substitution and a value chart (addition, sums to 18).	smma_lo_01685		
6.2.2.b	Use substitution to determine if a given value for a variable makes an equation or inequality true.	Evaluate the expression $mx + c$ or $mx - c$.	smma_lo_01739

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NE Standard(s) Number	NE Standard(s) Description	Item Description	Item ID
6.2.2.d	Given the value of the variable, evaluate algebraic expressions (which may include absolute value) with respect to order of operations (non-negative rational numbers).	Evaluate an expression within a context (multiplication).	smma_lo_01740
		Solve a one-step equation in context (division, two-digit whole numbers).	smma_lo_01745; smma_lo_01747
		Solve for a or c in $a/b + c/b = d/b$ (sums 2/3 to 11/12).	smma_lo_00356
		Solve for a or c in $a/b - c/b = d/b$ (minuends 2/3 to 11/12).	smma_lo_00360
		Solve for a or c in $a/b - c/b = d/b$ (improper fractions, minuends 4/3 to 35/12).	smma_lo_00362
		Solve for a or c in $a/b + c/b = d/b$ (improper fractions, sums 4/3 to 35/12).	smma_lo_00364
		Solve for a or b in $a + b = c$ (decimals to tenths, no regrouping).	smma_lo_00367
6.2.2.e	Solve one-step equations with non-negative rational numbers using addition, subtraction, multiplication and division.	Solve for a or b in $a - b = c$ (decimals to tenths, regrouping).	smma_lo_00368
		Solve for a or b in $a \times b = c$ (products from 0.2 x 0.6 to 0.9 x 0.9).	smma_lo_00369
		Solve for a or b in $a \div b = c$ (combinations 0.6 ÷ 0.6 to 0.9 ÷ 0.9).	smma_lo_00370
		Solve for a, b, or c in $a \div b/c = d/e$ (combinations to 12 ÷ 12).	smma_lo_00371
		Solve for a or b in $a + b = c$ (decimals to hundredths).	smma_lo_00373
		Solve for a or b in $a - b = c$ (decimals to hundredths, regrouping).	smma_lo_00374
		Solve for a or b in $a \times b = c$ (products from 0.02 x 0.13 to 0.09 x 0.19).	smma_lo_00376
		Solve for a, b, c, or d in $a/b \div c/d = e/f$.	smma_lo_00377
		Solve for a or b in $a \div b = c$ (up to 4-digit decimals).	smma_lo_00378
		Solve for a in $ba/c = d$ by multiplying by the reciprocal.	smma_lo_00382; smma_lo_01795
		Solve one-step equations (addition and subtraction, fractions).	smma_lo_01796
		Solve a one-step equation (multiplication, decimals).	smma_lo_01797
		Solve for a in $a/b = c$.	smma_lo_01798
		Solve a one-step equation with decimals in context (addition and subtraction).	smma_lo_01799
		Solve a one-step equation (fractions, multiplication and division).	smma_lo_01847
Solve a one-step equation (fractions, addition and subtraction).	smma_lo_01848; smma_lo_01868		

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6.2.2.e	Solve one-step equations with non-negative rational numbers using addition, subtraction, multiplication and division.	Find a percent of a money amount (\$0.80 to \$10.80).	smma_lo_00270
		Find a percent of a number (the percent is greater than or equal to 100).	smma_lo_00275
		Find the percent given the whole and the part.	smma_lo_00276
		Find the whole given the percent and the part.	smma_lo_00277
		Find the number of grams that represents a percentage of the total weight (whole numbers).	smma_lo_01636
		Determine the percent (100 total items).	smma_lo_01713
		Find the unit price of an item (products 2 x 6 to 25 x 32).	smma_lo_00830
6.2.3.c	Solve real-world problems involving percents of numbers.	Solve time and distance problems (whole numbers).	smma_lo_00842
		Given the number of kilowatt-hours used and a price, find the total cost of power.	smma_lo_01336
		Given a rate and a model, find a distance.	smma_lo_01575
		Find the number of hours worked given the hourly rate and total earned.	smma_lo_01625
		Find the total money earned, given the number of hours worked and the hourly rate.	smma_lo_01630
		Identify two unit rates for a given word problem.	smma_lo_02114
6.2.3.d	Solve real-world problems using ratios and unit rates.	Complete a comparison statement based on the ratios in two tables.	smma_lo_02116
		Convert measurement units either by making a table or by multiplying by a unit rate.	smma_lo_02117
		Identify the net for a geometric solid.	smma_lo_00675
		Identify the net that forms a three-dimensional solid.	smma_lo_01772
		Identify a point on a grid given an ordered pair, or identify the ordered pair for a point shown on the grid.	smma_lo_01057
		Graph a set of ordered pairs from a table on a coordinate plane (Quadrant I).	smma_lo_01809
		Graph a set of ordered pairs from a table on a coordinate plane.	smma_lo_01810
		Graph points on a coordinate plane based on a real-world context.	smma_lo_02112
		Identify the set of vertices on a grid can be connected to form a figure (triangle, quadrilateral, rectangle, or square).	smma_lo_00625

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6.3.1.a	Identify and create nets to represent two-dimensional drawings of prisms, pyramids, cylinders, and cones.	Find distances between points with the same first coordinate or the same second coordinate by using coordinates and absolute value.	mma_lo_02113
		Find the area of a triangle (2 to 72 square inches).	mma_lo_00176
6.3.2.a	Identify the ordered pair of a given point in the coordinate plane.	Use a formula to find the area of a parallelogram.	mma_lo_00824
6.3.2.b	Plot the location of an ordered pair in the coordinate plane.	Find the area of a triangle using a formula.	mma_lo_00827
		Find the area of a rectilinear figure in a context by decomposing it into two rectangles.	mma_lo_02032
6.3.2.b	Draw polygons in the coordinate plane given coordinates for the vertices.	Determine the volume of a box given the height, width, and length (60 to 480 customary or metric cubic units).	mma_lo_00174
6.3.2.d	Draw polygons in the coordinate plane given coordinates for the vertices.	Solve for a variable in the formula for volume of a rectangular prism (whole numbers and mixed numbers).	mma_lo_01817
6.3.2.e	Calculate vertical and horizontal distances in the coordinate plane to find perimeter and area.	Calculate the volume of a rectangular prism; then convert the cubic feet or cubic meters into gallons or liters.	mma_lo_01819
6.3.3.a	Determine the area of quadrilaterals, including parallelograms, trapezoids, and triangles by composition and decomposition of polygons as well as application of formulas.	Compute the volume of right rectangular prisms using formulas.	mma_lo_02043
		Analyze a line plot to find the total number of items that fall at, above, or below a given value.	mma_lo_01156
		Identify the most frequent value (mode) using a line plot.	mma_lo_01164
		Read and interpret a line plot.	mma_lo_01764
6.3.3.c	Apply volume formulas for rectangular prisms.	Find and compare the average variation of two sets of data.	mma_lo_01221
		Find the average (mean) of 3 numbers.	mma_lo_00151
		Determine a student's grade point average based on five grades.	mma_lo_00179
		Determine the average (mean) of a data set of three to five customary weights or metric masses.	mma_lo_00836
6.4.2.a	Solve problems using information presented in line plots, dot plots, box plots, and histograms.	Identify the most frequent value (mode) using a line plot.	mma_lo_01164
		Find the range of a set of data.	mma_lo_01166
		Identify the median of a data set with an odd number of items.	mma_lo_01168
6.4.2.b	Compare and interpret data sets based upon their graphical representations (e.g., center, spread, and shape).	Identify the median of a data set with an even number of items and the two middle values are equal.	mma_lo_01169

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6.4.2.c	Find and interpret the mean, median, mode, and range for a set of data.	Identify the median of a data set with an even number of items and the two middle values are not equal.	smma_lo_01170
		Determine the range of a set of data represented in a line graph.	smma_lo_01176
		Determine the average (mean), median, mode, and range.	smma_lo_01210
		Solve a problem in context by finding the average (mean) of three to seven numbers.	smma_lo_01619
		Determine the mode of a data set.	smma_lo_01719
		Determine the median of a data set.	smma_lo_01726
		Determine the mean of a data set.	smma_lo_01727
		Determine the mode of a set of data.	smma_lo_01765
		Determine the range of a set of data.	smma_lo_01766
		Determine the median of a set of data.	smma_lo_01768
		Solve a proportion problem in context.	smma_lo_01284
		Find the amount of an ingredient needed to make two, three or four times a recipe.	smma_lo_01627
		Solve a problem in context using proportions.	smma_lo_01635
		Determine the fraction needed to complete the proportion.	smma_lo_01827
		Find the missing negative addend in a number sentence (sums 1 to 8).	smma_lo_00105
		Find the missing addend in a number sentence (missing addends -10 to 10, sums -20 to 20).	smma_lo_00110
Divide a decimal by a whole number.	smma_lo_00239		
7.1.2.a	Solve problems using proportions and ratios (e.g., cross products, percents, tables, equations, and graphs).	Multiply a negative integer by a positive integer (products -144 to -4).	smma_lo_00914
		Evaluate a numerical expression $(a) + (b) - (c)$, where a , b , and c have values from -9 to 9.	smma_lo_01527
		Find the final temperature given the initial temperature and the temperature increase.	smma_lo_01632
		Extend an arithmetic sequence for three more terms.	smma_lo_01803
7.1.2.b	Add, subtract, multiply, and divide rational numbers (e.g., positive and negative fractions, decimals, and integers).	Represent addition and subtraction of rational numbers (fractions) on a number line.	smma_lo_02153
		Represent addition and subtraction of rational numbers (decimals) on a number line.	smma_lo_02154
		Identify an equivalent expression of commutativity for addition of integers.	smma_lo_00114
		Identify $-(a + b)$ as equivalent to $-a + (-b)$, where a and b are 1 to 9.	smma_lo_00115
		Identify $-(a + b)$ as equivalent to $-a - b$, where a and b are 1 to 9.	smma_lo_00116
		Identify an equivalent expression with integers (four one-digit addends).	smma_lo_00117

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7.1.2.b	Add, subtract, multiply, and divide rational numbers (e.g., positive and negative fractions, decimals, and integers).	Identify $-(a + b)$ as equivalent to $-a - b$, where a and b are 1 to 9.	smma_lo_00118
		Compare two expressions using the additive inverse property.	smma_lo_00120
		Identify an equivalent variable expression $-(a + b) = -a + (-b)$.	smma_lo_00124
7.1.2.c	Apply properties of operations as strategies for problem solving with rational numbers.	Identify $a \times (b - c)$ as equivalent to $(a \times b) - (a \times c)$.	smma_lo_00130
		Identify $a - b$ as equivalent to $a + (-b)$, where a and b are 1 to 20.	smma_lo_01514
		Identify $-a - b$ as equivalent to $-a + (-b)$ (minuends -20 to -1).	smma_lo_01515
		Identify $a - (-b)$ as equivalent to $a + b$ (minuends 1 to 10).	smma_lo_01517
		Identify $-a - (-b)$ as equivalent to $-a + b$ (minuends and subtrahends -9 to 9).	smma_lo_01521
		Identify $-(a - b)$ as equivalent to $-a + b$ (a and b from 1 to 9).	smma_lo_01523
		Identify $-(-a - b)$ as equivalent to $a + b$ (a and b from 1 to 9).	smma_lo_01524
		Identify $-(a - b)$ as equivalent to $-a + b$ with variables.	smma_lo_01529
		Identify $-(-a - b)$ as equivalent to $a + b$ with variables.	smma_lo_01530
		Identify $a \times (b - c)$ as equivalent to $(a \times b) - (a \times c)$ with variables.	smma_lo_01533
		Identify $a \times (b - c)$ as equivalent to $(a \times b) - (a \times c)$.	smma_lo_01534
		Find three consecutive integers when given their sum.	smma_lo_01639
		Identify fractions that are equivalent to a given negative fraction.	smma_lo_02087
		Find the missing one-digit addend in a number sentence (positive or negative integers, sums are 0).	smma_lo_00102
		Determine if the sum is positive or negative (one- and two-digit addends).	smma_lo_00106
		Add two negative integers or add 0 and a negative integer (sums -20 to 0).	smma_lo_00107
		Add a positive and a negative integer (one-digit addends, sums -9 to 9).	smma_lo_00108
		Add two integers using addition facts (addends -10 to 10, sums -20 to 20).	smma_lo_00109
		Add three integers (sum -10 to 10).	smma_lo_00111
		Add integers in an associative expression $((a + b) + c, \text{ three addends } -10 \text{ to } 10)$.	smma_lo_00113

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NE Standard(s) Number	NE Standard(s) Description	Item Description	Item ID
7.1.2.d	Use multiple strategies to add, subtract, multiply, and divide integers.	Find the sum of four integers when two are additive inverses (a, b, c, and d have absolute values 1 to 20).	smma_lo_00119
		Add two integers (-20 to 20).	smma_lo_00121
		Find the missing addend in a number sentence (sums -20 to 20).	smma_lo_00122
		Find the missing addend in a number sentence (three addends, -10 to 10).	smma_lo_00123
		Evaluate $-a(a + b)$, where $9 < a < 19$, $1 < b < 9$.	smma_lo_00127
		Evaluate $-(-a + b)$, where $1 < a, b < 9$.	smma_lo_00128
		Divide integers (combinations 6×10 to -9×12 , dividend or divisor is negative).	smma_lo_00316
		Divide integers (combinations 4×6 to 12×12).	smma_lo_00317
		Divide integers (combinations 6×13 to 9×19 , all signs).	smma_lo_00319
		Multiply two negative integers (products 4 to 144).	smma_lo_00915
		Determine the sign of the products of two integers (one and two-digit integers).	smma_lo_00916
		Multiply a negative integer by a positive integer (one-digit number \times two-digit multiple of 10).	smma_lo_00917
		Find the missing positive or negative factor in a number sentence.	smma_lo_00918
		Determine the sign of the product of four factors.	smma_lo_00919
		Multiply three integers (one-digit factors with absolute values 2 to 10).	smma_lo_00920
		Find a missing number in an arithmetic sequence (-200 to 200, intervals 3 to 8).	smma_lo_01115
		Subtract integers using a number line (differences -5 to 1).	smma_lo_01505
		Subtract integers (minuends 0 to 10, subtrahends 1 to 10, differences negative).	smma_lo_01506
		Subtract integers (minuends 0 to 19, subtrahends 1 to 20, negative differences).	smma_lo_01507; smma_lo_01508
		Find the missing subtrahend in a number sentence (minuends 0 to 10, subtrahends 2	smma_lo_01509
		Subtract integers (minuends 0 to 19, subtrahends 1 to 20, negative differences).	smma_lo_01510
		Subtract integers using a number line (differences -5 to 4).	smma_lo_01511
		Find the missing subtrahend in a number sentence (minuends -9 to 0, differences -9 to 0).	smma_lo_01512
		Subtract integers (minuends 0 to 19, subtrahends 1 to 20, negative differences).	smma_lo_01516; smma_lo_01520

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NE Standard(s) Number	NE Standard(s) Description	Item Description	Item ID
7.1.2.d	Use multiple strategies to add, subtract, multiply, and divide integers.	Evaluate the expression $-(-a)$, where a has values 1 to 99.	smma_lo_01518
		Subtract integers (minuend 0, subtrahends 1 to 20).	smma_lo_01519
		Subtract integers (minuends -10 to 0 , subtrahends -10 to -1).	smma_lo_01522
		Subtract integers (minuends 0 to 19, subtrahends 1 to 20, negative differences).	smma_lo_01526
		Represent addition of integers on a number line.	smma_lo_02085
		Represent subtraction of integers on a number line.	smma_lo_02152
		Choose the best estimate for the volume of a rectangular prism.	smma_lo_00848
		Identify the inequality translated from a written phrase.	smma_lo_01853
		Write an inequality of the form $x > c$ or $x < c$ to represent a constraint in a real-world problem.	smma_lo_02064
		Write an inequality of the form $x > c$ or $x < c$ to represent a constraint in a real-world problem. Then represent the solution on a number line.	smma_lo_02065
		Form a proportion that can be used to solve for the height of an object.	smma_lo_00660
		Apply properties of operations to add two linear expressions.	smma_lo_02149
		Rewrite an expression from context by factoring and combining like terms.	smma_lo_02150
Evaluate the expression $-(a - b)$, where a and b have values from 1 to 9.	smma_lo_01531		
7.1.2.d	Add, subtract, multiply, and divide rational numbers (e.g., positive and negative fractions, decimals, and integers).	Subtract integers (minuends -11 to -20 , subtrahends -1 to -10 , negative differences).	smma_lo_01513
		Subtract integers (minuends 0 to 19, subtrahends 1 to 20, negative differences).	smma_lo_01525
7.1.2.e	Estimate and check reasonableness of answers using appropriate strategies and tools.	Evaluate the expression $-(-a - b)$, where a and b have values from 1 to 9.	smma_lo_01532

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NE Standard(s) Number	NE Standard(s) Description	Item Description	Item ID
7.2.1.a	Describe and create an inequality from words and pictures (e.g., one-step, one-variable).	Evaluate an algebraic expression with exponents (integers -10 to 10).	mma_lo_01818
		Evaluate an algebraic expression (integers -10 to 10).	mma_lo_01842
		Evaluate an algebraic expression with three variables (-5.9 to 5.9).	mma_lo_01843
7.2.1.b	Represent real-world situations with proportions.	Find the missing two-digit addend in a number sentence (sums are 0).	mma_lo_00103
7.2.2.b	Use factoring and properties of operations to create equivalent algebraic expressions (e.g., $2x + 6 = 2(x + 3)$).	Find the missing two-digit addend in a number sentence (sums are 0 , missing addend is first).	mma_lo_00104
		Find the missing dividend or divisor in a number sentence (combinations 7×13 to 9×19 , all signs).	mma_lo_00320
7.2.2.c	Given the value of the variable(s), evaluate algebraic expressions (including absolute value).	Solve for x in $ax + b = c$.	mma_lo_00384
		Solve for a in $a + b = c$ (a is from -20 to -1).	mma_lo_00388
		Solve for a in $a - b = c$ (differences from -19 to 11).	mma_lo_00389
		Solve for x in $ax = b$ (products from $-(4 \times 4)$ to $-(9 \times 9)$).	mma_lo_00390
		Solve for a in $a/b = c$ (products from $-(4 \times 4)$ to $-(9 \times 9)$).	mma_lo_00391
7.2.2.d	Solve two-step equations involving rational numbers which include the integers.	Complete the steps to solve for x in $ax + b = c$ (x is from -9 to -1).	mma_lo_00392
		Complete the steps to solve for x in $ax - b = c$ (x is from -9 to 2).	mma_lo_00393
		Complete the steps to solve for x in $ax - b = c$ (x is from -9 to 9).	mma_lo_00394
		Solve for x in $-x = a$ (numbers from -99 to 99).	mma_lo_00395
		Complete the steps to solve for x in $a - x = b$.	mma_lo_00396
		Determine whether a given value for x is a solution for $ax + b = c$ (x is from -9 to 9).	mma_lo_00397
		Solve for a two-step equation in context.	mma_lo_01638
		Solve a one-step equation (multiplication and division, integers).	mma_lo_01800
		Solve a one-step equation (addition and subtraction, one-digit integers).	mma_lo_01801
		Solve a one-step equation (two-digit integers, addition and subtraction).	mma_lo_01844
		Solve a one-step equation (integers, multiplication and division).	mma_lo_01845
		Solve a two-step equation (integers).	mma_lo_01846
		Solve a one-step equation (decimal integers, multiplication and division).	mma_lo_01849
		Solve a two-step equation (fractions, multiplication).	mma_lo_01850
		Solve a two-step equation (decimals).	mma_lo_01851

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NE Standard(s) Number	NE Standard(s) Description	Item Description	Item ID
7.2.2.d	Solve two-step equations involving rational numbers which include the integers.	Identify the equation that translates the written phrase ($ax + b = c$).	smma_lo_00385
		Identify the equation that translates the written phrase ($ax + b = c$).	smma_lo_00386
		Given a table of values for x and y , identify a true equation.	smma_lo_00399
		Identify the one-step equation that is a translation of the written phrase within a	smma_lo_01813
		Identify the two-step equation that is a	smma_lo_01814
		Match equations and inequalities with real-world situations.	smma_lo_02140
		Match equations and inequalities with real-world situations.	smma_lo_02140
		Find the total cost, given an amount and the sales tax percentage.	smma_lo_00178
7.2.3.a	Describe and write linear equations from words and tables.	Find the percent of increase.	smma_lo_00278
		Identify a correct expression to solve a problem about sales tax.	smma_lo_00845
		Find total earnings for two to four weeks given the weekly salary, commission	smma_lo_01637
		Solve for a variable in the formula for simple interest (whole numbers and decimals).	smma_lo_01805
		Identify the correct proportion for the context, and then solve.	smma_lo_01826
7.2.3.c	Solve real-world problems with equations that involve rational numbers in any form.	Identify the constant of proportionality given a table, a graph, an equation, a diagram, or a word problem.	smma_lo_02002
7.2.3.d	Solve real-world problems with inequalities.	Interpret the meaning of a point on the graph of a proportional relationship in terms	smma_lo_02089
7.2.3.e	Use proportional relationships to solve real-world problems, including percent problems, (e.g., % increase, % decrease, mark-up, tip, simple interest).	Identify the scale factor in similar shapes to find the missing corresponding sides.	smma_lo_00513
		Determine distances from scale drawings (inches to miles, cm to km).	smma_lo_00815
		Interpret scale drawings (metric and customary units of length).	smma_lo_00846
		Establish that vertical angles are congruent.	smma_lo_00670
		Find the measure of the missing angle in a diagram.	smma_lo_00674
		Find the volume of a rectangular or triangular prism.	smma_lo_00838
		Find the volume of a three-dimensional figure by decomposing that figure into two right rectangular prisms and then adding those prisms' volumes.	smma_lo_02044
		Find the circumference, given the length of the diameter or the radius ($\pi = 3.14$).	smma_lo_00828

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NE Standard(s) Number	NE Standard(s) Description	Item Description	Item ID
7.2.3.f	Solve real-world problems involving scale drawings using a proportional relationship.	Measure the diameter of a circle, and then determine the circumference.	smma_lo_01779
		Measure the radius of a circle, and then determine the circumference.	smma_lo_01780
		Measure the diameter of a circle, and then determine the area.	smma_lo_01781
7.3.1.a	Apply and use properties of adjacent, complementary, supplementary, and vertical angles to find missing angle measures.	Measure the radius of a circle, and then determine the area.	smma_lo_01783
		Determine the most accurate representation of the circumference of a circle.	smma_lo_01784
7.3.3.b	Solve real-world problems involving surface area and volume of composite shapes made from rectangular and	Given the radius, find the circumference of a circle within context.	smma_lo_01855
		Given the diameter, find the circumference of a circle within context.	smma_lo_01856
7.3.3.c	Determine the area and circumference of circles both on and off the coordinate plane.	Select a circle graph whose sectors are in the same proportions as the data displayed	smma_lo_01160
		Select a table that contains data that are in the same proportions as the sectors of a	smma_lo_01162
		Read and interpret data from a circle graph labeled with percents.	smma_lo_01208
		Given a chart of tree growth, infer which of two years there was more rainfall.	smma_lo_01305
		Given a graphical representation of a spinner, count the number of possible	smma_lo_01209
		Given a coordinate grid to represent outcomes of tossing a pair of number	smma_lo_01218; smma_lo_01219
		Determine the number of arrangements that can be made from two groups with two	smma_lo_01717
7.4.2.a	Solve problems using information presented in circle graphs.	Determine the arrangements that can be made with a group of two and a group of three items.	smma_lo_01718
		Express an event as a ratio of the number of favorable outcomes to the total number of outcomes (bowl containing marbles of two colors).	smma_lo_01179
		Within the context of selecting without replacement from a bowl containing marbles of two colors, indicate the effect of changes on the probability of the event in both the number of possible outcomes favorable to an event and the total number of possible	smma_lo_01203
7.4.2.a	Use observations, surveys, and experiments to collect, represent, and interpret the data using tables (e.g., frequency charts) and bar graphs.	In the context of randomly selecting a card that has one of two pictures on it, compute the probability of each picture being selected from a set of cards (total of 4 to 7 cards).	smma_lo_01211

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NE Standard(s) Number	NE Standard(s) Description	Item Description	Item ID
7.4.3.a	Generate a list of possible outcomes for a simple event.	In the context of randomly selecting a card that has a certain me on it, compute the probability of each me being selected from a set of cards.	smma_lo_01215
		Within the context of selecting without replacement from a bowl containing marbles of two colors, indicate the effect of changes on the probability of the event in both the number of possible outcomes favorable to an event and the total number of possible	smma_lo_01226
		Write a fraction to express the probability of an event.	smma_lo_01667
		Within the context of selecting without replacement from a bowl containing marbles of two colors, indicate the effect of changes on the probability of the event in both the number of possible outcomes favorable to an event and the total number of possible	smma_lo_01200; smma_lo_01216
7.4.3.b	Describe the theoretical probability of an event using a fraction, percentage, and decimal.	Identify the probability of two independent outcomes, and then determine the probability of the combination of the two outcomes occurring simultaneously.	smma_lo_01224
		Determine whether a chronological event is certain or impossible.	smma_lo_01137
		Given information about a current situation, classify a future event as being certain, possible, or impossible.	smma_lo_01139
		Within the context of repeated selections without replacement from a bag containing two balls of the same color, label events as	smma_lo_01141
		Given a sentence describing an observed event, label a future occurrence as certain, possible, or impossible.	smma_lo_01143
		Within the context of selecting without replacement from a cup containing three balls, each of a different color, label a given event prior to each selection as certain, possible, or impossible.	smma_lo_01147

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NE Standard(s) Number	NE Standard(s) Description	Item Description	Item ID
7.4.3.c	Find theoretical probabilities for independent events.	Create a set of colored balls whose contents are specified by whether it is certain, possible, or impossible to select a particular color.	smma_lo_01153
		Given a graphical representation of an urn containing balls of three colors, determine qualitatively which event is more probable to occur (5 to 8 times as many balls of one color as of the other color).	smma_lo_01157
		Given a graphical representation of an urn containing balls of two colors, determine qualitatively which color is more probable to be randomly selected (2 to 4 times as many balls of one color as of the other color).	smma_lo_01159
7.4.3.d	Perform simple experiments and express the degree of likelihood (possible, impossible, certain, more likely, equally likely, or less likely); write as fractions and percentages.	Using a graphical representation of an urn and a set of balls of two colors, modify a random experiment so that the qualitative probability of getting one color is greater than that of getting the other color.	smma_lo_01161
		Given a graphical representation of an urn containing balls of three colors, determine qualitatively which event is more probable to occur.	smma_lo_01163
		Given the graphical representation of a bowl containing marbles of two colors, represent on a qualitative ordinal scale the probability of an event (6 to 11 marbles in the bowl).	smma_lo_01165
		Given a graphical representation of a bowl containing marbles of two colors, represent on a qualitative ordinal scale the probability of an event and its complement.	smma_lo_01171
		Given a graphical representation of two urns containing different compositions of balls of two colors, select the urn in which an event is qualitatively determined to have a high probability.	smma_lo_01173
		Determine the probability of an event.	smma_lo_01197
		Given a graphical representation of a spinner partitioned into sectors of different sizes, each containing one of several possible pictures, label events as certain or impossible or pairs of events as more, less, or equally likely.	smma_lo_01212
		Determine the event that is most or least likely; then conduct a simulation in which the results are recorded so that theoretical and experimental probability can be compared.	smma_lo_01738

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NE Standard(s) Number	NE Standard(s) Description	Item Description	Item ID
7.4.3.d	Perform simple experiments and express the degree of likelihood (possible, impossible, certain, more likely, equally likely, or less likely); write as fractions and percentages.	Given a graphical representation of two spinners, count all the possible outcomes for spinning each spinner once.	smma_lo_01665
		Express a number in scientific notation (exponents 1 to 6).	smma_lo_01113
		Given the scientific notation, determine the standard notation of a number (the power of 10 has an exponent of 1 to 6).	smma_lo_01121
		Find the missing exponent for a number written in scientific notation (the exponent is 1 to 6).	smma_lo_01122
		Write very small numbers in scientific notation.	smma_lo_02070; smma_lo_02071
		Drag rational and irrational values to their correct positions on a number line.	smma_lo_02141
7.4.3.f	Compare and contrast theoretical and experimental probabilities.	R: Compare sums and difference of positive and negative integers (-5 to 5).	smma_lo_01528
7.4.3.h	Identify complementary events and calculate their probabilities.	Find the square root of a number using a calculator (numbers to 4000).	smma_lo_01120
8.1.1.b	Represent numbers with positive and negative exponents and in scientific notation.	Multiply or divide two numbers with exponents (same base, exponents less than 18).	smma_lo_01104
		Find the missing exponent in a multiplication or division number sentence.	smma_lo_01111
		Compare numbers written in scientific notation.	smma_lo_02072
		Identify an equation to describe the pattern generated by a table.	smma_lo_01741
		Identify an expression to describe the pattern generated by a table.	smma_lo_01742
8.1.1.d	Approximate, compare, and order real numbers (both rational and irrational) and order real numbers both off and on the number line.	Identify a two-step expression to describe the pattern generated by a table (input = 100).	smma_lo_01752
		Identify a two-step expression to describe the pattern generated by a table (input = 1000).	smma_lo_01753
8.1.2.a	Evaluate the square roots of perfect squares less than or equal to 400 and cube roots of perfect cubes less than or equal to 125.	Identify the expression that is a translation of the written phrase.	smma_lo_01759
8.1.2.b	Simplify numerical expressions involving exponents and roots (e.g., $4(-2)$ is the same as $1/16$).	Complete an input/output table and identify the algebraic equation that describes the one-step rule.	smma_lo_01806
		Complete an input/output table and identify the algebraic equation that describes the two-step rule.	smma_lo_01807
8.1.2.d	Multiply and divide numbers using scientific notation.	Complete a table of values and graph the equation of a linear function.	smma_lo_01837

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8.2.1.a	Create algebraic expressions, equations, and inequalities (e.g., two-step, one variable) from word phrases, tables, and pictures.	Identify the equation translated from a written phrase.	smma_lo_01852
		Identify the written phrase translated from an inequality.	smma_lo_01869; smma_lo_01870
		Write an inequality of the form $px + q > r$ or $px + q < r$ to represent a constraint in a real-world problem.	smma_lo_02083
		Compare a proportional relationship represented as a graph to a proportional relationship represented as a table.	smma_lo_02074
		Identify the rate of change and the y-intercept of two linear functions, one represented graphically, and one represented either algebraically or in a table.	smma_lo_02101
		Identify the rate of change and the y-intercept of two linear functions, one represented in a verbal description, and one represented either graphically or algebraically.	smma_lo_02102
		Identify the rate of change and the y-intercept of two linear functions, one represented in a table, and one represented either algebraically or in a verbal description.	smma_lo_02103
		Transform a given multi-step equation into a simpler form.	smma_lo_02079
		Identify the solution to a system of linear equations by locating the point of intersection on its graph.	smma_lo_02080
		If a system of linear equations has 0 or infinitely many solutions, solve it by inspection. If it has 1 solution, solve it either algebraically or by graphing.	smma_lo_02133
8.2.1.b	Determine and describe the rate of change for given situations through the use of tables and graphs.	Use similar triangles to explain why the slope m is the same between any two distinct points on a nonvertical line in the	smma_lo_02075
		Generate and solve an equation with variables on both sides of the equal sign in a real-world context.	smma_lo_02145
		Solve an inequality of the form $px + q > r$ or $px + q < r$; then graph the solution on a number line.	smma_lo_02084
		Solve a problem involving equal angle measures.	smma_lo_00677

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8.2.1.c	Describe equations and linear graphs as having one solution, no solution, or infinitely many solutions.	Establish that alternate interior angles are congruent for parallel lines.	smma_lo_00672
		Arrange statements to write a proof of a fact about either the angle sum or the exterior angle of a triangle.	smma_lo_02126
		In a figure in which parallel lines are cut by a transversal, identify the transformations that would line one angle up with another angle. Then, describe the relationship between the	smma_lo_02129
8.2.1.d	Graph proportional relationships and interpret the slope.	Identify a figure as a slide, reflection (flip), or turn of another figure.	smma_lo_00599
		Identify a set of geometric figures that show a reflection (flip).	smma_lo_00648
8.2.2.a	Solve multi-step equations involving rational numbers with the same variable appearing on both sides of the equal sign.	Identify a reflection, a rotation, and a translation of a geometric figure.	smma_lo_00665
8.2.2.b	Solve two-step inequalities involving rational numbers and represent solutions on a number line.	Determine the missing coordinate of a vertex of a triangle in a transformation.	smma_lo_01736
8.3.1.a	Determine and use the relationships of the interior angles of a triangle to solve for missing measures.	Identify a transformation as a slide, flip, or a turn.	smma_lo_01776
8.3.1.b	Identify and apply geometric properties of parallel lines cut by a transversal and the resulting corresponding, alternate interior, and alternate exterior angles to find missing measures.	Rotate a figure by 90, 180, or 270 degrees clockwise or counterclockwise on a coordinate plane.	smma_lo_02104
		Reflect a figure on a coordinate plane over the x-axis, the y-axis, or the line $y = x$.	smma_lo_02105
		Given two points, describe how the points are related: reflected across the x-axis, reflected across the y-axis, or reflected across both axes.	smma_lo_02108
8.3.2.a	Perform and describe positions and orientation of shapes under single transformations including rotations (in multiples of 90 degrees about the origin), translations, reflections, and dilations on and off the coordinate plane.	Translate a figure on a coordinate plane.	smma_lo_02120
		Rotate a figure on a coordinate plane; verify properties of the rotation.	smma_lo_02121
		Reflect a figure on a coordinate plane over the x-axis, the y-axis, or the line $y = x$; verify	smma_lo_02122
		Translate a figure on a coordinate plane; verify properties of the rotation.	smma_lo_02123
		Given two congruent figures, transform one figure so that it lines up with the other.	smma_lo_02124
		Reflect a figure, find the coordinates of the reflected figure, and describe the effect of the reflection on the coordinates.	smma_lo_02125
		Determine the algebraic expression used to find the coordinates of the image of a figure under a dilation with the origin as the center of dilation.	smma_lo_02142

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8.3.2.a	Perform and describe positions and orientation of shapes under single transformations including rotations (in multiples of 90 degrees about the origin), translations, reflections, and dilations on and off the coordinate plane.	Identify similar polygons.	smma_lo_00610
		Identify the polygon that is not similar to the others (counterexample)	smma_lo_00645
		Identify the figure that is not similar to the others. (simple shapes, counterexample)	smma_lo_00649
		Identify similar triangles or rectangles on a geoboard.	smma_lo_00847
		Explain a proof of the converse of the Pythagorean Theorem.	smma_lo_02132
		Find the measurement of the hypotenuse using the Pythagorean theorem. (2D)	smma_lo_01854
		Explain a proof of the Pythagorean Theorem.	smma_lo_02131
		Given two points on a coordinate grid, draw a right triangle whose hypotenuse connects the two points. Then use the Pythagorean Theorem to find the distance between the two points.	smma_lo_02100
8.3.2.c	Find similar two-dimensional figures and define similarity in terms of a series of transformations.	Use a formula to find the volume of a cylinder.	smma_lo_00839
		Use a formula to find the volume of a cone or a sphere.	smma_lo_00844
		Choose an approximation based on a trend line for bivariate data.	smma_lo_02143
		Identify positive, negative, or no association for sets of actual data.	smma_lo_01222
8.3.3.a	Explain a model of the Pythagorean Theorem.		
8.3.3.b	Apply the Pythagorean Theorem to find side lengths of triangles and to solve real-world problems.		
8.3.3.c	Find the distance between any two points on the coordinate plane using the Pythagorean Theorem.		
8.3.3.d	Determine the volume of cones, cylinders, and spheres, and solve real-world problems using		
8.4.1.a	Represent bivariate data (i.e. ordered pairs) using scatter plots.		
8.4.2.a	Solve problems and make predictions using an approximate line of best fit.		

"R" denotes a learning object that enables students to achieve readiness for a standard. These learning objects reinforce prerequisite skills needed for understanding and mastery of the content described in the standard.