SAVVAS

SuccessMaker®

State Standards Alignments for Mathematics

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

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
K.2.A	S	The student is expected to count forward and backward to at least 20 with and without objects.	Identify a set with the same number of objects as a given set (1 to 5 objects).	SMMA_LO_00922
			Identify four numbers ordered from least to greatest (two-digit).	SMMA_LO_00985
			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
			F: Make a group with one to five objects.	SMMA_LO_00938
			F: Find the next number in a sequence, counting by 1's (1 to 5).	SMMA_LO_00939
			F: Make a group with 6 to 9 objects.	SMMA_LO_00945
			F: Find the next number in a sequence, counting by 1's (1 to 9).	SMMA_LO_00948
			F: Find the number that comes before a given number, counting by 1's (1 to 9).	SMMA_LO_00949
			F: Order four numbers from least to greatest (1 to 9).	SMMA_LO_00950
			F: Find a missing number in a sequence, counting by 1's (1 to 20).	SMMA_LO_00951
			F: Find a missing number in a sequence, counting by 1's (1 to 9).	SMMA_LO_00960
			F: Find a missing number in a sequence, counting by 1's (10 to 20).	SMMA_LO_00970
			F: Find a missing number in a sequence, counting by 1's (11 to 50).	SMMA_LO_00982
			F: Find a missing number in a sequence, counting by 1's (51 to 99).	SMMA_LO_00983
K.2.B	R	The student is expected to read, write, and represent whole numbers from 0 to at least 20 with and without objects or pictures.	Match objects to show a one-to-one correspondence (2 to 5 objects).	SMMA_LO_00921
			Identify a number from a spoken number (6 to 9).	SMMA_LO_00944
			Identify a number, model, or word with the same value (1 to 9).	SMMA_LO_00965
			Enter the number for a word name (two-digit).	SMMA_LO_01001
			F: Enter the number shown (0 to 4).	SMMA_LO_00001
			F: Enter the number shown (5 to 9).	SMMA_LO_00002
			F: Enter the missing date on a calendar.	SMMA_LO_00700
			F: Enter the number shown (1 to 5).	SMMA_LO_00932
			F: Identify a number from a spoken number (1 to 5).	SMMA_LO_00937
			F: Find the next number in a sequence, counting by 1's (1 to 5).	SMMA_LO_00940
			F: Enter the number shown (1 to 9).	SMMA_LO_00942
			F: Identify the group of objects that represent a number (1 to 5 objects).	SMMA_LO_00956

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
K.2.C	S	The student is expected to count a set of objects up to at least 20 and demonstrate that the last number said tells the number of objects in the set regardless of their arrangement or order.	Count specific objects within a larger set (1 to 6 objects).	SMMA_LO_00936
			Count objects by pairing each object with one number 1 to 10; determine how many objects there are.	SMMA_LO_02092
			F: Count objects arranged in a row (1-5 objects).	SMMA_LO_00933
			F: Count objects not arranged in a row (1 to 5 objects).	SMMA_LO_00935
			F: Count objects not arranged in a row (6 to 9 objects).	SMMA_LO_00943
			F: Count objects arranged in a row (one to nine objects).	SMMA_LO_00957
			F: Count specific objects within a larger set (6 to 9 objects).	SMMA_LO_00958
K.2.D	S	The student is expected to recognize instantly the quantity of a small group of objects in organized and random arrangements.	Count two sets of objects to find the total (sums 2 to 4).	SMMA_LO_00003
			Match a digit to a set with that number of objects (0 to 5).	SMMA_LO_00934
			Identify the number of objects for a word name. (1 to 9 objects).	SMMA_LO_00964
K.2.E	S	The student is expected to generate a set using concrete and pictorial models that represents a number that is more than, less than, and equal to a given number up to 20.	Identify whole numbers on a number line that satisfy the inequality (0 to 10).	SMMA_LO_01023
			F: Make a set with the same number of objects as a given set (1 to 5 objects).	SMMA_LO_00926
			F: Make a group with one more object than a given group (one to five objects).	SMMA_LO_00927
			F: Make a group with one fewer object than a given group (1 to 5 objects).	SMMA_LO_00928
			F: Make a group with the same number of objects as a given group (6 to 9 objects).	SMMA_LO_00929
			F: Make a group with one more object than a given group (six to nine objects).	SMMA_LO_00930
			F: Make a group with one fewer object than a given group (6 to 9 objects).	SMMA_LO_00931
			F: Create a set with the same, more, or fewer number of objects than a given group (1 to 9 objects).	SMMA_LO_00953
			F: Create a set with one more object than a given set (1 to 9 objects).	SMMA_LO_00954
			F: Create a set with one fewer object than a given set (1 to 9 objects).	SMMA_LO_00955
K.2.F	S	The student is expected to generate a number that is one more than or one less than another number up to at least 20.	Find a number that is one fewer or one greater than a given number (1 to 9).	SMMA_LO_00962
			Find a number that is one less or one more than a given number (two-digit).	SMMA_LO_00984

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
K.2.G	S	The student is expected to compare sets of objects up to at least 20 in each set using comparative language.	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
			F: Identify a number that is greater than or less than a spoken number (1 to 9).	SMMA_LO_00946
			F: Identify the number with the greatest value (1 to 9).	SMMA_LO_00947
K.2.H	R	The student is expected to use comparative language to describe two numbers up to 20 presented as written numerals.	Identify two numbers within a range (1 to 9).	SMMA_LO_00963
K.2.I	R	The student is expected to compose and decompose numbers up to 10 with objects and pictures.	Given a number (1-9) of objects, determine how many more objects are needed to make a ten.	SMMA_LO_02017
			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
			Model the number that makes 10 when added to a given number from 1 to 9; then identify the number.	SMMA_LO_02097
K.3.A	S	The student is expected to model the action of joining to represent addition and the action of separating to represent subtraction.	Count two sets of objects to find the total (sums 4 to 6).	SMMA_LO_00004
			Count two set of objects to find the total (sums 2 to 5).	SMMA_LO_00005
			Count two sets of objects to find the total (sums 6 to 10).	SMMA_LO_00006
			Count the objects in two sets (sums 1 to 5).	SMMA_LO_00007
			Count the objects in two sets (sums 6 to 10).	SMMA_LO_00008
			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
			Write an addition number sentence to represent a picture (sums 1 to 9).	SMMA_LO_00036
			Identify sets of objects that combined have a given sum (sums 6 to 9).	SMMA_LO_00726
			Identify a picture that represents an addition problem (sums 2 to 6).	SMMA_LO_01228
			Identify the expression that represents a picture (minuends 2 to 9).	SMMA_LO_01414
			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

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
K.3.A	S	The student is expected to model the action of joining to represent addition and the action of separating to represent subtraction.	Act out the solution to an addition problem in context (three addends, sums 1 to 9).	SMMA_LO_01537
			Model and apply joining stories to solve problems (sums 1 to 9).	SMMA_LO_01863
			Decompose numbers from 11 to 19 into ten ones and some further ones.	SMMA_LO_02094
K.3.B	R	The student is expected to solve word problems using objects and drawings to find sums up to 10 and differences within 10.	Identify a number sentence that can be used to solve a word problem with extra information (addition or subtraction, basic facts).	SMMA_LO_01242
			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
			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
			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
			Act out the solution to multi-step problem in context (addends, minuends 1 to 4).	SMMA_LO_01538
			Solve an addition problem in context (same objects, sums 2 to 5).	SMMA_LO_01540
			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
			Solve a problem in context by finding a missing addend (sums 2 to 5).	SMMA_LO_01546
			Solve an addition problem with three addends in context (sums 3 to 10).	SMMA_LO_01549
			Solve a subtraction problem in context by finding how many more (minuends 2 to 5).	SMMA_LO_01550
			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
			Identify and solve a number sentence for an addition problem in context (sums 2 to 9).	SMMA_LO_01553

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
K.3.B	R	The student is expected to solve word problems using objects and drawings to find sums up to 10 and differences within 10.	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
			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
			F: Identify the operation from pictures and contexts (sums 6 to 9, minuends 6 to 9).	SMMA_LO_00321
			F: Identify a picture that represents a subtraction problem (minuends 5 to 10).	SMMA_LO_01235
			F: Identify the picture that can be used to solve an addition or subtraction problem.	SMMA_LO_01255
			F: Identify the number sentence that solves a subtraction problem in context (minuends 11 to 18, subtrahends 1 to 9).	SMMA_LO_01439
			F: Identify the picture that represents a subtraction problem in context (minuends 2 to 10).	SMMA_LO_01542
K.4.A	S	The student is expected to identify U.S. coins by name, including pennies, nickels, dimes, and quarters.	Identify nickels or dimes.	SMMA_LO_00698
K.5.A	S	The student is expected to recite numbers up to at least 100 by ones and tens beginning with any given number.	Find a missing number in a sequence, counting by 10's (two-digit, non multiples of 10).	SMMA_LO_00992
K.6.A	S	The student is expected to identify two-dimensional shapes, including circles, triangles, rectangles, and squares as special rectangles.	Identify the object on the top, in the middle, or on the bottom.	SMMA_LO_00524
			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
			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
			Count the geometric figures in a picture.	SMMA_LO_00572
			Identify the group with the greatest number of shapes of a given type (1 to 6).	SMMA_LO_00959
			F: Identify the rectangle with the same size and shape as a given rectangle.	SMMA_LO_00736

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
K.6.D	S	The student is expected to identify attributes of two-dimensional shapes using informal and formal geometric language interchangeably.	Identify the figure that has a different number of sides from a given figure.	SMMA_LO_00553
			Count the number of sides in a polygon.	SMMA_LO_00586
			Identify figures with more or fewer than a given number of sides.	SMMA_LO_00587
			Identify corners (vertices) of polygons.	SMMA_LO_00589
			Count the corners (vertices) of a polygon (3 to 7 corners).	SMMA_LO_00596
			F: Determine whether points are outside, inside, or on a geometric figure.	SMMA_LO_00552
			F: Identify objects inside or outside a convex figure.	SMMA_LO_00575
			F: Move an object to a specified location (upper left, upper right, lower left, or lower right corner).	SMMA_LO_00590
K.6.E	R	The student is expected to classify and sort a variety of regular and irregular two- and three-dimensional figures regardless of orientation or size.	Match simple geometric figures that have the same size, shape, and color.	SMMA_LO_00514
			Match pictures that are identical.	SMMA_LO_00515
			Match geometric figures that have the same size and shape (simple figures).	SMMA_LO_00516
			Move puzzle pieces to complete a puzzle (2 pieces).	SMMA_LO_00534
			Identify the figure that is a different color from a given figure.	SMMA_LO_00541
			Match congruent irregular polygons.	SMMA_LO_00545
			Identify the figure with a different shape.	SMMA_LO_00547
			Match a shape to a picture containing that shape.	SMMA_LO_00548
			Identify shapes that are alike.	SMMA_LO_00549
			Identify 3-, 4-, and 5-sided figures.	SMMA_LO_00550
			Match similar irregular polygons.	SMMA_LO_00555
			Identify matching congruent figures under rotation and/or reflection.	SMMA_LO_00557
			Identify a shape by two positive tests, e.g., red, circle.	SMMA_LO_00565
			Match similar figures in different orientations.	SMMA_LO_00566
			Identify matching congruent geometric solids.	SMMA_LO_00567
			Identify the figure that is not of a given type (rectangle or triangle).	SMMA_LO_00571
			Classify geometric figures by a shape attribute.	SMMA_LO_00576
			Identify similar three-dimensional figures.	SMMA_LO_00592
K.6.F	S	The student is expected to create two-dimensional shapes using a variety of materials and drawings.	Connect points on a geoboard to copy a figure.	SMMA_LO_00611

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
K.7.A	S	The student is expected to give an example of a measurable attribute of a given object, including length, capacity, and weight.	Identify the tool for a particular use (thermometer, scale, clock).	SMMA_LO_00761
K.7.B	R	The student is expected to compare two objects with a common measurable attribute to see which object has more of/less of the attribute and describe the difference.	Match objects of the same height (3 heights).	SMMA_LO_00687
			Match objects of the same length (3 lengths).	SMMA_LO_00688
			Match amounts of liquid in containers (3 amounts).	SMMA_LO_00689
			Identify a pair of objects that are not the same size.	SMMA_LO_00692
			Given 3 objects, Identify the shortest or longest object.	SMMA_LO_00693
			Identify the tallest object.	SMMA_LO_00694
			Identify the biggest or smallest object.	SMMA_LO_00695
			Identify the container with the greatest or least capacity.	SMMA_LO_00696
			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 the smaller or bigger rectangle.	SMMA_LO_00747
K.8.A	S	The student is expected to collect, sort, and organize data into two or three categories.	Use logical reasoning to identify the item that does not belong in a group.	SMMA_LO_01227
			F: Match each set of tally marks to a total (1 to 9).	SMMA_LO_00952
			F: Formulate questions around numerical data.	SMMA_LO_01642
K.8.B	R	The student is expected to use data to create real-object and picture graphs.	Label the categories of a vertical bar graph based on data from a table.	SMMA_LO_01138
K.8.C	R	The student is expected to draw conclusions from real-object and picture 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 (six items).	SMMA_LO_00150
			Read a pictograph (3 categories, 1 to 9 items per category).	SMMA_LO_01124
			Read and interpret a pictograph about birds counted (2 to 5 birds in each row).	SMMA_LO_01299

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
1.2.B	S	The student is expected to use concrete and pictorial models to compose and decompose numbers up to 120 in more than one way as so many hundreds, so many tens, and so many ones.	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
			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
			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
			Model the numbers from 11 to 19 with place value blocks.	SMMA_LO_02018
			Model multiples of 10 (from 10 to 90) with place value blocks.	SMMA_LO_02019
			F: Enter the number equal to a given number of ones and tens (0 to 9 tens, 1 to 9 ones).	SMMA_LO_00979
			F: Act out the problem to find the sum (basic facts).	SMMA_LO_01241
			F: Act out a problem to find the sum of three numbers (one-digit addends).	SMMA_LO_01249
1.2.C	R	The student is expected to use objects, pictures, and expanded and standard forms to represent numbers up to 120.	Identify a written number from a spoken number (two-digit).	SMMA_LO_00977
			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 two-digit number, model, or expression that has a different value.	SMMA_LO_00991
			F: Find a number equal to 2 to 9 ones.	SMMA_LO_00972
			F: Enter the number equal to 1 to 9 ones.	SMMA_LO_00973
			F: Enter the number equal to 1 to 9 tens.	SMMA_LO_00974
			F: Enter the number of tens for a given multiple of ten (10 to 90).	SMMA_LO_00975
1.2.D	S	The student is expected to generate a number that is greater than or less than a given whole number up to 120.	Find two numbers within a range (two-digit).	SMMA_LO_00998
			Find two numbers when given place value clues (two-digit).	SMMA_LO_01049
1.2.E	S	The student is expected to use place value to compare whole numbers up to 120 using comparative language.	Identify the greatest or least number (two-digit).	SMMA_LO_00999
			F: Identify a number with a given digit in the ones or tens place.	SMMA_LO_00995
			F: Identify a number with a given digit in the ones, tens, or hundreds place.	SMMA_LO_01014
			F: Identify the value that is greater than one number and less than another in context.	SMMA_LO_01554

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
1.2.G	R	The student is expected to represent the comparison of two numbers to 100 using the symbols >, <, or =.	Compare numbers using < or > symbols (1 to 19).	SMMA_LO_00325
			Compare sums (sums 1 to 9).	SMMA_LO_00326
			Compare numbers using < or > symbols (20 to 99).	SMMA_LO_00328
			Compare differences (minuends 1 to 9).	SMMA_LO_00337
			Identify two numbers that make an inequality true (two-digit).	SMMA_LO_00997
			F: Identify two numbers that make an inequality true (0 to 9).	SMMA_LO_00994
1.3.A	S	The student is expected to use concrete and pictorial models to determine the sum of a multiple of 10 and a one-digit number in problems up to 99.	Add 10 to a number (sums 11 to 19).	SMMA_LO_00038
			Add a multiple of 10 and a one-digit number displayed horizontally (sums 11 to 99).	SMMA_LO_00040
1.3.B	S	The student is expected to use objects and pictorial models to solve word problems involving joining, separating, and comparing sets within 20 and unknowns as any one of the terms in the problem such as 2 + 4 = [ ]; 3 + [ ] = 7; 5 = [ ] - 3.	Use a picture to solve a missing addend problem (sums 2 to 6).	SMMA_LO_01232
			Choose the expression that can represent a problem with extra information; then solve (addition or subtraction).	SMMA_LO_01239
			Choose an operation to solve a problem with extra information; then solve (addition or subtraction, basic facts).	SMMA_LO_01247
			Identify a number sentence that can be used to solve a problem with extra information (addition or subtraction, basic facts).	SMMA_LO_01250
			Solve a problem in context by finding a missing addend (three addends, sums to 20).	SMMA_LO_01574
			Solve an addition problem in context (three addends, sums 9 to 18).	SMMA_LO_01576
			F: Identify a picture that represents a subtraction problem (one or two-digit).	SMMA_LO_01244
1.3.C	S	The student is expected to compose 10 with two or more addends with and without concrete objects.	Given a number (1-9) of objects, determine how many more objects are needed to make a ten.	SMMA_LO_02017
1.3.D	S	The student is expected to apply basic fact strategies to add and subtract within 20, including making 10 and decomposing a number leading to a 10.	Add 9 to a number (sums 10 to 18).	SMMA_LO_00045
			Create a fact family (addition and subtraction).	SMMA_LO_01857
			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
			Solve a subtraction problem by finding the missing addend.	SMMA_LO_02023
			Subtract two numbers by regrouping the numbers into a ten and some ones.	SMMA_LO_02026

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
1.3.F	R	The student is expected to generate and solve problem situations when given a number sentence involving addition or subtraction of numbers within 20.	Add zero to a number (sums 1 to 9).	SMMA_LO_00035
1.4.A	S	The student is expected to identify U.S. coins, including pennies, nickels, dimes, and quarters, by value and describe the relationships among them.	Identify the coin worth 1, 5, 10, or 25 cents.	SMMA_LO_00702
			Identify the coin equivalent to 5, 10, or 25 pennies.	SMMA_LO_00727
			Find equivalence of nickels and dimes (1 to 5 dimes).	SMMA_LO_00738
1.4.C	R	The student is expected to use relationships to count by twos, fives, and tens to determine the value of a collection of pennies, nickels, and/or dimes.	Make a picture to solve a multiplication problem involving total cost (2 to 5 items, 5, 10, or 15 cents each).	SMMA_LO_01584
1.5.B	S	The student is expected to skip count by twos, fives, and tens to determine the total number of objects up to 120 in a set.	Find the missing number in a sequence, counting by 5's or 10's.	SMMA_LO_01231
			F: Find a missing number in a sequence, counting by 2's (0 to 10).	SMMA_LO_00966
			F: Find a missing number in a sequence, counting by 10's (10 to 100, visual support).	SMMA_LO_00971
			F: Find a missing number in a sequence, counting by 10's (10 to 100).	SMMA_LO_00981
			F: Find the missing two-digit number in a sequence of odd or even numbers.	SMMA_LO_01002
			F: Find a missing number in a sequence, counting by 5's (5 to 50).	SMMA_LO_01003
			F: Find a missing number in a sequence, counting up or down by 5's (two-digit).	SMMA_LO_01004
1.5.C	S	The student is expected to use relationships to determine the number that is 10 more and 10 less than a given number up to 120.	Mentally find 10 more or 10 less than a given two-digit number; model the solution with place value blocks.	SMMA_LO_02020
1.5.D	R	The student is expected to represent word problems involving addition and subtraction of whole numbers up to 20 using concrete and pictorial models and number sentences.	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
			Solve an addition problem involving money (sums 3 to 9 cents).	SMMA_LO_01543
			F: Solve an addition problem with three addends in context (sums 3 to 10).	SMMA_LO_01557
1.5.E	S	The student is expected to understand that the equal sign represents a relationship where expressions on each side of the equal sign represent the same value(s).	Determine if equations involving addition and subtraction are true or false.	SMMA_LO_02024

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
1.5.F	S	The student is expected to determine the unknown whole number in an addition or subtraction equation when the unknown may be any one of the three or four terms in the equation.	Find the missing addend in a number sentence.	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 (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 1 to 9).	SMMA_LO_00052
			Find the missing addend in a number sentence (three addends, sums 10 to 19).	SMMA_LO_00066
			Complete fact families with four facts (sums 3 to 10).	SMMA_LO_00322
			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
			Identify a missing number in an addition and subtraction fact family.	SMMA_LO_01035
			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
			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 an addition problem in context (two-digit addends, sums less than 100, no regrouping).	SMMA_LO_01656
			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

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
1.5.G	R	The student is expected to apply properties of operations to add and subtract two or three numbers.	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
			Apply the Associative Property of Addition to add three numbers.	SMMA_LO_02135
1.6.A	R	The student is expected to classify and sort regular and irregular two-dimensional shapes based on attributes using informal geometric language.	Match pictures with shapes that are alike.	SMMA_LO_00517
			Match the face of a geometric solid to a plane figure.	SMMA_LO_00518
			Identify open and closed figures.	SMMA_LO_00580
			Match complex congruent figures in different orientations.	SMMA_LO_00581
1.6.B	S	The student is expected to distinguish between attributes that define a two-dimensional or three-dimensional figure and attributes that do not define the shape.	Match compound figures that have the same shape (different sizes).	SMMA_LO_00594
			Sort two-dimensional and three-dimensional shapes.	SMMA_LO_01677
1.6.C	S	The student is expected to create two-dimensional figures, including circles, triangles, rectangles, and squares, as special rectangles, rhombuses, and hexagons.	Connect points on a geoboard to copy a figure.	SMMA_LO_00611
			Identify parallelograms, rhombuses, and trapezoids.	SMMA_LO_00620
1.6.D	R	The student is expected to identify two-dimensional shapes, including circles, triangles, rectangles, and squares, as special rectangles, rhombuses, and hexagons and describe their attributes using formal geometric language.	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 shapes that are alike.	SMMA_LO_00549
			Identify parallelograms, rhombuses, and trapezoids.	SMMA_LO_00620
1.6.E	R	The student is expected to identify three-dimensional solids, including spheres, cones, cylinders, rectangular prisms (including cubes), and triangular prisms, and describe their attributes using formal geometric language.	Match pictures that are identical.	SMMA_LO_00515
			Identify matching congruent geometric solids.	SMMA_LO_00567
			Identify a geometric solid (cylinder, pyramid, or rectangular prism).	SMMA_LO_00616
			Identify geometric solids (cones, cubes, cylinders, pyramids, rectangular prisms, spheres).	SMMA_LO_00622
1.6.F	S	The student is expected to compose two-dimensional shapes by joining two, three, or four figures to produce a target shape in more than one way if possible.	Identify puzzle pieces needed to make a given shape, and then complete the puzzle (4 to 6 pieces).	SMMA_LO_00564

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
1.6.G	S	The student is expected to partition two-dimensional figures into two and four fair shares or equal parts and describe the parts using words.	Identify the model that is divided into equal parts (2 to 8 parts).	SMMA_LO_00400
			Count shaded parts and the total number of parts (halves to eighths).	SMMA_LO_00419
			F: Count the number of equal parts in a fractional model (2 to 8 parts).	SMMA_LO_00402
			F: Identify a model that represents a fraction (halves, thirds, fourths).	SMMA_LO_00404
			F: Identify a fraction that represents a model (halves, thirds, fourths).	SMMA_LO_00405
			F: Identify the figure divided into equal parts (halves to eighths).	SMMA_LO_00417
1.6.H	S	The student is expected to identify examples and non-examples of halves and fourths.	Count the fractional parts and total number of parts in a region (halves, thirds, fourths).	SMMA_LO_00403
			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
			Match halves of figures (left and right).	SMMA_LO_00561
			Match halves of figures (top and bottom).	SMMA_LO_00563
1.7.A	S	The student is expected to use measuring tools to measure the length of objects to reinforce the continuous nature of linear measurement.	Select the appropriate ruler to measure vertical or horizontal lengths.	SMMA_LO_00812
1.7.B	S	The student is expected to illustrate that the length of an object is the number of same-size units of length that, when laid end-to-end with no gaps or overlaps, reach from one end of the object to the other.	Identify the group of objects that is 1 to 5 nonstandard units long or tall.	SMMA_LO_00701
			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
			Identify an object given the height and width in nonstandard units.	SMMA_LO_00725
			Measure the length of an object (2 to 7 nonstandard units).	SMMA_LO_00777
			F: Find the distance between two objects (2 to 8 nonstandard units).	SMMA_LO_00732
1.7.C	S	The student is expected to measure the same object/distance with units of two different lengths and describe how and why the measurements differ.	Measure the length of an object in cm and inches; relate the two measurements to the sizes of the units.	SMMA_LO_02003

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
1.7.E	R	The student is expected to tell time to the hour and half hour using analog and digital clocks.	Tell time to the hour using an analog clock.	SMMA_LO_00714
			Tell time to the hour using digital and analog clocks.	SMMA_LO_00716
			Tell time to the half-hour using an analog clock.	SMMA_LO_00724
			F: Identify the hour or minute hand of a clock.	SMMA_LO_00697
1.8.A	S	The student is expected to collect, sort, and organize data in up to three categories using models/representations such as tally marks or T-charts.	Collect, tally, and graph the results generated by a spinner.	SMMA_LO_01144
1.8.C	R	The student is expected to draw conclusions and generate and answer questions using information from picture and bar-type 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 (six items).	SMMA_LO_00150
			Read a pictograph (3 categories, 1 to 9 items per category).	SMMA_LO_01124
			Read and interpret a pictograph about birds counted (2 to 5 birds in each row).	SMMA_LO_01299
			Read and interpret data about tree growth from a bar graph.	SMMA_LO_01302
2.2.A	S	The student is expected to use concrete and pictorial models to compose and decompose numbers up to 1,200 in more than one way as a sum of so many thousands, hundreds, tens, and ones.	Enter a three-digit number in a place-value chart (base-ten block models, three-digit).	SMMA_LO_01025
			F: Identify the number represented by a set of objects (pictorial models of hundreds, tens, and ones; three-digit).	SMMA_LO_01010
			F: Use base-ten blocks to show a number (three-digit).	SMMA_LO_01012
			F: Enter a three-digit number in a place-value chart (base-ten block models, three-digit).	SMMA_LO_01013
			F: Find a number equal to 1 to 9 hundreds, 0 to 9 tens, and 0 to 9 ones.	SMMA_LO_01015
2.2.B	R	The student is expected to use standard, word, and expanded forms to represent numbers up to 1,200.	Identify the word name for a three-digit number.	SMMA_LO_01009
			Identify the number, model, word name, or expanded notation that has a different value (three-digit).	SMMA_LO_01018
			Enter the number for a word name (100 to 999).	SMMA_LO_01042
			Find a number equal to 1 to 9 hundreds, 0 to 9 tens, and 0 to 9 ones.	SMMA_LO_01047
2.2.C	S	The student is expected to generate a number that is greater than or less than a given whole number up to 1,200.	Find a number between two given numbers (1 to 999).	SMMA_LO_01020

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
2.2.D	R	The student is expected to use place value to compare and order whole numbers up to 1,200 using comparative language, numbers, and symbols (>, <, or =).	Identify the greatest or least number (three-digit).	SMMA_LO_01019
			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
			Read and interpret a table about temperature.	SMMA_LO_01646
			F: Identify a set of numbers between two numbers, or less than or greater than a given number (101 to 999).	SMMA_LO_01068
2.2.E	S	The student is expected to locate the position of a given whole number on an open number line.	Identify a number on a number line between two given numbers (1 to 9).	SMMA_LO_00993
			F: Read a thermometer to the nearest 10 degrees (Fahrenheit).	SMMA_LO_00768
2.2.F	S	The student is expected to name the whole number that corresponds to a specific point on a number line.	Find a missing number on a number line (0 to 9).	SMMA_LO_00961
			Find a missing number for a point on a number line (two-digit).	SMMA_LO_00996
			Enter a number on a partially numbered number line (100 to 999).	SMMA_LO_01037
2.3.A	S	The student is expected to partition objects into equal parts and name the parts, including halves, fourths, and eighths, using words.	Draw one to two segments to divide a figure into two to four congruent parts.	SMMA_LO_00640
			Partition shapes into equal parts.	SMMA_LO_02000
			F: Identify the model that is divided into equal parts (2 to 8 parts).	SMMA_LO_00400
			F: Count the number of equal parts in a fractional model (2 to 8 parts).	SMMA_LO_00402
			F: Identify the figure divided into equal parts (halves to eighths).	SMMA_LO_00417
2.3.B	R	The student is expected to explain that the more fractional parts used to make a whole, the smaller the part; the fewer the fractional parts, the larger the part.	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
2.3.D	S	The student is expected to identify examples and non-examples of halves, fourths, and eighths.	Count the fractional parts and total number of parts in a region (halves, thirds, fourths).	SMMA_LO_00403
			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 divided into equal parts (halves to eighths).	SMMA_LO_00417

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
2.3.D	S	The student is expected to identify examples and non-examples of halves, fourths, and eighths.	Count shaded parts and the total number of parts (halves to eighths).	SMMA_LO_00419
			Identify the figure showing a fraction of a region shaded (halves to eighths).	SMMA_LO_00420
			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
2.4.A	S	The student is expected to recall basic facts to add and subtract within 20 with automaticity.	Add two addends (sums 6 to 10).	SMMA_LO_00012
			Add using basic math facts displayed horizontally (sums 6 to 10).	SMMA_LO_00013
			Add using basic math facts (addends 0 to 5, sums 1 to 5).	SMMA_LO_00014
			Add 1 to a number (sums 1 to 10).	SMMA_LO_00015
			Add two addends (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 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 using basic math facts (sums 1 to 18).	SMMA_LO_00024
			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 four addends (one-digit addends, sums 3 to 10).	SMMA_LO_00030
			Add three addends (one-digit addends, sums 11 to 19).	SMMA_LO_00031
			Add three addends (one-digit addends, sums 10 to 19).	SMMA_LO_00032
			Add 1- and 2-digit addends (sums 11-19, audio presentation).	SMMA_LO_00039
			Add two addends (sums 10 to 18).	SMMA_LO_00041
			Add using basic math facts displayed horizontally (sums 10 to 18).	SMMA_LO_00042
			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

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
2.4.A	S	The student is expected to recall basic facts to add and subtract within 20 with automaticity.	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
			Use guess and check to solve an addition and subtraction problem (basic facts).	SMMA_LO_01240
			Work backwards to solve a problem with a missing number.	SMMA_LO_01266
			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).	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
			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
			Subtract a one-digit number from a two-digit number displayed horizontally (minuends 11 to 19, subtrahends 1 to 9).	SMMA_LO_01443
			Subtract using basic math facts (minuends 15 to 18, subtrahends 6 to 9).	SMMA_LO_01444
2.4.B	S	The student is expected to add up to four two-digit numbers and subtract two-digit numbers using mental strategies and algorithms based on knowledge of place value and properties of operations.	Add two multiples of 10 (student choice, sums 20 to 90).	SMMA_LO_00025
			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 multiples of 10 (student choice, sums 100 to 180).	SMMA_LO_00047

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
2.4.B	S	The student is expected to add up to four two-digit numbers and subtract two-digit numbers using mental strategies and algorithms based on knowledge of place value and properties of operations.	Add three multiples of 10 (sums 100 to 190, regrouping).	SMMA_LO_00051
			Add two addends (student choice, two-digit addends, sums 100 to 189, regrouping 10's to 100's).	SMMA_LO_00053
			Add three addends (two-digit addends, sums 33 to 99, no regrouping).	SMMA_LO_00056
			Add three addends (student choice, two-digit addends, sums 100 to 199, regrouping from tens to hundreds place).	SMMA_LO_00060
			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).	SMMA_LO_00067
			Add two addends displayed horizontally (multiples of 10, sums 100 to 180, regrouping).	SMMA_LO_00068
			Add two addends (student choice, two-digit addends, sums 100 to 198, regrouping).	SMMA_LO_00075
			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 100 to 198, no regrouping).	SMMA_LO_00087
			Add three addends (student choice, one- and two-digit addends, sums 30 to 98, regrouping).	SMMA_LO_00090
			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
			Find the difference between two numbers (two-digit, presented as a sentence).	SMMA_LO_01000
			Subtract two multiples of 10 (student choice, minuends 20 to 90, subtrahends 10 to 80).	SMMA_LO_01426
			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 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

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
2.4.B	S	The student is expected to add up to four two-digit numbers and subtract two-digit numbers using mental strategies and algorithms based on knowledge of place value and properties of operations.	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-digit numbers with regrouping (vertical presentation).	SMMA_LO_01463
			Subtract two-digit numbers with regrouping (vertical presentation).	SMMA_LO_01473
			Find the difference of two whole numbers (two-digit numbers, regrouping).	SMMA_LO_01488
			Read and interpret a table about temperature.	SMMA_LO_01646
			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
			F: Add two addends (one- and two-digit addends, sums 11 to 99, no regrouping).	SMMA_LO_00033
			F: Add two addends displayed horizontally (one- and two-digit addends, sums 11 to 99).	SMMA_LO_00049
			F: Add two addends (student choice, a one-digit and a two-digit addend, sums 20 to 98, regrouping).	SMMA_LO_00054
			F: Find the sum of two numbers displayed horizontally (a one-digit and a two-digit addend, sums 20 to 98, regrouping).	SMMA_LO_00055
			F: Add three addends displayed horizontally (one-digit addends, sums 20 to 27).	SMMA_LO_00062
			F: Add three addends (student choice, one-digit addends, sums 20 to 27).	SMMA_LO_00069
			F: 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
			F: Subtract (student choice, minuends 21 to 95, subtrahends 1 to 9, no regrouping).	SMMA_LO_01428
			F: Subtract (minuends 11 to 19, subtrahends 1 to 9, no regrouping).	SMMA_LO_01445
			F: Subtract (minuends 21 to 99, subtrahends 1 to 9, no regrouping).	SMMA_LO_01450
			F: Subtract two numbers displayed horizontally (counting up strategy, minuends 21 to 98, subtrahends 2 to 9, regrouping).	SMMA_LO_01462
			F: Subtract two numbers displayed horizontally (counting up strategy, minuends 25 to 98, subtrahends 6 to 9, regrouping).	SMMA_LO_01472

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
2.4.C	R	The student is expected to solve one-step and multi-step word problems involving addition and subtraction within 1,000 using a variety of strategies based on place value, including algorithms.	Solve for a or b in a + b = c (sums 101 to 199, no regrouping).	SMMA_LO_00345
			Calculate the difference between the life spans of two animals (differences 2 to 59).	SMMA_LO_01310
			Subtract 100 from a three-digit number presented in a sentence.	SMMA_LO_01459
			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 in context 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 subtraction problem involving coins (two-digit numbers, no regrouping).	SMMA_LO_01579
			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
			Identify the missing variable of addition or subtraction equations (sums 10 to 50, minuends 10 to 50).	SMMA_LO_01687
2.4.D	R	The student is expected to generate and solve problem situations for a given mathematical number sentence involving addition and subtraction of whole numbers within 1,000.	Add two addends (100 and a three-digit number, sums 200 to 900).	SMMA_LO_00057
			F: 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
			F: Find the missing addend in a number sentence (three addends, sums 20 to 27, regrouping).	SMMA_LO_00082
			F: Find the missing addend in a number sentence (two addends, sums 20 to 98, regrouping).	SMMA_LO_00084
			F: Solve for a or b in a + b = c (sums 10 to 108).	SMMA_LO_00336
			F: Solve for c in a - b = c (minuends 20 to 99, subtrahends 1 to 9, no regrouping).	SMMA_LO_00338
			F: Solve for c in a - b = c (minuends 20 to 99, two-digit subtrahends, no regrouping).	SMMA_LO_00340

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
2.4.D	R	The student is expected to generate and solve problem situations for a given mathematical number sentence involving addition and subtraction of whole numbers within 1,000.	F: Solve for a or b in a + b = c (sums 12 to 98).	SMMA_LO_00341
			F: Solve for c in a - b = c (minuends 20 to 99, regrouping).	SMMA_LO_00342
			F: Solve for a or b in a - b = c (minuends 20 to 99, no regrouping).	SMMA_LO_00343
			F: Solve for a or b in a - b = c (minuends 21 to 99, subtrahends 1 to 9, no regrouping).	SMMA_LO_00347
2.5.A	R	The student is expected to determine the value of a collection of coins up to one dollar.	Determine the number of cents in 1 to 100 pennies, 1 to 20 nickels, or 1 to 10 dimes.	SMMA_LO_00143
			Enter the amount of money shown (1 to 5 cents in pennies).	SMMA_LO_00699
			Enter the amount of money shown (6 to 9 cents in pennies).	SMMA_LO_00704
			Enter the amount of money shown (11 to 50 cents in pennies and dimes).	SMMA_LO_00715
			Enter the amount of money shown (10 to 19 cents in pennies, nickels, and dimes).	SMMA_LO_00722
			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 the given amount of money in coins (25 to 90 cents in pennies, nickels, dimes, and quarters).	SMMA_LO_00778
			F: Identify items that can be purchased for a nickel.	SMMA_LO_01541
2.7.A	S	The student is expected to determine whether a number up to 40 is even or odd using pairings of objects to represent the number.	Identify the expression whose sum is odd or even (basic facts).	SMMA_LO_01053
2.7.C	S	The student is expected to represent and solve addition and subtraction word problems where unknowns may be any one of the terms in the problem.	Find the missing addend in a number sentence (multiples of 10, sums 100 to 180).	SMMA_LO_00074
			Identify a missing number in related addition and subtraction number sentences (two-digit sums, two-digit differences).	SMMA_LO_01060
			Solve a one-step equation (addition, sums to 100).	SMMA_LO_01686
			F: Find the missing addend in a number sentence (two addends, sums 100 to 199, regrouping).	SMMA_LO_00086

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
2.7.C	S	The student is expected to represent and solve addition and subtraction word problems where unknowns may be any one of the terms in the problem.	F: 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
			F: Find the missing subtrahend in a subtraction number sentence (minuends 21 to 99).	SMMA_LO_01470
			F: Find the missing minuend in a number sentence (minuends 21 to 99).	SMMA_LO_01478
			F: Find the missing subtrahend in a number sentence (minuends 10 to 99).	SMMA_LO_01480
			F: Find the missing minuend in a subtraction number sentence (minuends 10 to 99, no regrouping).	SMMA_LO_01486
			F: Find the missing minuend in a subtraction number sentence (minuends 20 to 98, subtrahends 11 to 89).	SMMA_LO_01491
2.8.A	S	The student is expected to create two-dimensional shapes based on given attributes, including number of sides and vertices.	Identify the set of vertices on a grid can be connected to form a figure (triangle, quadrilateral, rectangle, or square).	SMMA_LO_00625
2.8.B	R	The student is expected to classify and sort three-dimensional solids, including spheres, cones, cylinders, rectangular prisms (including cubes as special rectangular prisms), and triangular prisms, based on attributes using formal geometric language.	Classify and sort three-dimensional solids based on attributes using formal geometric language.	SMMA_LO_02138
2.8.C	R	The student is expected to classify and sort polygons with 12 or fewer sides according to attributes, including identifying the number of sides and number of vertices.	Identify polygons and circles (pentagons, hexagons, octagons, parallelograms).	SMMA_LO_00627
			F: Identify a shape with positive and negative tests.	SMMA_LO_00578
2.8.E	R	The student is expected to decompose two-dimensional shapes such as cutting out a square from a rectangle, dividing a shape in half, or partitioning a rectangle into identical triangles and identify the resulting geometric parts.	Match a plane figure to a geometric design that uses the figure.	SMMA_LO_00554
			Determine whether two to six segments divide a figure into congruent parts.	SMMA_LO_00634
2.9.B	S	The student is expected to describe the inverse relationship between the size of the unit and the number of units needed to equal the length of an object.	Measure the length of an object in cm and inches; relate the two measurements to the sizes of the units.	SMMA_LO_02003

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
2.9.D	S	The student is expected to determine the length of an object to the nearest marked unit using rulers, yardsticks, meter sticks, or measuring tapes.	Measure the length of an object to the nearest inch (2 to 6 inches).	SMMA_LO_00703
			Find the total length of two to four objects laid end to end (2 to 6 inches).	SMMA_LO_00748
			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
			Measure two metric lengths, write an addition problem, and find the sum (sums 2 to 12 centimeters).	SMMA_LO_00756
			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 an object in centimeters or inches (whole numbers).	SMMA_LO_00785
			Draw a line segment using a ruler (to 1/4 inch and 0.5 cm).	SMMA_LO_00800
			Measure the length of a bar to the nearest 1/4 inch or 0.5 cm.	SMMA_LO_00822
2.9.E	R	The student is expected to determine a solution to a problem involving length, including estimating lengths.	Identify an object given the estimated height and width in customary units.	SMMA_LO_00728
			Identify the reasonable length of an object (inches, feet, and yards).	SMMA_LO_00780
			Measure two objects in inches; determine how much longer one object is than the other.	SMMA_LO_02015
2.9.F	S	The student is expected to use concrete models of square units to find the area of a rectangle by covering it with no gaps or overlaps, counting to find the total number of square units, and describing the measurement using a number and the unit.	Count squares to find the area (2 to 8 units).	SMMA_LO_00706
			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
			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
			Find the area of a plane figure made up of square units and halves of square units.	SMMA_LO_02028
			F: Identify a unit square and what attribute it is used to measure.	SMMA_LO_02027

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
2.9.G	R	The student is expected to read and write time to the nearest one-minute increment using analog and digital clocks and distinguish between a.m. and p.m.	Show time to 5-minute intervals using digital and analog clocks.	SMMA_LO_00744
			Show time to the minute using digital and analog clocks.	SMMA_LO_00771
			Identify another way to state the time (minutes before or after the hour).	SMMA_LO_00779
			Match digital times with descriptions (e.g., quarter to or quarter past).	SMMA_LO_00806
			Set the digital clock to match the time on the analog clock to the exact minute.	SMMA_LO_01670
2.10.B	S	The student is expected to organize a collection of data with up to four categories using pictographs and bar graphs with intervals of one or more.	Create a vertical bar graph from a table and interpret data in the graph.	SMMA_LO_01130
			Identify a vertical bar graph that represents data in a table.	SMMA_LO_01134
			Create a bar graph using data from a chart of values.	SMMA_LO_01696
			F: Identify the table that represents the data in a vertical bar graph.	SMMA_LO_01136
2.10.C	R	The student is expected to write and solve one-step word problems involving addition or subtraction using data represented within pictographs and bar graphs with intervals of one.	Read and interpret a horizontal or vertical pictograph (four to six items).	SMMA_LO_00138
2.10.D	S	The student is expected to draw conclusions and make predictions from information in a graph.	Read and interpret a horizontal or vertical pictograph (four to six items).	SMMA_LO_00138
			Interpret the shorter or taller bar of a vertical bar graph as having fewer or more items.	SMMA_LO_01131
			Create a table from a vertical bar graph.	SMMA_LO_01132
			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 vertical bar graph that shows a strictly increasing or decreasing trend.	SMMA_LO_01135
			Construct a vertical bar graph based on data from a horizontal bar graph.	SMMA_LO_01146
			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
			Construct a horizontal bar graph based on data from a vertical bar graph.	SMMA_LO_01150
			Analyze a bar graph to find the number of bars that fall within a given range.	SMMA_LO_01154
			Analyze a line plot to find the total number of items that fall at, above, or below a given value.	SMMA_LO_01156

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
2.10.D	S	The student is expected to draw conclusions and make predictions from information in a graph.	Complete and interpret a pictograph.	SMMA_LO_01207
			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
			F: Given a chart of tree growth, infer which of two years there was more rainfall.	SMMA_LO_01305
3.2.A	R	The student is expected to compose and decompose numbers up to 100,000 as a sum of so many ten thousands, so many thousands, so many hundreds, so many tens, and so many ones using objects, pictorial models, and numbers, including expanded notation as appropriate.	Find the number of hundreds equivalent to a multiple of 100 (100 to 900).	SMMA_LO_01008
			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
			Show a four-digit number with base-ten blocks.	SMMA_LO_01032
			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
			F: Find a number equal to 1 to 9 hundreds.	SMMA_LO_01007
			F: Identify a number with a given digit in the ones, tens, hundreds, or thousands place.	SMMA_LO_01033
3.2.C	S	The student is expected to represent a number on a number line as being between two consecutive multiples of 10; 100; 1,000; or 10,000 and use words to describe relative size of numbers in order to round whole numbers.	Round a two-digit number to the nearest ten.	SMMA_LO_01028
			Round a three-digit number to the nearest hundred.	SMMA_LO_01036
			Round a two-digit or three-digit number to the nearest ten.	SMMA_LO_01059
			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

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
3.2.D	R	The student is expected to compare and order whole numbers up to 100,000 and represent comparisons using the symbols >, <, or =.	Compare sums (two-digit addends, multiples of 10).	SMMA_LO_00334
			Compare products (products 2 x 2 to 9 x 9).	SMMA_LO_00350
			Compare quotients (combinations 2 × 2 to 9 × 9).	SMMA_LO_00355
			Compare numbers (1,000 to 9,999).	SMMA_LO_01039
			Order four numbers from least to greatest (1,000 to 9,999).	SMMA_LO_01040
3.3.A	S	The student is expected to represent fractions greater than zero and less than or equal to one with denominators of 2, 3, 4, 6, and 8 using concrete objects and pictorial models, including strip diagrams and number lines.	Count the fractional parts and total number of parts in a region (halves, thirds, fourths).	SMMA_LO_00403
			Identify a model that represents a fraction (halves, thirds, fourths).	SMMA_LO_00404
			Identify a fraction that represents a model (halves, thirds, fourths).	SMMA_LO_00405
			Identify the set of shapes that represents a fraction (halves, thirds, fourths).	SMMA_LO_00406
			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
			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
			Find a fraction equal to 1 (halves to eighths).	SMMA_LO_00427
			Model a fraction a/b by filling in a out of b sections in a fraction model.	SMMA_LO_02034
			Represent a unit fraction 1/b by partitioning a number line and then finding 1/b on it.	SMMA_LO_02148
			F: Match the word name of a fraction to a fraction (halves, thirds, fourths).	SMMA_LO_00411
			F: Match the word name of the fraction to the fraction (halves to eighths).	SMMA_LO_00416
			F: Count shaded parts and the total number of parts (halves to eighths).	SMMA_LO_00419
3.3.B	S	The student is expected to determine the corresponding fraction greater than zero and less than or equal to one with denominators of 2, 3, 4, 6, and 8 given a specified point on a number line.	Enter the missing fraction on a number line (halves to eighths).	SMMA_LO_00430

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
3.3.C	S	The student is expected to explain that the unit fraction 1/b represents the quantity formed by one part of a whole that has been partitioned into b equal parts where b is a non-zero whole number.	Represent a unit fraction 1/b by partitioning a number line and then finding 1/b on it.	SMMA_LO_02148
3.3.E	S	The student is expected to solve problems involving partitioning an object or a set of objects among two or more recipients using pictorial representations of fractions with denominators of 2, 3, 4, 6, and 8.	Solve a problem by finding the fractional amount of a set (halves to eighths).	SMMA_LO_00424
			F: Count the fractional parts and total number of parts in a set (halves, thirds, fourths).	SMMA_LO_00412
			F: Identify the figure showing the fraction of a set shaded (halves, thirds, fourths).	SMMA_LO_00413
			F: Identify the fraction representing shaded items in a set (halves, thirds, fourths).	SMMA_LO_00414
			F: Identify a fractional portion of a set (halves, thirds, fourths).	SMMA_LO_00415
			F: Identify the picture that shows one number is one-half of another number.	SMMA_LO_00418
			F: Count the shaded and total number of elements in a set (halves to eighths).	SMMA_LO_00423
			F: Identify a fractional portion of a set (halves to eighths).	SMMA_LO_00425
			F: Using pictures, find a fractional amount of a whole number (product of halves to fourths and 2 to 16).	SMMA_LO_00428
3.3.F	R	The student is expected to represent equivalent fractions with denominators of 2, 3, 4, 6, and 8 using a variety of objects and pictorial models, including number lines.	Identify two equivalent fractions for 1/2.	SMMA_LO_01708
			Model equivalent fractions; identify equivalent fractions on a number line.	SMMA_LO_02035
3.3.G	S	The student is expected to explain that two fractions are equivalent if and only if they are both represented by the same point on the number line or represent the same portion of a same size whole for an area model.	Using models, find equivalent fractions (halves to sixteenths).	SMMA_LO_00433
			Identify the figures with the equivalent fractional parts shaded.	SMMA_LO_00483
3.3.H	R	The student is expected to compare two fractions having the same numerator or denominator in problems by reasoning about their sizes and justifying the conclusion using symbols, words, objects, and pictorial models.	Using a number line, compare fractions (like denominators, halves to sixteenths).	SMMA_LO_00434
			Compare fractions (like denominators, thirds to sixteenths).	SMMA_LO_00447

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
3.4.A	R	The student is expected to solve with fluency one-step and two-step problems involving addition and subtraction within 1,000 using strategies based on place value, properties of operations, and the relationship between addition and subtraction.	Add two multiples of 100 (student choice, sums 200 to 900).	SMMA_LO_00046
			Add two 3-digit numbers without regrouping (sums 200-999).	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 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 (student choice, three-digit addends, sums 200 to 999, no regrouping).	SMMA_LO_00071
			Add two addends (student choice, three-digit addends, sums 300 to 989, no regrouping).	SMMA_LO_00081
			Add two addends (student choice, a two-digit and a three-digit addend, sums 120 to 999, regrouping).	SMMA_LO_00083
			Add two addends (student choice, three-digit addends, sums 210 to 999, regrouping).	SMMA_LO_00085
			Use a picture to solve an addition problem with three addends.	SMMA_LO_01286
			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

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
3.4.A	R	The student is expected to solve with fluency one-step and two-step problems involving addition and subtraction within 1,000 using strategies based on place value, properties of operations, and the relationship between addition and subtraction.	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
			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
3.4.B	S	The student is expected to round to the nearest 10 or 100 or use compatible numbers to estimate solutions to addition and subtraction problems.	Identify the best estimate for a sum of two numbers (two-digit addends, round to the nearest 10).	SMMA_LO_01052
			Determine the reasonableness of a sum or difference (two- and three-digit numbers).	SMMA_LO_01259
			Estimate the number of objects to the nearest ten (21 to 49 objects).	SMMA_LO_01548
			Estimate the sum or difference in a money problem by rounding to the nearest 10 (two-digit sums and differences).	SMMA_LO_01580
			Solve a problem in context that involves finding the difference of 2 three-digit numbers.	SMMA_LO_01610
			Estimate the sum by rounding to the nearest 10 (two-digit addends).	SMMA_LO_01615
			Identify the best estimate for a sum using data in a table (three- and four-digit addends).	SMMA_LO_01620

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
3.4.B	S	The student is expected to round to the nearest 10 or 100 or use compatible numbers to estimate solutions to addition and subtraction problems.	Estimate the sum by rounding to the nearest hundred (three-digit addends).	SMMA_LO_01621
			Determine the number of dollar bills needed to buy three to five items.	SMMA_LO_01623
			Estimate the sum by rounding to the nearest hundred (three-digit addends).	SMMA_LO_01675
			Estimate the difference (three-digit, differences 100 to 800).	SMMA_LO_01676
			F: Identify the multiple of 5 that is closest to a given number.	SMMA_LO_01005
			F: Identify the multiple of 5 that is closer to a number (25 to 94).	SMMA_LO_01006
			F: Round a three- to five-digit number to the nearest hundred.	SMMA_LO_01081
			F: Identify the most reasonable quantity for a context (order of magnitude differs).	SMMA_LO_01586
3.4.C	S	The student is expected to determine the value of a collection of coins and bills.	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
			Solve an addition problem by finding the total cost of two items (prices expressed as decimals, total < $0.50, no regrouping).	SMMA_LO_00181
			Write the value of a set of dimes in dollar form ($1.10 to $3.90).	SMMA_LO_00183
			Show a decimal money amount in dollars and coins ($1.00 to $5.00).	SMMA_LO_00774
			Write the value of a set of coins as a decimal amount ($1.00 to $3.20).	SMMA_LO_00784
			Find the total value of a group of quarters, dimes, nickels, and pennies (sums to $1.65).	SMMA_LO_01611
3.4.D	S	The student is expected to determine the total number of objects when equally-sized groups of objects are combined or arranged in arrays up to 10 by 10.	Use repeated addition to multiply (products 2 x 2 to 5 x 5).	SMMA_LO_00852
			Solve addition problems with doubles as prelude to multiplication.	SMMA_LO_00853
3.4.E	S	The student is expected to represent multiplication facts by using a variety of approaches such as repeated addition, equal-sized groups, arrays, area models, equal jumps on a number line, and skip counting.	Solve addition and multiplication problems (products 2 × 6 to 2 × 9).	SMMA_LO_00854
			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
			Identify four arrays for a given product (products 6 to 30).	SMMA_LO_01858

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
3.4.E	S	The student is expected to represent multiplication facts by using a variety of approaches such as repeated addition, equal-sized groups, arrays, area models, equal jumps on a number line, and skip counting.	Create arrays for a given product (products 6 to 30).	SMMA_LO_01859
			F: Find the missing numbers on a number line counting by 3's or 9's (3 to 81).	SMMA_LO_01034
3.4.F	S	The student is expected to recall facts to multiply up to 10 by 10 with automaticity and recall the corresponding division facts.	Complete fact families with four facts (products 2 x 3 to 8 x 9).	SMMA_LO_00344
			Identify a common factor of two numbers (4 to 81).	SMMA_LO_01088
			Identify the common multiples for two to three numbers (2 to 20).	SMMA_LO_01096
3.4.G	S	The student is expected to use strategies and algorithms, including the standard algorithm, to multiply a two-digit number by a one-digit number. Strategies may include mental math, partial products, and the commutative, associative, and distributive properties.	Multiply a two-digit number by a one-digit number (products 10 x 1 to 12 x 4).	SMMA_LO_00869
			Multiply whole numbers (student choice, products 10 x 2 to 15 x 5).	SMMA_LO_00870
			Multiply whole numbers (student choice, products 16 x 2 to 19 x 5).	SMMA_LO_00872
			Multiply whole numbers (student choice, products 10 x 6 to 15 x 9).	SMMA_LO_00874
			Multiply whole numbers (student choice, products 16 x 6 to 19 x 9).	SMMA_LO_00876
			Multiply whole numbers (student choice, products 20 x 2 to 90 x 9, multiples of 10).	SMMA_LO_00878
			Multiply whole numbers (student choice, products 21 x 2 to 99 x 9).	SMMA_LO_00880
			Multiply whole numbers (products 2 x 20 to 90 x 9, multiples of 10).	SMMA_LO_00885
			Multiply whole numbers (products 13 x 1 to 19 x 5).	SMMA_LO_00894
			Multiply whole numbers (products 12 x 6 to 19 x 9).	SMMA_LO_00896
3.4.H	S	The student is expected to determine the number of objects in each group when a set of objects is partitioned into equal shares or a set of objects is shared equally.	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
3.4.I	S	The student is expected to determine if a number is even or odd using divisibility rules.	Identify an even or odd number (2 to 99).	SMMA_LO_01050
			Identify odd or even numbers (two- and three-digit).	SMMA_LO_01054
			Identify numbers that are multiples of a given number.	SMMA_LO_01069
			Identify if the sum, difference, or product of two numbers is even or odd.	SMMA_LO_01086

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
3.4.J	S	The student is expected to determine a quotient using the relationship between multiplication and division.	Divide (combinations 2 x 10 to 5 x 12).	SMMA_LO_00286
			Divide (combinations 5 x 9 to 6 x 12).	SMMA_LO_00288
			Divide (combinations 2 x 13 to 5 x 19, no remainder).	SMMA_LO_00305
			Represent a division problem as an unknown-factor problem; then find the missing factor.	SMMA_LO_02039
3.4.K	R	The student is expected to solve one-step and two-step problems involving multiplication and division within 100 using strategies based on objects; pictorial models, including arrays, area models, and equal groups; properties of operations; or recall of facts.	Divide using basic facts (combinations 5 x 5).	SMMA_LO_00280
			Divide using basic facts (combinations 2 x 6 to 9 x 5).	SMMA_LO_00282
			Divide (combinations 6 x 6 to 9 x 9).	SMMA_LO_00284
			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 the missing information needed to solve a multiplication problem in context; then solve the problem.	SMMA_LO_01283
			Find twice the amount of the money shown (products to 20).	SMMA_LO_01571
			Solve a multiplication problem in context (counting feedback, products 2 × 2 to 5 × 5).	SMMA_LO_01572
			Solve a multiplication problem in context (repeated addition feedback, products 2 x 2 to 5 x 5).	SMMA_LO_01578
			Solve a multiplication problem in context with extra information.	SMMA_LO_01589
			Identify and solve an expression that represents a multiplication problem in context (products 3 x 4 to 9 x 9).	SMMA_LO_01590
			Solve a problem using data in a table (twice, half, three times, or four times an amount).	SMMA_LO_01593
			Solve a one-step division problem (math facts 2 × 2 to 9 × 9).	SMMA_LO_01600
			Identify the expression that represents a division problem in context; then solve the problem (dividends 12 to 81).	SMMA_LO_01605
			Use repeated subtraction to solve a division problem (dividends 4 to 24).	SMMA_LO_01664
			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
			F: Find the missing information needed to solve a problem; then solve.	SMMA_LO_01293

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
3.5.A	R	The student is expected to represent one- and two-step problems involving addition and subtraction of whole numbers to 1,000 using pictorial models, number lines, and equations.	Find a number that is one fewer, one greater, just before, or just after a three-digit number.	SMMA_LO_01016
3.5.B	R	The student is expected to represent and solve one- and two-step multiplication and division problems within 100 using arrays, strip diagrams, and equations.	Find the missing dividend or divisor (combinations 4 x 4 to 7 x 7).	SMMA_LO_00285
			Solve for c in a × b = c (products 1 × 2 to 5 × 9).	SMMA_LO_00346
			Find the quotient (dividends 6 × 6 to 9 × 9).	SMMA_LO_00349
			Solve for c in a × b = c (products 6 × 2 to 9 × 12).	SMMA_LO_00353
			Multiply whole numbers (products to 5 x 5).	SMMA_LO_00855
			Multiply whole numbers (products 6 x 1 to 9 x 5).	SMMA_LO_00857
			Multiply whole numbers displayed horizontally (products 1 x 6 to 5 x 9).	SMMA_LO_00859
			Multiply whole numbers (products 1 x 2 to 5 x 5).	SMMA_LO_00861
			Multiply whole numbers (products 1 x 6 to 5 x 9).	SMMA_LO_00863
			Multiply whole numbers (products 6 x 2 to 9 x 5).	SMMA_LO_00865
			Multiply whole numbers (products 6 x 6 to 9 x 9).	SMMA_LO_00867
			Multiply whole numbers displayed horizontally (products 6 x 6 to 9 x 9).	SMMA_LO_00868
			Identify the number sentence that represents a division problem in context (model shown, dividends to 20).	SMMA_LO_01569
			Identify and solve an expression that represents a multiplication problem in context (model shown, products to 32).	SMMA_LO_01570
			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
3.5.C	S	The student is expected to describe a multiplication expression as a comparison such as 3 x 24 represents 3 times as much as 24.	Translate a verbal statement of a multiplicative comparison into a multiplication equation.	SMMA_LO_02008
			Interpret a multiplication equation by writing a comparison statement.	SMMA_LO_02025

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
3.5.D	S	The student is expected to determine the unknown whole number in a multiplication or division equation relating three whole numbers when the unknown is either a missing factor or product.	Solve for a or b in a x b = c (products 1 x 2 to 5 x 9).	SMMA_LO_00351
			Solve for a or b in a ÷ b = c (combinations 1 × 2 to 5 × 5).	SMMA_LO_00352
			Solve for a or b in a ÷ b = c (combinations 6 × 6 to 9 × 9).	SMMA_LO_00354
			Find the missing factor (products to 5 x 5).	SMMA_LO_00856
			Find the missing factor (products to 5 x 5).	SMMA_LO_00858
			Find the missing factor (products 1 x 6 to 5 x 9).	SMMA_LO_00860
			Find the missing factor (products 1 x 6 to 5 x 9).	SMMA_LO_00862
			Find the missing factor (products 1 x 6 to 9 x 5).	SMMA_LO_00864
			Find the missing factor (products 6 x 1 to 9 x 5).	SMMA_LO_00866
			Find the missing factor (products 6 x 6 to 9 x 9).	SMMA_LO_00873
			Find the missing factor (products 6 x 6 to 9 x 9).	SMMA_LO_00877
3.5.E	R	The student is expected to represent real-world relationships using number pairs in a table and verbal descriptions.	Create a table based on data from a bar graph.	SMMA_LO_01645
3.6.A	R	The student is expected to classify and sort two- and three-dimensional solids, including cones, cylinders, spheres, triangular and rectangular prisms, and cubes, based on attributes using formal geometric language.	Identify the quadrilaterals in a set of figures.	SMMA_LO_00615
			Identify parallelograms, rhombuses, and trapezoids.	SMMA_LO_00620
			In a set of quadrilaterals, identify all the parallelograms.	SMMA_LO_00621
			Identify the regular polygons.	SMMA_LO_00651
			Identify the quadrilaterals that are trapezoids or rhombuses.	SMMA_LO_00659
3.6.B	S	The student is expected to use attributes to recognize rhombuses, parallelograms, trapezoids, rectangles, and squares as examples of quadrilaterals and draw examples of quadrilaterals that do not belong to any of these subcategories.	Identify the quadrilaterals in a set of figures.	SMMA_LO_00615
			Identify parallelograms, rhombuses, and trapezoids.	SMMA_LO_00620
			In a set of quadrilaterals, identify all the parallelograms.	SMMA_LO_00621
			Identify the true statement about a relationship among quadrilaterals.	SMMA_LO_00656
			Identify the quadrilaterals that are trapezoids or rhombuses.	SMMA_LO_00659

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
3.6.C	R	The student is expected to determine the area of rectangles with whole number side lengths in problems using multiplication related to the number of rows times the number of unit squares in each row.	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
3.6.D	S	The student is expected to decompose composite figures formed by rectangles into non-overlapping rectangles to determine the area of the original figure using the additive property of area.	Using a grid, find the area of a simple figure (8 to 60 nonstandard units).	SMMA_LO_00786
			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
			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
			Find the area of a rectilinear figure in a context by decomposing it into two rectangles.	SMMA_LO_02032
			F: Find the sum of the areas of two figures (sums 3 to 8, nonstandard units).	SMMA_LO_00752
3.6.E	S	The student is expected to decompose two congruent two-dimensional figures into parts with equal areas and express the area of each part as a unit fraction of the whole and recognize that equal shares of identical wholes need not have the same shape.	Determine whether two to six segments divide a figure into congruent parts.	SMMA_LO_00634
3.7.B	R	The student is expected to determine the perimeter of a polygon or a missing length when given perimeter and remaining side lengths in problems.	Find the perimeter of a rectangle (24 to 48 customary or metric units).	SMMA_LO_00169
			Given the length of one side of a rectangle, measure another side, and then find the perimeter.	SMMA_LO_00788
			Find the perimeter of a polygon (decimal numbers, metric units).	SMMA_LO_00790
			Identify the expression for the perimeter of a figure.	SMMA_LO_00818
			Given the lengths of all sides, find the perimeter of a rectangle.	SMMA_LO_00821
			F: Count to find the perimeter (3 to 9 nonstandard units).	SMMA_LO_00708
			F: Identify the shape with the greater perimeter (3 to 11 nonstandard units).	SMMA_LO_00734
			F: Find the perimeter of a figure (3 to 10 nonstandard units).	SMMA_LO_00757

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
3.7.C	S	The student is expected to determine the solutions to problems involving addition and subtraction of time intervals in minutes using pictorial models or tools such as a 15-minute event plus a 30-minute event equals 45 minutes.	Show time 1 to 11 hours and 5 to 55 minutes before or after the time shown (analog and digital clocks).	SMMA_LO_00775
			Show time 1 to 11 hours and 5 to 55 minutes before or after the time shown (analog and digital clocks).	SMMA_LO_02155
			F: Find the elapsed time (differences from 1 to 6 hours, does not cross 12 o'clock).	SMMA_LO_00142
			F: Find the time one to five hours before or after a given time (not crossing 12 o'clock).	SMMA_LO_00153
			F: Compare the difference of two times to a given time (1 to 24 hours, across 12 o'clock).	SMMA_LO_00155
			F: Find the time one to five hours before or after a given time (across 12 o'clock).	SMMA_LO_00162
			F: Find the time one to twelve hours and ten to fifty-five minutes from a starting time.	SMMA_LO_00175
			F: Determine elapsed time (1 to 6 hours, start and end times on the hour, can cross 12 o'clock).	SMMA_LO_00731
			F: Find the elapsed time (1 1/2 to 6 1/2 hours, start times and end times on the hour or half-hour, can cross 12 o'clock).	SMMA_LO_00770
			F: Find the time 5 to 50 minutes after the time shown (analog clock).	SMMA_LO_00798
			F: Solve a problem by identifying the time 1 to 2 hours after a given time (not crossing 12 o'clock).	SMMA_LO_01547
3.7.D	S	The student is expected to determine when it is appropriate to use measurements of liquid volume (capacity) or weight.	Select the appropriate standard unit of measurement for length, capacity, and weight (customary).	SMMA_LO_00729
			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
3.7.E	S	The student is expected to determine liquid volume (capacity) or weight using appropriate units and tools.	F: Add nonstandard units of capacity (sums 2 to 8).	SMMA_LO_00739
			F: Subtract nonstandard units of capacity (differences 0 to 3).	SMMA_LO_00742
			F: Find the capacity of a container (3 to 10 nonstandard units).	SMMA_LO_00754
			F: Add units of capacity (pints, sums 2 to 6).	SMMA_LO_00764
			F: Read weights from a chart; choose two weights that equal a given total (sums to 1,500).	SMMA_LO_01301
			F: Choose the appropriate customary units of liquid measure (cups, quarts, and gallons).	SMMA_LO_01674

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
3.8.A	R	The student is expected to summarize a data set with multiple categories using a frequency table, dot plot, pictograph, or bar graph with scaled intervals.	Create a table based on data from a bar graph.	SMMA_LO_01645
3.8.B	S	The student is expected to solve one- and two-step problems using categorical data represented with a frequency table, dot plot, pictograph, or bar graph with scaled intervals.	Read and interpret a horizontal pictograph with a scale of 2 (five items).	SMMA_LO_00140
			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
			Find the amount of increase or decrease between two points in a line graph.	SMMA_LO_01178
			Read and interpret a line graph.	SMMA_LO_01206
			Given the survival needs for a bug, interpret a line graph with time and temperature data.	SMMA_LO_01325
			F: Make a pictograph from a set of data.	SMMA_LO_00146
			F: Choose a title for a line plot and label the units.	SMMA_LO_01643
			F: Create a bar graph.	SMMA_LO_01769
4.2.A	S	The student is expected to interpret the value of each place-value position as 10 times the position to the right and as one-tenth of the value of the place to its left.	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 1/10 as much.	SMMA_LO_02045
4.2.B	R	The student is expected to represent the value of the digit in whole numbers through 1,000,000,000 and decimals to the hundredths using expanded notation and numerals.	Identify a word name for a four-, five- or six-digit numbers.	SMMA_LO_01043
			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
			Identify the value of a given digit in a four-digit number.	SMMA_LO_01062
			Identify a number with a given digit in the thousands to hundred millions place.	SMMA_LO_01064
			Enter a number in a place-value chart (10,000 to 999,999).	SMMA_LO_01070
			Enter each individual digit in a place-value chart for a five- to nine-digit number given the name of the number.	SMMA_LO_01075
			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

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
4.2.B	R	The student is expected to represent the value of the digit in whole numbers through 1,000,000,000 and decimals to the hundredths using expanded notation and numerals.	Express a number in expanded notation or determine the number from an expanded notation.	SMMA_LO_01097
			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 1/10 as much.	SMMA_LO_02045
			F: Identify the decimal number with a 0 to 9 in the tenths or hundredths place.	SMMA_LO_00202
			F: Match the word name with the decimal number (0.10 to 9.99).	SMMA_LO_00204
			F: Match a decimal number to its word name (to thousandths).	SMMA_LO_00227
4.2.C	S	The student is expected to compare and order whole numbers to 1,000,000,000 and represent comparisons using the symbols >, <, or =.	Identify a number that is one or two greater than or less than a five- or six-digit number.	SMMA_LO_01072
			Order five numbers from least to greatest (three- to six-digit numbers).	SMMA_LO_01710
			Compare two whole numbers (three to seven-digit numbers).	SMMA_LO_01711
4.2.E	S	The student is expected to represent decimals, including tenths and hundredths, using concrete and visual models and money.	Enter a decimal number on a number line (1.11 to 9.89).	SMMA_LO_00213
			Find the missing decimal number on a number line (1.0 to 9.89).	SMMA_LO_00215
4.2.F	S	The student is expected to compare and order decimals using concrete and visual models to the hundredths.	Enter a decimal number on a number line (1.11 to 9.89).	SMMA_LO_00213
			Find the missing decimal number on a number line (1.0 to 9.89).	SMMA_LO_00215
4.2.G	R	The student is expected to relate decimals to fractions that name tenths and hundredths.	Match a fraction to a decimal (tenths, 0.1 to 0.9).	SMMA_LO_00184
			Determine the fraction and decimal that represent a model (base-ten blocks, tenths, 0.1 to 0.9).	SMMA_LO_00185
			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, 0.10 to 9.99).	SMMA_LO_00205
			Match a decimal number to an equivalent fraction (tenths to thousandths).	SMMA_LO_00224
4.2.H	S	The student is expected to determine the corresponding decimal to the tenths or hundredths place of a specified point on a number line.	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
			Find the missing decimal number on a number line (1.0 to 9.89).	SMMA_LO_00215

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
4.3.B	S	The student is expected to decompose a fraction in more than one way into a sum of fractions with the same denominator using concrete and pictorial models and recording results with symbolic representations.	Using a model, rewrite a mixed number as a fraction (halves to eighths).	SMMA_LO_00446
			Determine addition expressions that are equivalent to a given fraction.	SMMA_LO_02146
4.3.C	S	The student is expected to determine if two given fractions are equivalent using a variety of methods.	Find an equivalent fraction of a simplified fraction (simplified fractions 1/2 to 8/9).	SMMA_LO_00457
			Find three equivalent fractions (simplified fractions 1/2 to 8/9).	SMMA_LO_00458
			Determine the equivalent fractions using the least common denominator of two given fractions.	SMMA_LO_00494
			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
			Identify the fraction equivalent to the given fraction.	SMMA_LO_01793
			F: Determine the least common denominator of two fractions.	SMMA_LO_00493
			F: Find the greatest common factor for two to three numbers.	SMMA_LO_01110
4.3.D	R	The student is expected to compare two fractions with different numerators and different denominators and represent the comparison using the symbols >, =, or <.	Use a model to compare two fractions (halves to eighths, unlike denominators).	SMMA_LO_00429
			Compare fractions to 1 on the number line (halves to eighths).	SMMA_LO_00432
			Using models, compare fractions (unlike denominators, numerators equal to one, halves to sixteenths).	SMMA_LO_00435
			Using models, compare fractions (unlike denominators, halves to sixteenths).	SMMA_LO_00436
			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
			Order three fractions from least to greatest (unlike denominators, halves to twelfths).	SMMA_LO_00440
			Compare fractions to 1 (halves to sixteenths).	SMMA_LO_00448
			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).	SMMA_LO_00495
			Identify a list of fractions that is ordered from least to greatest.	SMMA_LO_00497
			F: Determine the least common denominator of two fractions.	SMMA_LO_00493

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
4.3.E	R	The student is expected to represent and solve addition and subtraction of fractions with equal denominators using objects and pictorial models that build to the number line and properties of operations.	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
			Using a model, rewrite a whole number as a fraction (halves to eighths).	SMMA_LO_00443
			Add mixed numbers; no simplifying (like denominators, thirds to twelfths).	SMMA_LO_00460
			Subtract mixed numbers; no simplifying (like denominators, thirds to twelfths).	SMMA_LO_00461
			Add mixed numbers; simplify if necessary (like denominators, halves to sixteenths).	SMMA_LO_00463
			Add mixed numbers within a context; simplify if necessary (like denominators).	SMMA_LO_00480
			Subtract mixed numbers in context; simplify if necessary (like denominators).	SMMA_LO_00481
			Add mixed numbers; simplify if necessary (like denominators).	SMMA_LO_00484
			Subtract mixed numbers; simplify if necessary (like denominators).	SMMA_LO_00485
			Add mixed numbers with like denominators in context; simplify if necessary.	SMMA_LO_01624
			Subtract two fractions from a whole within a context.	SMMA_LO_01634
			Use addition to find an equivalent fraction for 1/2.	SMMA_LO_01706
			Add fractions with like denominators (no simplifying).	SMMA_LO_01709
			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
4.3.F	S	The student is expected to evaluate the reasonableness of sums and differences of fractions using benchmark fractions 0, 1/4, 1/2, 3/4, and 1, referring to the same whole.	Estimate the difference of two fractions.	SMMA_LO_01707
4.3.G	S	The student is expected to represent fractions and decimals to the tenths or hundredths as distances from zero on a number line.	Identify a fraction for a given point on a number line divided into tenths, twelfths, or sixteenths.	SMMA_LO_00431

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
4.4.A	R	The student is expected to add and subtract whole numbers and decimals to the hundredths place using the standard algorithm.	Add two addends (student choice, three-digit addends, sums 1000 to 1899, regrouping).	SMMA_LO_00077
			Add two addends (a two-digit and a three-digit addend, sums 111 to 899, regrouping).	SMMA_LO_00089
			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 decimal numbers (tenths, sums 1.0 to 2.0, regrouping).	SMMA_LO_00192
			Add two decimal numbers using mental math (sums 1.1 to 9.9, no regrouping).	SMMA_LO_00193
			Subtract decimal numbers using mental math (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
			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

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
4.4.A	R	The student is expected to add and subtract whole numbers and decimals to the hundredths place using the standard algorithm.	Subtract decimals numbers (minuends and subtrahends 0.01 to 9.99).	SMMA_LO_00207
			Subtract money amounts (sums less than $17.00, regrouping).	SMMA_LO_00208
			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
			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
			Use logical reasoning to complete an addition puzzle with two three-digit addends.	SMMA_LO_01261
			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
			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

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
4.4.A	R	The student is expected to add and subtract whole numbers and decimals to the hundredths place using the standard algorithm.	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
			F: Subtract metric length or weight measurements expressed as decimals (to tenths, difference 1.2 to 8.9, regrouping).	SMMA_LO_00159
			F: Add or subtract decimals using mental math (sums less than 1.00, with or without regrouping).	SMMA_LO_00210
4.4.D	S	The student is expected to use strategies and algorithms, including the standard algorithm, to multiply up to a four-digit number by a one-digit number and to multiply a two-digit number by a two-digit number. Strategies may include mental math, partial products, and the commutative, associative, and distributive properties.	Multiply whole numbers (products 10 x 2 to 12 x 12).	SMMA_LO_00871
			Multiply whole numbers (products 2 x 12 to 12 x 12).	SMMA_LO_00875
			Find the missing factor (products 2 x 2 to 12 x 12).	SMMA_LO_00881
			Multiply whole numbers (student choice, products 100 x 2 to 990 x 9, multiples of 10).	SMMA_LO_00882
			Multiply whole numbers (student choice, products 10 x 10 to 15 x 90, multiples of 10).	SMMA_LO_00884
			Multiply whole numbers (student choice, products 101 x 2 to 999 x 9).	SMMA_LO_00886
			Multiply whole numbers (products 20 x 20 to 90 x 90, multiples of 10).	SMMA_LO_00889
			Find the missing factor (products 20 x 11 to 90 x 99, multiples of 10).	SMMA_LO_00891
			Multiply whole numbers (student choice, products 1000 x 2 to 9999 x 9).	SMMA_LO_00892
			Find the missing factor (products 20 x 20 to 90 x 90, multiples of 10).	SMMA_LO_00893
			Multiply whole numbers (student choice, products 11 x 11 to 15 x 99).	SMMA_LO_00899
			Multiply whole numbers (student choice, products 16 x 11 to 19 x 99).	SMMA_LO_00901
			Multiply whole numbers (student choice, products 21 x 11 to 99 x 99).	SMMA_LO_00903
			Measure topsoil in a soil sample; calculate how long it took to form.	SMMA_LO_01323
			Identify equivalent arrays with different factors (two-digit factors).	SMMA_LO_01733
			Use an area model to solve a multiplication problem (two-digit factors).	SMMA_LO_01734

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
4.4.F	S	The student is expected to use strategies and algorithms, including the standard algorithm, to divide up to a four-digit dividend by a one-digit divisor.	Divide using the long division algorithm (one-digit divisor, no remainder).	SMMA_LO_00290
			Divide (combinations 2 x 20 to 5 x 90).	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
			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
			Divide using the long division algorithm (four-digit dividend, one-digit divisor, remainder).	SMMA_LO_00300
			Find the quotient of b divided by a (combinations 6 x 13 to 9 x 19).	SMMA_LO_00312
4.4.G	S	The student is expected to round to the nearest 10, 100, or 1,000 or use compatible numbers to estimate solutions involving whole numbers.	Estimate the quotient to the nearest ten (three-digit dividends, one-digit divisors).	SMMA_LO_00314
			Round four- to five-digit numbers in context (to the nearest thousand).	SMMA_LO_01106
			Estimate the sum, difference, product or quotient to solve a problem in context (round to the nearest thousand).	SMMA_LO_01109
			Estimate the product by rounding the second factor.	SMMA_LO_01603
			Estimate the difference of 2 four-digit numbers to the nearest thousand.	SMMA_LO_01614
			Estimate the product by rounding each factor.	SMMA_LO_01622
4.4.H	R	The student is expected to solve with fluency one- and two-step problems involving multiplication and division, including interpreting remainders.	Identify a reasonable answer for a division problem.	SMMA_LO_00246
			Find a missing number in a geometric sequence (first number 1 to 5, factors 2 to 5).	SMMA_LO_01117
			Solve a division problem in context by rounding the quotient to the next whole number (model shown).	SMMA_LO_01573
			Solve a multiplication problem in context (one-, two-, and three-digit factors).	SMMA_LO_01604
			Solve a division problem in context (remainder).	SMMA_LO_01616

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
4.4.H	R	The student is expected to solve with fluency one- and two-step problems involving multiplication and division, including interpreting remainders.	Interpret the quotient and remainder of a division problem in context (three-digit dividends).	SMMA_LO_01617
			Share a set of objects equally to show a division problem (6, 7, 10, or 12 objects).	SMMA_LO_01663
4.5.A	R	The student is expected to represent multi-step problems involving the four operations with whole numbers using strip diagrams and equations with a letter standing for the unknown quantity.	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
			Identify an expression that can be used to solve a problem (inverse operations).	SMMA_LO_01275
			Work backward to solve a two-step problem.	SMMA_LO_01288
			Solve a two-step multiplication and addition problem in context.	SMMA_LO_01633
			F: Identify the missing operation in a subtraction or addition number sentence (basic facts).	SMMA_LO_01031
			F: Identify the missing operation (sums 20 to 99, differences 10 to 70).	SMMA_LO_01055
			F: Identify the missing operation in a number sentence (all operations).	SMMA_LO_01074
			F: Identify extra information in a problem.	SMMA_LO_01272
			F: Identify the missing information needed to solve a two-step problem; then solve the problem.	SMMA_LO_01274
			F: Choose a method to solve a two-step problem.	SMMA_LO_01289
			F: Identify the expression that gives the best estimate for an addition or subtraction problem in context (two-digit numbers).	SMMA_LO_01566
			F: Make a picture to solve a multistep addition and multiplication problem in context.	SMMA_LO_01592
4.5.B	R	The student is expected to represent problems using an input-output table and numerical expressions to generate a number pattern that follows a given rule representing the relationship of the values in the resulting sequence and their position in the sequence.	Determine the output of a one-function machine, given an input and sample inputs and outputs (combinations 2 x 2 to 9 x 9).	SMMA_LO_00358
			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

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
4.5.B	R	The student is expected to represent problems using an input-output table and numerical expressions to generate a number pattern that follows a given rule representing the relationship of the values in the resulting sequence and their position in the sequence.	Describe the relationship between two sets of numbers in a relation or function using multiplication (factors 2 - 5).	SMMA_LO_01655
			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 one-step rule in the relation or function (addition and subtraction).	SMMA_LO_01722
			Generate a table of values given a rule.	SMMA_LO_01724
			Identify an expression to describe the pattern generated by a table.	SMMA_LO_01742
			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
			Complete an input/output table given a one-step rule; then plot the ordered pairs on a coordinate grid.	SMMA_LO_01757
			F: Find the missing decimal number in a pattern.	SMMA_LO_00253
			F: Extend a 1-2-1-2 pattern of pictures.	SMMA_LO_00519
			F: Extend a 1-2-1-2 pattern of geometric figures.	SMMA_LO_00520
			F: Extend a 1-1-2-2 pattern of pictures.	SMMA_LO_00521
			F: Extend a 1-1-2-2 pattern of geometric figures.	SMMA_LO_00522
			F: Match patterns of geometric figures.	SMMA_LO_00539
			F: Extend a 1-2-2 pattern of pictures.	SMMA_LO_00556
			F: Extend a 1-1-2 or 1-2-2 pattern of congruent shapes.	SMMA_LO_00558
			F: Extend a 1-2-3 pattern of similar figures.	SMMA_LO_00560
			F: Extend a 1-2-3 pattern of geometric figures.	SMMA_LO_00585
			F: Identify the missing geometric figure in a 1-2-1-2 pattern.	SMMA_LO_00591
			F: Identify the missing picture in a 1-2-3-1-2-3 pattern.	SMMA_LO_00607
			F: Count by 2's, 3's, or 10's (11 to 209, not multiples of 2, 3, 10).	SMMA_LO_01056
			F: Count by 5's, 6's, or 7's (through 70).	SMMA_LO_01058
			F: Count by 8's or 9's (up to 90).	SMMA_LO_01061
			F: Look for a pattern to solve a problem.	SMMA_LO_01276
			F: Given the value for the variable, evaluate an addition expression (sums 4 to 12).	SMMA_LO_01683

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
4.5.B	R	The student is expected to represent problems using an input-output table and numerical expressions to generate a number pattern that follows a given rule representing the relationship of the values in the resulting sequence and their position in the sequence.	F: Evaluate an expression with variables using substitution and a value chart (addition, sums to 18).	SMMA_LO_01685
			F: Extend a geometric pattern.	SMMA_LO_01691
			F: Identify the one-step rule in the relation or function (multiplication and division).	SMMA_LO_01723
			F: Extend an iterative pattern.	SMMA_LO_01754
4.5.D	R	The student is expected to solve problems related to perimeter and area of rectangles where dimensions are whole numbers.	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
			Identify rectangles that have equal areas, but different dimensions.	SMMA_LO_00823
			Given a perimeter, mark equilateral polygons with the same side measures.	SMMA_LO_00849
4.6.A	S	The student is expected to identify points, lines, line segments, rays, angles, and perpendicular and parallel lines.	Identify line segments in three- and four-sided figures.	SMMA_LO_00579
			Identify line segments.	SMMA_LO_00605
			Identify parallel and perpendicular streets on a map.	SMMA_LO_00619
			Count the points of intersection of two or more lines (0 to 5 intersection points).	SMMA_LO_00635
			Draw parallel, perpendicular, or intersecting lines on a grid.	SMMA_LO_00638
			Identify the pairs of parallel line segments in a geometric drawing.	SMMA_LO_00639
			F: Predict whether or not lines will intersect.	SMMA_LO_00598
			F: Match the labeled angles to the correct angle notation.	SMMA_LO_00617
4.6.B	S	The student is expected to identify and draw one or more lines of symmetry, if they exist, for a two-dimensional figure.	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
			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
4.6.C	S	The student is expected to apply knowledge of right angles to identify acute, right, and obtuse triangles.	Identify acute, obtuse, and right triangles.	SMMA_LO_00655
			Identify all triangles of a particular class (acute, right, or obtuse).	SMMA_LO_01774
			F: Determine whether an angle is larger than, smaller than, or the same size as a right angle.	SMMA_LO_00624
			F: Identify an angle as acute, right, or obtuse.	SMMA_LO_00628
			F: Identify right, acute, and obtuse angles in polygons.	SMMA_LO_00630

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
4.6.D	R	The student is expected to classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines or the presence or absence of angles of a specified size.	Classify and sort two-dimensional geometric figures by properties and attributes.	SMMA_LO_01728
4.7.C	R	The student is expected to determine the approximate measures of angles in degrees to the nearest whole number using a protractor.	Given the measure of an angle (initial side at 0 degrees, measure 10 to 180 degrees).	SMMA_LO_00631
			Use a protractor to measure an angle.	SMMA_LO_00636
			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
			F: Select the appropriate protractor to measure an angle.	SMMA_LO_00644
			F: Identify the better estimate for an angle measure.	SMMA_LO_00657
4.7.D	S	The student is expected to draw an angle with a given measure.	Measure angles in degrees using a protractor.	SMMA_LO_00663
4.7.E	S	The student is expected to determine the measure of an unknown angle formed by two non-overlapping adjacent angles given one or both angle measures.	Measure complementary or supplementary angles and find the sum of the angle measures.	SMMA_LO_00661
4.8.A	S	The student is expected to identify relative sizes of measurement units within the customary and metric systems.	Compare unlike customary units of length (inches, feet, and yards).	SMMA_LO_00792
			Identify the reasonable customary capacity of an object (cups, pints, quarts, and gallons).	SMMA_LO_00794
			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
			Identify the reasonable length, width, or height of an object (millimeters, centimeters, and meters).	SMMA_LO_00803
			Identify the reasonable mass for an object (grams and kilograms).	SMMA_LO_00807
			Identify the reasonable capacity of an object (milliliters and liters).	SMMA_LO_00811
			Compare unlike metric units and identify the correct statement (mm, cm, m, km; mL, L; mg, g, kg).	SMMA_LO_00820

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
4.8.A	S	The student is expected to identify relative sizes of measurement units within the customary and metric systems.	Identify distances or objects that would be measured in cm, m, or km.	SMMA_LO_01703
			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
4.8.B	S	The student is expected to convert measurements within the same measurement system, customary or metric, from a smaller unit into a larger unit or a larger unit into a smaller unit when given other equivalent measures represented in a table.	Express yards and feet as an equivalent number of feet, or feet and inches as an equivalent number of inches.	SMMA_LO_00166
			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
			Convert hours to minutes.	SMMA_LO_01672
4.8.C	R	The student is expected to solve problems that deal with measurements of length, intervals of time, liquid volumes, mass, and money using addition, subtraction, multiplication, or division as appropriate.	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
			Solve an addition problem by finding the total cost of two items (prices expressed as decimals, total < $0.50, no regrouping).	SMMA_LO_00181
			Write the value of a set of dimes in dollar form ($1.10 to $3.90).	SMMA_LO_00183
			Subtract money amounts (sums less than $17.00, regrouping).	SMMA_LO_00208
			Show a decimal money amount in dollars and coins ($1.00 to $5.00).	SMMA_LO_00774
			Write the value of a set of coins as a decimal amount ($1.00 to $3.20).	SMMA_LO_00784
			Identify the fraction of a dollar a coin is worth (penny to half-dollar).	SMMA_LO_00809
			Find a fraction of an hour in minutes (1/4, 1/3, 1/2, 2/3, or 3/4 hour).	SMMA_LO_00817
			Convert units of time (seconds, minutes, hours, days, weeks, months, and years).	SMMA_LO_00837
			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
			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

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
4.8.C	R	The student is expected to solve problems that deal with measurements of length, intervals of time, liquid volumes, mass, and money using addition, subtraction, multiplication, or division as appropriate.	Make a picture to find the change received from a purchase (change back from $1.00).	SMMA_LO_01583
			Solve a division problem about money with extra information (round quotient to the nearest whole number).	SMMA_LO_01585
			Estimate the total cost of four items by rounding to the nearest dollar (sums to $15.00).	SMMA_LO_01591
			Solve an addition problem using data in a table (sums 100 to 198).	SMMA_LO_01595
			Solve an addition problem in context (3 three-digit addends, regrouping).	SMMA_LO_01597
			Find the change from one dollar (item costs 55 to 99 cents).	SMMA_LO_01598
			Solve a decimal subtraction problem in context (tenths, regrouping).	SMMA_LO_01599
			Estimate the distance by rounding (d = rt).	SMMA_LO_01606
			Solve a problem in context that involves adding three amounts expressed as dollars and cents.	SMMA_LO_01608
			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
			Given the ending time and the elapsed time, find the starting time.	SMMA_LO_01613
			Estimate the difference by rounding to the nearest dollar (minuends $5.00 to $20.00, subtrahends $3.00 to $15.00).	SMMA_LO_01669
4.9.B	S	The student is expected to solve one- and two-step problems using data in whole number, decimal, and fraction form in a frequency table, dot plot, or stem-and-leaf plot.	Read and interpret a line graph.	SMMA_LO_01764
			F: Identify the value of a data item on a stem-and-leaf plot.	SMMA_LO_01186
			F: Read and interpret a table.	SMMA_LO_01695
5.2.A	S	The student is expected to represent the value of the digit in decimals through the thousandths using expanded notation and numerals.	Identify the place value of a digit in a decimal number (tenths to ten thousandths).	SMMA_LO_00241
			F: Match a decimal number to a model (thousandths).	SMMA_LO_00242
			F: Enter a decimal number in a place-value chart (tenths to thousandths).	SMMA_LO_01089
5.2.B	R	The student is expected to compare and order two decimals to thousandths and represent comparisons using the symbols >, <, or =.	Compare decimal numbers (0.1 to 9.9).	SMMA_LO_00191
			Compare two decimal numbers (10.01 to 99.99).	SMMA_LO_00216
			Order three decimal numbers (tenths to hundredths).	SMMA_LO_00218

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
5.2.B	R	The student is expected to compare and order two decimals to thousandths and represent comparisons using the symbols >, <, or =.	Compare decimal numbers (to thousandths).	SMMA_LO_00225
			Identify the symbol (< or >) needed to complete the inequality.	SMMA_LO_00254
5.2.C	S	The student is expected to round decimals to tenths or hundredths.	Round a decimal to the nearest tenth, hundredth, or whole number.	SMMA_LO_00230
5.3.A	S	The student is expected to estimate to determine solutions to mathematical and real-world problems involving addition, subtraction, multiplication, or division.	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 the symbol (< or >) needed to complete the inequality.	SMMA_LO_00254
			Estimate the quotient in a long division problem (three-digit dividend, two-digit divisor, remainder).	SMMA_LO_00301
			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
			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
			Find the number of dollar bills needed to buy two to four items (each $1.79 to $3.99 each).	SMMA_LO_01629
5.3.B	S	The student is expected to multiply with fluency a three-digit number by a two-digit number using the standard algorithm.	Multiply whole numbers (student choice, products 100 x 20 to 990 x 90, multiples of 10).	SMMA_LO_00902
			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 whole numbers (student choice, products 101 x 21 to 999 x 99).	SMMA_LO_00907
			F: Find the missing dividend or divisor (combinations 20 × 20 to 90 × 90).	SMMA_LO_00303

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
5.3.C	S	The student is expected to solve with proficiency for quotients of up to a four-digit dividend by a two-digit divisor using strategies and the standard algorithm.	Multiply multiples of 10 using mental math (20 x 20 to 90 x 90).	SMMA_LO_00299
			Divide using the long division algorithm (three-digit number, two-digit divisor, remainder).	SMMA_LO_00304
			F: Find the missing dividend or divisor (combinations 20 × 20 to 90 × 90).	SMMA_LO_00303
			F: Choose the best estimate for a long division problem (three-digit dividends, two-digit divisors).	SMMA_LO_00315
5.3.D	S	The student is expected to represent multiplication of decimals with products to the hundredths using objects and pictorial models, including area models.	Find the missing decimal number on a number line; then count by multiples of tenths to find the product.	SMMA_LO_00220
			Multiply a decimal and a whole number displayed horizontally (0.02 x 2 to 0.09 x 5).	SMMA_LO_00221
5.3.E	R	The student is expected to solve for products of decimals to the hundredths, including situations involving money, using strategies based on place-value understandings, properties of operations, and the relationship to the multiplication of whole numbers.	Find the missing factor and quotient in two related number sentences (products 0.2 x 2 to 0.9 x 5).	SMMA_LO_00219
			Find the missing decimal number on a number line; then count by multiples of tenths to find the product.	SMMA_LO_00220
			Multiply a decimal and a whole number displayed horizontally (0.02 x 2 to 0.09 x 5).	SMMA_LO_00221
			Multiply decimals by 10, 100, or 1000.	SMMA_LO_00235
5.3.G	R	The student is expected to solve for quotients of decimals to the hundredths, up to four-digit dividends and two-digit whole number divisors, using strategies and algorithms, including the standard algorithm.	Divide a decimal by a whole number.	SMMA_LO_00239
			Divide a decimal by a whole number.	SMMA_LO_00248
5.3.H	S	The student is expected to represent and solve addition and subtraction of fractions with unequal denominators referring to the same whole using objects and pictorial models and properties of operations.	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; simplify if necessary (unlike denominators).	SMMA_LO_00473
			Subtract fractions; simplify if necessary (unlike denominators).	SMMA_LO_00474
			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

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
5.3.H	S	The student is expected to represent and solve addition and subtraction of fractions with unequal denominators referring to the same whole using objects and pictorial models and properties of operations.	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
			F: Add fractions; no simplifying (unlike denominators).	SMMA_LO_00465
			F: Subtract fractions; no simplifying (unlike denominators).	SMMA_LO_00466
			F: Add fractions; no simplifying (unlike denominators).	SMMA_LO_00467
			F: Subtract fractions; no simplifying (unlike denominators).	SMMA_LO_00468
			F: Add fractions; simplify if necessary (unlike denominators).	SMMA_LO_00471
			F: Subtract fractions; simplify if necessary (unlike denominators).	SMMA_LO_00472
			F: Given the prime factorization of two numbers, find the common multiple.	SMMA_LO_01108
			F: Find the least common multiple of two or three numbers.	SMMA_LO_01112
5.3.I	S	The student is expected to represent and solve multiplication of a whole number and a fraction that refers to the same whole using objects and pictorial models, including area models.	Multiply a whole number by a proper fraction; no simplifying.	SMMA_LO_00470
			Determine the sale price of an item when the price is reduced by one-half, one-third, or one-fourth.	SMMA_LO_01285
			Add two fractional parts of whole numbers in context.	SMMA_LO_01640
			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
			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
			Determine whether multiplying a number by a factor results in scaling the number up or down.	SMMA_LO_02051

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
5.3.J	S	The student is expected to represent division of a unit fraction by a whole number and the division of a whole number by a unit fraction such as 1/3 ÷ 7 and 7 ÷ 1/3 using objects and pictorial models, including area models.	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 unit fractions by nonzero whole numbers and division of whole numbers by unit fractions.	SMMA_LO_02053
			Use models to solve real-world problems involving division of unit fractions by nonzero whole numbers.	SMMA_LO_02156
5.3.K	R	The student is expected to add and subtract positive rational numbers fluently.	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
			Solve for a or b in a + b = c (decimals to tenths, no regrouping).	SMMA_LO_00367
			Solve for a or b in a - b = c (decimals to tenths, regrouping).	SMMA_LO_00368
			Find a decimal number that is either greater than or less than two decimal numbers.	SMMA_LO_01118
			Add the decimal numbers provided on a data table.	SMMA_LO_01785
			Subtract the decimal numbers provided on a data table.	SMMA_LO_01786
5.3.L	R	The student is expected to divide whole numbers by unit fractions and unit fractions by whole numbers.	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 unit fractions by nonzero whole numbers and division of whole numbers by unit fractions.	SMMA_LO_02053
			Use models to solve real-world problems involving division of unit fractions by nonzero whole numbers.	SMMA_LO_02156
5.4.A	S	The student is expected to identify prime and composite numbers.	Find the factors of a number and determine if the number is prime or composite (3 to 30).	SMMA_LO_01073
			Identify the prime factorization of a two-digit number.	SMMA_LO_01093
			Identify prime and composite numbers (one- or two-digit).	SMMA_LO_01105
			Identify sets of prime and composite numbers.	SMMA_LO_01119
			F: Identify the number that is divisible by a given factor (numbers 2 to 81, factors 2 to 9).	SMMA_LO_01066

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
5.4.A	S	The student is expected to identify prime and composite numbers.	F: Identify the complete set of factors for a number (2 to 25).	SMMA_LO_01071
			F: Identify which numbers are divisible by another number (divisors 2 to 10).	SMMA_LO_01101
			F: Determine three factors of a given number.	SMMA_LO_01107
5.4.B	S	The student is expected to represent and solve multi-step problems involving the four operations with whole numbers using equations with a letter standing for the unknown quantity.	Write an expression to represent a real-world problem, using variables to represent numbers.	SMMA_LO_02062
			F: Identify related multiplication and division number sentences that can be used to solve a problem.	SMMA_LO_01080
5.4.C	R	The student is expected to generate a numerical pattern when given a rule in the form y = ax or y = x + a and graph.	Make a table and a graph when given a rule in the form y = ax or y = x + a.	SMMA_LO_02139
5.4.F	R	The student is expected to simplify numerical expressions that do not involve exponents, including up to two levels of grouping.	Evaluate an expression using the order of operations.	SMMA_LO_01091
5.4.G	n/a	The student is expected to use concrete objects and pictorial models to develop the formulas for the volume of a rectangular prism, including the special form for a cube (V = l x w x h, V = s x s x s, and V = Bh).	Find the volume of a prism by packing the prism with unit cubes.	SMMA_LO_02042
5.4.H	R	The student is expected to represent and solve problems related to perimeter and/or area and related to volume.	Determine the volume of a box given the height, width, and length (60 to 480 customary or metric cubic units).	SMMA_LO_00174
			Find the perimeter of a polygon (decimal numbers, metric units).	SMMA_LO_00805
			Find the volume of a rectangular solid by counting cubes.	SMMA_LO_00833
			Identify examples of relationships between area and perimeter.	SMMA_LO_00850
			Compute the volume of right rectangular prisms using formulas.	SMMA_LO_02043
			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
			F: Determine if the perimeter, area, or volume is needed to solve the problem.	SMMA_LO_00826
5.5.A	R	The student is expected to classify two-dimensional figures in a hierarchy of sets and subsets using graphic organizers based on their attributes and properties.	Identify equilateral, isosceles, and scalene triangles.	SMMA_LO_00658

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
5.6.A	S	The student is expected to recognize a cube with side length of one unit as a unit cube having one cubic unit of volume and the volume of a three-dimensional figure as the number of unit cubes (n cubic units) needed to fill it with no gaps or overlaps if possible.	Find the volume of a rectangular solid by counting cubes.	SMMA_LO_00829
			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
5.6.B	S	The student is expected to determine the volume of a rectangular prism with whole number side lengths in problems related to the number of layers times the number of unit cubes in the area of the base.	Find the volume of a rectangular solid by counting cubes.	SMMA_LO_00833
			Compute the volume of right rectangular prisms using formulas.	SMMA_LO_02043
5.7.A	S	The student is expected to solve problems by calculating conversions within a measurement system, customary or metric.	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
5.8.A	S	The student is expected to describe the key attributes of the coordinate plane, including perpendicular number lines (axes) where the intersection (origin) of the two lines coincides with zero on each number line and the given point (0, 0); the x-coordinate, the first number in an ordered pair, indicates movement parallel to the x-axis starting at the origin; the y-coordinate, the second number, indicates movement parallel to the y-axis starting at the origin.	Graph a set of ordered pairs from a table on a coordinate plane (Quadrant I).	SMMA_LO_01808
5.8.B	S	The student is expected to describe the process for graphing ordered pairs of numbers in the first quadrant of the coordinate plane.	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
			Find the coordinates for a point on a grid.	SMMA_LO_01077
			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

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
5.8.C	R	The student is expected to graph in the first quadrant of the coordinate plane ordered pairs of numbers arising from mathematical and real-world problems, including those generated by number patterns or found in an input-output table.	Identify a point on a coordinate grid given the ordered pair.	SMMA_LO_01092
			Interpret a line graph with time and temperature data, and add a point to line graph.	SMMA_LO_01324
			Graph a set of ordered pairs from a table on a coordinate plane (Quadrant I).	SMMA_LO_01808
			F: 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
			F: Find the coordinates for a point on a grid.	SMMA_LO_01077
5.9.A	S	The student is expected to represent categorical data with bar graphs or frequency tables and numerical data, including data sets of measurements in fractions or decimals, with dot plots or stem-and-leaf plots.	F: Create a line graph using data from a table.	SMMA_LO_01697
			F: Create a line graph.	SMMA_LO_01771
5.10.F	S	The student is expected to balance a simple budget.	Identify the inequality translated from a written phrase.	SMMA_LO_01853
6.2.B	S	The student is expected to identify a number, its opposite, and its absolute value.	Find the missing one-digit addend in a number sentence (positive or negative integers, sums are 0).	SMMA_LO_00102
			Find the missing two-digit addend in a number sentence (sums are 0).	SMMA_LO_00103
			Find the missing two-digit addend in a number sentence (sums are 0).	SMMA_LO_00104
			Evaluate the expression -(-a), where a has values 1 to 99.	SMMA_LO_01518
			Identify absolute value as a distance from zero on a number line.	SMMA_LO_01823
			Evaluate the absolute value of a number.	SMMA_LO_01824
			Describe situations that can be represented by opposite quantities.	SMMA_LO_02086
6.2.C	S	The student is expected to locate, compare, and order integers and rational numbers using a number line.	Locate the missing integer on a number line (-3 to -12).	SMMA_LO_00101
			Read the temperature on a thermometer to nearest degree (-10 to 10 degrees).	SMMA_LO_00804
			Determine the least or greatest integer (-10 to 10).	SMMA_LO_01102
			Compare rational numbers in real-world contexts.	SMMA_LO_02109
			Complete statements of order for rational numbers in real-world contexts.	SMMA_LO_02110
			F: Compare hundredths to multiples of ¼.	SMMA_LO_00209
6.2.D	R	The student is expected to order a set of rational numbers arising from mathematical and real-world contexts.	Order three decimals from least to greatest (to thousandths).	SMMA_LO_00236
			Identify the fraction that is between two fractions.	SMMA_LO_00503
			Identify a list of decimal numbers ordered from least to greatest.	SMMA_LO_01103

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
6.2.E	S	The student is expected to extend representations for division to include fraction notation such as a/b represents the same number as a ÷ b where b ≠ 0.	Multiply a fraction and a whole number; simplify.	SMMA_LO_00477
			Model a division word problem that results in a rational quotient; then express the word problem with an equation.	SMMA_LO_02047
			Identify fractions that are equivalent to a given negative fraction.	SMMA_LO_02087
6.3.A	S	The student is expected to recognize that dividing by a rational number and multiplying by its reciprocal result in equivalent values.	Multiply a fraction and a whole number; simplify first.	SMMA_LO_00478
			Divide fractions; simplify if necessary.	SMMA_LO_00487
			Divide a fraction by a whole number; simplify if necessary.	SMMA_LO_00489
			Divide a fraction by a mixed number; simplify if necessary.	SMMA_LO_00491
			Divide a whole number by a fraction.	SMMA_LO_00492
			Divide a mixed number by a whole number; simplify if necessary.	SMMA_LO_00502
			Divide fractions; simplify.	SMMA_LO_00512
			Divide a whole number by a fraction; simplify if necessary.	SMMA_LO_01787
6.3.B	S	The student is expected to determine, with and without computation, whether a quantity is increased or decreased when multiplied by a fraction, including values greater than or less than one.	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
6.3.C	S	The student is expected to represent integer operations with concrete models and connect the actions with the models to standardized algorithms.	Locate an integer on the number line (differences -5 to 1).	SMMA_LO_01505
			Subtract integers using a number line.	SMMA_LO_01511
6.3.D	R	The student is expected to add, subtract, multiply, and divide integers fluently.	Find the missing negative addend in a number sentence (sums 1 to 8).	SMMA_LO_00105
			Add two negative integers (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
			Find the missing addend in a number sentence (missing addends -10 to 10, sums -20 to 20).	SMMA_LO_00110
			Add three integers (sum -10 to 10).	SMMA_LO_00111
			Add integers in an associative expression ((a + b) + c, three addends -10 to 10).	SMMA_LO_00113
			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

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
6.3.D	R	The student is expected to add, subtract, multiply, and divide integers fluently.	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
			Find the missing dividend or divisor (combinations 2 x 13 to 5 x 19).	SMMA_LO_00309
			Finding the missing dividend or divisor (combinations 6 x 13 to 9 x 19).	SMMA_LO_00310
			Divide integers (combinations 6 x 10 to -9 x 12, dividend or divisor is negative).	SMMA_LO_00316
			Divide integers (combinations 4 x 6 to 12 x 12).	SMMA_LO_00317
			Divide integers (combinations 6 x 13 to 9 x 19, all signs).	SMMA_LO_00319
			Find the missing dividend or divisor in a number sentence (combinations 7 x 13 to 9 x 19, all signs).	SMMA_LO_00320
			Multiply whole numbers (multiples of 10 or 100).	SMMA_LO_00911
			Multiply a negative integer by a positive integer (products -144 to -4).	SMMA_LO_00914
			Multiply two negative integers (products 4 to 144).	SMMA_LO_00915
			Multiply a negative integer by a positive integer (products -(20 × 2) to -(90 × 9)).	SMMA_LO_00917
			Find the missing positive or negative factor in a number sentence.	SMMA_LO_00918
			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 (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
			Subtract integers (minuends 0 to 19, subtrahends 1 to 20, negative differences).	SMMA_LO_01508
			Find the missing subtrahend in a number sentence (minuends 0 to 10, subtrahends 2 to 11, negative differences).	SMMA_LO_01509
			Subtract integers (minuends 0 to 20, subtrahends 1 to 40).	SMMA_LO_01510
			Find the missing subtrahend in a number sentence (minuends -9 to 0, differences -9 to 0).	SMMA_LO_01512
			Subtract integers (minuends -20 to -10, subtrahends 0 to 10).	SMMA_LO_01513
			Subtract integers (minuends -20 to 20, subtrahends 0 to -20).	SMMA_LO_01516

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
6.3.D	R	The student is expected to add, subtract, multiply, and divide integers fluently.	Subtract an integer from 0 (subtrahends -20 to 20).	SMMA_LO_01519
			Subtract integers (minuends 0 to 20, subtrahends -10 to -1).	SMMA_LO_01520
			Subtract integers (minuends -10 to 0, subtrahends -10 to -1).	SMMA_LO_01522
			Subtract integers (minuends -10 to 10, subtrahends -10 to 10).	SMMA_LO_01525
			Subtract integers (minuends -20 to 20, subtrahends -20 to 20).	SMMA_LO_01526
			Evaluate an algebraic expression (integers -10 to 10).	SMMA_LO_01842
			Evaluate an algebraic expression with three variables (-5.9 to 5.9).	SMMA_LO_01843
			F: Determine if the sum is positive or negative (one- and two-digit addends).	SMMA_LO_00106
			F: Multiply whole numbers (products 10,000 x 2 to 99,999 x 9).	SMMA_LO_00900
			F: Multiply (student choice, products 1000 × 20 to 9999 × 90, multiples of 10).	SMMA_LO_00906
			F: Multiply by a multiple of 10 (student choice, 10,000 × 20 to 99,999 × 90).	SMMA_LO_00908
			F: Multiply whole numbers (student choice, products 1000 × 21 to 9999 × 99).	SMMA_LO_00909
			F: Multiply whole numbers (student choice, 10,000 × 21 to 99,999 × 99).	SMMA_LO_00910
			F: Estimate the missing factor in a number sentence (round to the nearest ten, products 2,010 to 81,090).	SMMA_LO_00913
			F: Determine the sign of the products of two integers (one and two-digit integers).	SMMA_LO_00916
			F: Determine the sign of the product of four factors.	SMMA_LO_00919
			F: Multiply one- to five-digit whole numbers by powers of ten (10 to 100,000).	SMMA_LO_01078
			F: Identify a - b as equivalent to a + (-b), where a and b are 1 to 20.	SMMA_LO_01514
			F: Identify -a - b as equivalent to -a + (-b) (minuends -20 to -1).	SMMA_LO_01515
6.3.E	R	The student is expected to multiply and divide positive rational numbers fluently.	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
			Multiply decimals (to thousandths x hundredths).	SMMA_LO_00234
			Determine the missing factor in the multiplication number sentence (decimals, to ten-thousandths).	SMMA_LO_00240
			Multiply decimals (to ten-thousandths x ten-thousandths).	SMMA_LO_00244

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
6.3.E	R	The student is expected to multiply and divide positive rational numbers fluently.	Divide decimals (0.3 x 0.3 to 0.9 x 0.09).	SMMA_LO_00245
			Move the decimal point in the divisor and dividend in a long division problem.	SMMA_LO_00247
			Move the decimal point in the divisor and dividend in a long division problem; then find the quotient.	SMMA_LO_00249
			Identify the probable error in a multiplication calculation with decimals.	SMMA_LO_00250
			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
			Solve for a or b in a x 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 ÷ b = c (combinations 0.6 × 0.6 to 0.9 × 0.9).	SMMA_LO_00370
			Multiply fractions; no simplifying.	SMMA_LO_00469
			Multiply fractions; simplify.	SMMA_LO_00475
			Multiply fractions; simplify first.	SMMA_LO_00476
			Multiply a fraction and a whole number; simplify.	SMMA_LO_00477
			Multiply a fraction and a whole number; simplify first.	SMMA_LO_00478
			Divide fractions; simplify if necessary.	SMMA_LO_00487
			Divide a fraction by a whole number; simplify if necessary.	SMMA_LO_00489
			Divide a fraction by a mixed number; simplify if necessary.	SMMA_LO_00491
			Divide a whole number by a fraction.	SMMA_LO_00492
			Find a fractional part of a fraction.	SMMA_LO_00498
			Multiply mixed numbers; simplify if necessary.	SMMA_LO_00501
			Divide a mixed number by a whole number; simplify if necessary.	SMMA_LO_00502
			Multiply three fractions; simplify if necessary.	SMMA_LO_00506
			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 whole number by a fraction; simplify if necessary.	SMMA_LO_01787
			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

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
6.3.E	R	The student is expected to multiply and divide positive rational numbers fluently.	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
			F: Identify the location of the decimal point of the product of two decimals (factors, tenths to hundredths).	SMMA_LO_00222
			F: Divide a decimal by a decimal (horizontal division; dividends to tenths).	SMMA_LO_00237
			F: Rewrite a fraction as a mixed number (halves to eighths).	SMMA_LO_00449
			F: Rewrite a mixed number as a fraction (fifths to ninths).	SMMA_LO_00450
			F: Multiply whole numbers (products 10,000 x 2 to 99,999 x 9).	SMMA_LO_00900
			F: Multiply (student choice, products 1000 × 20 to 9999 × 90, multiples of 10).	SMMA_LO_00906
			F: Multiply by a multiple of 10 (student choice, 10,000 × 20 to 99,999 × 90).	SMMA_LO_00908
			F: Multiply whole numbers (student choice, products 1000 × 21 to 9999 × 99).	SMMA_LO_00909
			F: Multiply whole numbers (student choice, 10,000 × 21 to 99,999 × 99).	SMMA_LO_00910
			F: Identify the rule for an iterative pattern.	SMMA_LO_01840
6.4.B	R	The student is expected to apply qualitative and quantitative reasoning to solve prediction and comparison of real-world problems involving ratios and rates.	Solve time and distance problems (whole numbers).	SMMA_LO_00842
			Solve a proportion problem in context.	SMMA_LO_01284
			Determine the number of calories in multiple servings given data in a chart.	SMMA_LO_01333
			Given the number of kilowatt-hours used and a price, find the total cost of power.	SMMA_LO_01336
			Convert light years to kilometers and kilometers to light years.	SMMA_LO_01339
			Given the rate and time, find the distance.	SMMA_LO_01575
			Find the number of hours worked given the hourly rate and total earned.	SMMA_LO_01625
			Find the amount of an ingredient needed to make two, three, or four times a recipe.	SMMA_LO_01627
			Find the total money earned, given the number of hours worked and the hourly rate.	SMMA_LO_01630

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
6.4.B	R	The student is expected to apply qualitative and quantitative reasoning to solve prediction and comparison of real-world problems involving ratios and rates.	Solve a problem in context using proportions.	SMMA_LO_01635
			Complete a comparison statement based on the ratios in two tables.	SMMA_LO_02116
			F: Identify the ratio.	SMMA_LO_01712
			F: Write a ratio in three different forms.	SMMA_LO_01825
6.4.C	S	The student is expected to give examples of ratios as multiplicative comparisons of two quantities describing the same attribute.	Identify two unit rates for a given word problem.	SMMA_LO_02114
6.4.D	S	The student is expected to give examples of rates as the comparison by division of two quantities having different attributes, including rates as quotients.	Interpret quotients of rational numbers by describing real-world contexts.	SMMA_LO_02088
6.4.E	S	The student is expected to represent ratios and percents with concrete models, fractions, and decimals.	Determine the decimal and percent that is represented by a model (base-ten blocks, hundredths).	SMMA_LO_00256
			Express a percent as a fraction and simplify.	SMMA_LO_00269
			Identify equivalent representations of numbers.	SMMA_LO_01114
			Write a ratio in three different forms.	SMMA_LO_01825
6.4.F	S	The student is expected to represent benchmark fractions and percents such as 1%, 10%, 25%, 33 1/3%, and multiples of these values using 10 by 10 grids, strip diagrams, number lines, and numbers.	Express a fraction as a percent (denominator is 100).	SMMA_LO_01714
6.4.G	R	The student is expected to generate equivalent forms of fractions, decimals, and percents using real-world problems, including problems that involve money.	Determine the equivalent fraction for a decimal (the denominator is a factor of 100).	SMMA_LO_00259
			Express a fraction as a percent (denominator is 100).	SMMA_LO_01714
			F: Identify the division problem that can be used to rewrite a fraction as a decimal.	SMMA_LO_00257
			F: Divide to convert from a fraction to a decimal equivalent.	SMMA_LO_00258
			F: Find the missing numerator or denominator in an equivalent fraction (simplified fractions 1/2 to 3/4).	SMMA_LO_00451
			F: Determine if a fraction can be simplified; simplify if possible (simplified fractions 1/2 to 3/4).	SMMA_LO_00452
			F: Find the missing numerator or denominator in an equivalent fraction (simplified fractions 1/2 to 7/8).	SMMA_LO_00453

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
6.4.G	R	The student is expected to generate equivalent forms of fractions, decimals, and percents using real-world problems, including problems that involve money.	F: Determine if a fraction can be simplified; simplify if possible (simplified fractions 1/2 to 7/8).	SMMA_LO_00454
			F: Write a fraction in simplest form (simplified fractions 1/2 to 7/8).	SMMA_LO_00455
			F: Determine if a fraction can be simplified; simplify if possible (simplified fractions 1/2 to 7/8).	SMMA_LO_00456
6.4.H	R	The student is expected to convert units within a measurement system, including the use of proportions and unit rates.	Convert between customary units of weight (ounces and pounds).	SMMA_LO_00797
6.5.A	S	The student is expected to represent mathematical and real-world problems involving ratios and rates using scale factors, tables, graphs, and proportions.	Evaluate an expression within a context (multiplication).	SMMA_LO_01740
			Generate a table of values given a one-step rule.	SMMA_LO_01755
			Determine the fraction needed to complete the proportion.	SMMA_LO_01827
			Find missing values in a table that represents a proportional relationship, and plot the pairs of values on the coordinate plane.	SMMA_LO_02115
6.5.B	R	The student is expected to solve real-world problems to find the whole given a part and the percent, to find the part given the whole and the percent, and to find the percent given the part and the whole, including the use of concrete and pictorial models.	Find a percent of a money amount ($0.80 to $10.80).	SMMA_LO_00270
			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
			Express a fraction as a percent (denominator is 100).	SMMA_LO_01714
			F: Find a percent of a number (the percent is greater than or equal to 100).	SMMA_LO_00275
			F: Find the percent given the whole and the part.	SMMA_LO_00276
			F: Find the whole given the percent and the part.	SMMA_LO_00277
6.5.C	S	The student is expected to use equivalent fractions, decimals, and percents to show equal parts of the same whole.	Find an equivalent mixed number for a decimal (tenths to ten thousandths).	SMMA_LO_00255
			Express a mixed number as a decimal.	SMMA_LO_00260
			Identify decimals or fractions that are not equivalent to a given decimal or fraction.	SMMA_LO_01094
			Identify a number not equivalent to four others.	SMMA_LO_01116
			Complete the equivalence table by expressing a decimal number as a fraction and a percent.	SMMA_LO_01820
			Complete the equivalence table by expressing a decimal number as a fraction and a percent (round answer to the nearest hundredth).	SMMA_LO_01821

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
6.5.C	S	The student is expected to use equivalent fractions, decimals, and percents to show equal parts of the same whole.	Complete the equivalence table by expressing a fraction as a decimal number and a percent (round answer to the nearest hundredth).	SMMA_LO_01822
			Evaluate an expression within a context (multiplication).	SMMA_LO_01740
			Identify an expression to describe the pattern generated by a table.	SMMA_LO_01741
			Generate a table of values given a one-step rule.	SMMA_LO_01755
			Identify the one-step equation that is a translation of the written phrase within a context.	SMMA_LO_01813
			F: Identify the expression that is a translation of the written phrase.	SMMA_LO_01759
			F: Write expressions that record operations with numbers and variables.	SMMA_LO_02056
6.7.A	R	The student is expected to generate equivalent numerical expressions using order of operations, including whole number exponents and prime factorization.	Evaluate -(a + b), where 9 < a < 19, 1 < b < 9.	SMMA_LO_00127
			Evaluate -(-a + b), where 1 < a, b < 9.	SMMA_LO_00128
			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
			Evaluate the expression mx + c or mx - c.	SMMA_LO_01739
			Evaluate an algebraic expression with exponents (integers -10 to 10).	SMMA_LO_01818
			F: Using a factor tree, find the prime factors of a number (2 to 32).	SMMA_LO_01087
			F: Give the value of a number (1 to 10) raised to a power (1 to 5).	SMMA_LO_01098
			F: Match expressions with repeated factors to numbers in exponential form to create equations.	SMMA_LO_01100
6.7.C	S	The student is expected to determine if two expressions are equivalent using concrete models, pictorial models, and algebraic representations.	Choose all expressions that are equivalent to a given expression.	SMMA_LO_02060
6.7.D	R	The student is expected to generate equivalent expressions using the properties of operations: inverse, identity, commutative, associative, and distributive properties.	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
			Identify -(a + b) as equivalent to -a - b, where a and b are 1 to 9.	SMMA_LO_00118

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
6.7.D	R	The student is expected to generate equivalent expressions using the properties of operations: inverse, identity, commutative, associative, and distributive properties.	Compare two expressions using the additive inverse property.	SMMA_LO_00120
			Identify an equivalent variable expression (-(a + b) = -a + (-b)).	SMMA_LO_00124
			Identify an equivalent expression for a x (b + c) with variables.	SMMA_LO_00129
			Identify a x (b - c) as equivalent to (a x b) - (a x c).	SMMA_LO_00130
			Use the commutative and associative properties of addition to find the missing number.	SMMA_LO_01090
			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
			Evaluate the expression -(a - b), where a and b have values from 1 to 9.	SMMA_LO_01531
			Evaluate the expression -(-a - b), where a and b have values from 1 to 9.	SMMA_LO_01532
			Identify a x (b - c) as equivalent to (a x b) - (a x c) with variables.	SMMA_LO_01533
			Identify a x (b - c) as equivalent to (a x b) - (a x c).	SMMA_LO_01534
			Apply the properties of operations to generate equivalent expressions.	SMMA_LO_02059
			Choose all expressions that are equivalent to a given expression.	SMMA_LO_02060
			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
6.8.C	S	The student is expected to write equations that represent problems related to the area of rectangles, parallelograms, trapezoids, and triangles and volume of right rectangular prisms where dimensions are positive rational numbers.	Find the area of a triangle (2 to 72 square inches).	SMMA_LO_00176
			Use a formula to find the area of a parallelogram.	SMMA_LO_00824
			Find the area of a triangle using a formula.	SMMA_LO_00827

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
6.8.D	R	The student is expected to determine solutions for problems involving the area of rectangles, parallelograms, trapezoids, and triangles and volume of right rectangular prisms where dimensions are positive rational numbers.	Multiply mixed numbers to determine the area of a rectangle or triangle; simplify if necessary.	SMMA_LO_00508
			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
6.9.A	S	The student is expected to write one-variable, one-step equations and inequalities to represent constraints or conditions within problems.	Identify the inequality translated from a written phrase.	SMMA_LO_01853
			F: Solve a two-step addition problem to find a person's age 5 to 20 years from now.	SMMA_LO_01631
			F: Identify the written phrase that is a translation of a expression or inequality.	SMMA_LO_01815
			F: Write an inequality of the form x > c or x < c to represent a constraint in a real-world problem.	SMMA_LO_02064
			F: 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
6.9.B	S	The student is expected to represent solutions for one-variable, one-step equations and inequalities on number lines.	F: 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
6.9.C		The student is expected to write corresponding real-world problems given one-variable, one-step equations or inequalities.	Apply mathematical process standards to use equations and represent situations.	SMMA_LO_02140
6.10.A	R	The student is expected to model and solve one-variable, one-step equations and inequalities that represent problems, including geometric concepts.	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 b in a x b = c (products 6 x 2 to 9 x 12).	SMMA_LO_00357
			Solve for a or b in a ÷ b = c (combinations 2 ÷ 10 to 5 ÷ 12).	SMMA_LO_00359
			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 b in a ÷ b = c (combinations 6 ÷ 10 to 9 ÷ 12).	SMMA_LO_00361
			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 b in a x b = x (products 2 x 10 to 12 x 12).	SMMA_LO_00363

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
6.10.A	R	The student is expected to model and solve one-variable, one-step equations and inequalities that represent problems, including geometric concepts.	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 (combinations 6 ÷ 20 to 9 ÷ 90, multiples of 10).	SMMA_LO_00365
			Solve for a or b in a x b = x (products 2 x 20 to 12 x 90, multiples of 10).	SMMA_LO_00366
			Solve for a or b in a + b = c (decimals to tenths, no regrouping).	SMMA_LO_00367
			Solve for a or b in a - b = c (decimals to tenths, regrouping).	SMMA_LO_00368
			Solve for a or b in a x 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 ÷ b = c (combinations 0.6 × 0.6 to 0.9 × 0.9).	SMMA_LO_00370
			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 x b = c (products from 0.02 x 0.13 to 0.09 x 0.19).	SMMA_LO_00376
			Solve for a or b in a ÷ b = c (combinations from 0.01 to 0.02 to 0.05 × 0.05).	SMMA_LO_00378
			Complete the steps to solve for a in a + b = c or a - b = c in steps (sums and differences 2 to 20).	SMMA_LO_00379
			Solve for x in ax = c in steps (products 4 x 4 to 9 x 10).	SMMA_LO_00380
			Complete the steps to solve for a in a ÷ b = c (combinations 4 × 4 to 9 × 10).	SMMA_LO_00381
			Solve for a in a + b = c (a is from -20 to -1).	SMMA_LO_00388
			Solve for a in a - b = c (differences from -19 to 11).	SMMA_LO_00389
			Solve for x in ax = b (products from -(4 x 4) to -(9 x 9)).	SMMA_LO_00390
			Solve for a in a/b = c (products from -(4 x 4) to -(9 x 9)).	SMMA_LO_00391
			Solve for x in -x = a (numbers from -99 to 99).	SMMA_LO_00395
			Complete the steps to solve for x in a - x = b.	SMMA_LO_00396
			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
			Solve a one-step equation in context (division, two-digit whole numbers).	SMMA_LO_01745

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
6.10.A	R	The student is expected to model and solve one-variable, one-step equations and inequalities that represent problems, including geometric concepts.	Solve a one-step equation in context (division, two-digit whole numbers).	SMMA_LO_01747
			Solve one-step equations (multiplication, fractions).	SMMA_LO_01795
			Solve one-step equations (subtraction fractions).	SMMA_LO_01796
			Solve a one-step equation (multiplication, decimals).	SMMA_LO_01797
			Solve a one-step equation with decimals in context (addition and subtraction).	SMMA_LO_01799
			Solve a one-step equation (multiplication and division, integers).	SMMA_LO_01800
			Solve a one-step equation (addition and subtraction, one-digit integers).	SMMA_LO_01801
			Solve a one-step equation (two-digit integers, addition and subtraction).	SMMA_LO_01844
			Solve a one-step equation (integers, multiplication and division).	SMMA_LO_01845
			Solve a one-step equation (fractions, multiplication and division).	SMMA_LO_01847
			Solve a one-step equation (fractions, addition and subtraction).	SMMA_LO_01848
			Solve a one-step equation (decimals, multiplication and division).	SMMA_LO_01849
			Solve a one-step equations (fractions, addition and subtraction).	SMMA_LO_01868
			Use substitution to determine whether a given number in a specified set makes an equation or inequality true.	SMMA_LO_02061
6.10.B	S	The student is expected to determine if the given value(s) make(s) one-variable, one-step equations or inequalities true.	Use substitution to determine whether a given number in a specified set makes an equation or inequality true.	SMMA_LO_02061
			F: Compare sums and difference of positive and negative integers (-5 to 5).	SMMA_LO_01528
6.11.A	R	The student is expected to graph points in all four quadrants using ordered pairs of rational numbers.	Graph a set of ordered pairs from a table on a coordinate plane.	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
6.12.A	S	The student is expected to represent numeric data graphically, including dot plots, stem-and-leaf plots, histograms, and box plots.	Find the five values (upper and lower extremes, median, and upper and lower quartiles) from a set of data that are needed to create a box-and-whiskers plot.	SMMA_LO_01199
			Identify the box-and-whiskers plot that matches a given set of data.	SMMA_LO_01201
6.12.B	S	The student is expected to use the graphical representation of numeric data to describe the center, spread, and shape of the data distribution.	Find and compare the average variation of two sets of data.	SMMA_LO_01221
			F: Graph and interpret rainfall data in a chart.	SMMA_LO_01328

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
6.12.C	R	The student is expected to summarize numeric data with numerical summaries, including the mean and median (measures of center) and the range and interquartile range (IQR) (measures of spread), and use these summaries to describe the center, spread, and shape of the data distribution.	Find the average of 3 numbers.	SMMA_LO_00151
			Determine a student's grade point average based on five grades.	SMMA_LO_00179
			Determine the mean of a data set of three to five customary weights or metric masses.	SMMA_LO_00836
			Find the range of a set of data.	SMMA_LO_01166
			Identify the median of a data set with an odd number of items.	SMMA_LO_01168
			Identify the median of a data set with an even number of items and the two middle values are equal.	SMMA_LO_01169
			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 range, mean, median, and mode (one-digit numbers).	SMMA_LO_01210
			Determine the median of a data set.	SMMA_LO_01726
			Determine the mean of a data set.	SMMA_LO_01727
			Determine the range of a set of data.	SMMA_LO_01766
			Determine the median of a set of data.	SMMA_LO_01768
			F: Solve a problem in context by finding the average (mean) of three to seven numbers.	SMMA_LO_01619
6.12.D	R	The student is expected to summarize categorical data with numerical and graphical summaries, including the mode, the percent of values in each category (relative frequency table), and the percent bar graph, and use these summaries to describe the data distribution.	Select a circle graph whose sectors are in the same proportions as the data displayed in a given table.	SMMA_LO_01160
			Select a table that contains data that are in the same proportions as the sectors of a graph.	SMMA_LO_01162
			Determine the mode of a set of data.	SMMA_LO_01765
			F: Determine the mode of a data set.	SMMA_LO_01719
6.13.A	S	The student is expected to interpret numeric data summarized in dot plots, stem-and-leaf plots, histograms, and box plots.	Identify the mode of a set of data.	SMMA_LO_01164
			Find the frequency of a single data item on a stem-and-leaf plot.	SMMA_LO_01188
			Identify data sets that match the data represented in a given box-and-whiskers plot.	SMMA_LO_01202
			F: Read and interpret data in a table to determine the time it would take for skin to freeze.	SMMA_LO_01314
			F: Read and interpret data in a table to determine the time it would take for skin to freeze.	SMMA_LO_01315
6.14.C	S	The student is expected to balance a check register that includes deposits, withdrawals, and transfers.	F: Use positive and negative numbers together to represent quantities having opposite directions or values.	SMMA_LO_02066

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
7.3.A	S	The student is expected to add, subtract, multiply, and divide rational numbers fluently.	Subtract decimals with regrouping (to ten-thousandths).	SMMA_LO_00243
			Evaluate a numerical expression (a) + (b) - (c), where a, b, and c have values from -9 to 9.	SMMA_LO_01527
			Extend an arithmetic sequence for three more terms.	SMMA_LO_01803
			F: 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
			F: Represent addition and subtraction of rational numbers on a number line.	SMMA_LO_02085
			F: Represent subtraction of integers on a number line.	SMMA_LO_02152
			F: Represent addition and subtraction of rational numbers (fractions) on a number line.	SMMA_LO_02153
			F: Represent addition and subtraction of rational numbers (decimals) on a number line.	SMMA_LO_02154
7.3.B	R	The student is expected to apply and extend previous understandings of operations to solve problems using addition, subtraction, multiplication, and division of rational numbers.	Find the final temperature given the initial temperature and the temperature increase.	SMMA_LO_01632
			Find three consecutive integers when given their sum.	SMMA_LO_01639
7.4.A	R	The student is expected to represent constant rates of change in mathematical and real-world problems given pictorial, tabular, verbal, numeric, graphical, and algebraic representations, including d = rt.	Interpret the meaning of a point on the graph of a proportional relationship in terms of the situation; use this information to answer questions about the situation.	SMMA_LO_02089
7.4.B	S	The student is expected to calculate unit rates from rates in mathematical and real-world problems.	Identify the unit rate given a table, a graph, an equation, a diagram, or a word problem.	SMMA_LO_02001
			Identify two unit rates for a given word problem.	SMMA_LO_02114
7.4.C	S	The student is expected to determine the constant of proportionality (k = y/x) within mathematical and real-world problems.	Identify the constant of proportionality given a table, a graph, an equation, a diagram, or a word problem.	SMMA_LO_02002
7.4.D	R	The student is expected to solve problems involving ratios, rates, and percents, including multi-step problems involving percent increase and percent decrease, and financial literacy problems.	Find the percent of increase.	SMMA_LO_00278
			Find the unit price of an item (products 2 × 6 to 25 × 32).	SMMA_LO_00830
			Find total earnings for two to four weeks given the weekly salary, commission percentage, and total sales (whole number percents).	SMMA_LO_01637

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
7.4.E	S	The student is expected to convert between measurement systems, including the use of proportions and the use of unit rates.	Convert measurement units either by making a table or by multiplying by a unit rate.	SMMA_LO_02117
7.5.A	S	The student is expected to generalize the critical attributes of similarity, including ratios within and between similar shapes.	Form a proportion that can be used to solve for the height of an object.	SMMA_LO_00660
			Derive the equation y = mx for a line through the origin, and y = mx + b for a line intercepting the vertical axis at b.	SMMA_LO_02076
7.5.C	R	The student is expected to solve mathematical and real-world problems involving similar shape and scale drawings.	Identify the scale factor in similar shapes to find the missing corresponding sides.	SMMA_LO_00513
			Identify similar polygons.	SMMA_LO_00610
			Identify two figures as being similar, congruent, or neither.	SMMA_LO_00618
			Identify the polygon that is not similar to the others.	SMMA_LO_00645
			Identify the example that is a counterexample to a statement.	SMMA_LO_00649
			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
			Identify similar triangles or rectangles on a geoboard.	SMMA_LO_00847
			Derive the equation y = mx for a line through the origin, and y = mx + b for a line intercepting the vertical axis at b.	SMMA_LO_02076
7.6.A	S	The student is expected to represent sample spaces for simple and compound events using lists and tree diagrams.	Given a graphical representation of a spinner, count the number of possible outcomes and complete a list of all the outcomes.	SMMA_LO_01209
			Determine the number of arrangements that can be made from two groups with two items.	SMMA_LO_01717
			Determine the arrangements that can be made with a group of two and a group of three items.	SMMA_LO_01718
			F: Given a graphical representation of two spinners, count all the possible outcomes for spinning each spinner once.	SMMA_LO_01665
			F: Determine the number of routes between two locations on a map.	SMMA_LO_01737
7.6.B	n/a	The student is expected to select and use different simulations to represent simple and compound events with and without technology.	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

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
7.6.B	n/a	The student is expected to select and use different simulations to represent simple and compound events with and without technology.	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
7.6.C	S	The student is expected to make predictions and determine solutions using experimental data for simple and compound events.	Given a random experiment represented graphically by a spinner, prepare an equivalent random experiment using a representation based on an urn and colored balls.	SMMA_LO_01200
7.6.D	S	The student is expected to make predictions and determine solutions using theoretical probability for simple and compound events.	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
			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
			Using a graphical representation of a bowl containing marbles of four colors, begin to apply the addition rule for computing the probabilities of inclusive classes using light and dark colored marbles.	SMMA_LO_01203
			Given information about a situation in which items are selected from a container without replacement, label the probabilities of given outcomes in a first and second selection.	SMMA_LO_01226
7.6.E	S	The student is expected to find the probabilities of a simple event and its complement and describe the relationship between the two.	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
			F: 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
7.6.F	n/a	The student is expected to use data from a random sample to make inferences about a population.	Make predictions based on a sample.	SMMA_LO_01223

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
7.6.G	R	The student is expected to solve problems using data represented in bar graphs, dot plots, and circle graphs, including part-to-whole and part-to-part comparisons and equivalents.	Read and interpret data from a circle graph labeled with percents.	SMMA_LO_01208
7.6.I	R	The student is expected to determine experimental and theoretical probabilities related to simple and compound events using data and sample spaces.	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
			Determine the probability of an event.	SMMA_LO_01197
			In the context of randomly selecting a card that has a certain name on it, compute the probability of each name being selected from a set of cards.	SMMA_LO_01215
			Identify the probability of two independent outcomes, and then determine the probability of the combination of the two outcomes occurring simultaneously.	SMMA_LO_01224
			Given information about a situation in which items are selected from a container without replacement, label the probabilities of given outcomes in a first and second selection.	SMMA_LO_01226
			Write a fraction to express the probability of an event.	SMMA_LO_01667
			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
7.7.A	R	The student is expected to represent linear relationships using verbal descriptions, tables, graphs, and equations that simplify to the form y = mx + b.	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
			Identify an equation that can be used to solve a two-step problem in context.	SMMA_LO_01297
			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 two-step rule.	SMMA_LO_01756
			Complete an input/output table given a two-step rule; then plot the ordered pairs on coordinate grid.	SMMA_LO_01758
			Identify the two-step equation that is a translation of the written phrase within a context.	SMMA_LO_01814

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
7.7.A	R	The student is expected to represent linear relationships using verbal descriptions, tables, graphs, and equations that simplify to the form y = mx + b.	Complete a table of values and graph the equation of a linear function.	SMMA_LO_01837
			Identify the equation translated from a written phrase.	SMMA_LO_01852
7.9.A	R	The student is expected to solve problems involving the volume of rectangular prisms, triangular prisms, rectangular pyramids, and triangular pyramids.	Find the volume of a rectangular or triangular prism.	SMMA_LO_00838
			Choose the best estimate for the volume of a rectangular prism.	SMMA_LO_00848
			Solve for a variable in the formula for volume of a rectangular prism (whole numbers and mixed numbers).	SMMA_LO_01817
			Calculate the volume of a rectangular prism; then convert the cubic feet or cubic meters into gallons or liters.	SMMA_LO_01819
7.9.B	R	The student is expected to determine the circumference and area of circles.	Find the circumference, given the length of the diameter or the radius (pi = 3.14).	SMMA_LO_00828
			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
			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
			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
			F: Identify parts of a circle (center, radius, and diameter).	SMMA_LO_00633
			F: Identify a part of a circle (center, radius, chord, or diameter).	SMMA_LO_00653
7.9.C	R	The student is expected to determine the area of composite figures containing combinations of rectangles, squares, parallelograms, trapezoids, triangles, semicircles, and quarter circles.	Find the area of a rectilinear figure in a context by decomposing it into two rectangles.	SMMA_LO_02032
7.9.D	S	The student is expected to solve problems involving the lateral and total surface area of a rectangular prism, rectangular pyramid, triangular prism, and triangular pyramid by determining the area of the shape's net.	F: Identify faces, edges, and vertices of solids.	SMMA_LO_00632
			F: Count the vertices, edges, or faces of a prism or pyramid.	SMMA_LO_00643
			F: Identify the set of faces for a geometric solid.	SMMA_LO_00664
			F: Identify the net for a geometric solid.	SMMA_LO_00675
			F: Identify the net that forms a three-dimensional solid.	SMMA_LO_01772

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
7.10.A	S	The student is expected to write one-variable, two-step equations and inequalities to represent constraints or conditions within problems.	Identify an equation that can be used to solve a two-step problem in context.	SMMA_LO_01297
			F: Translate an expression into a written phrase (two-step).	SMMA_LO_01816
			F: Identify parts of an expression using mathematical terms (sum, term, product, factor, quotient, coefficient).	SMMA_LO_02057
7.10.B	S	The student is expected to represent solutions for one-variable, two-step equations and inequalities on number lines.	Solve an inequality of the form px + q > r or px + q < r; then graph the solution on a number line.	SMMA_LO_02084
7.10.C	S	The student is expected to write a corresponding real-world problem given a one-variable, two-step equation or inequality.	Identify the written phrase translated from an inequality.	SMMA_LO_01869
			Identify the written phrase translated from an inequality.	SMMA_LO_01870
7.11.A	R	The student is expected to model and solve one-variable, two-step equations and inequalities.	Solve for a, b, or c in a × b/c = d/e (combinations to 12 × 12).	SMMA_LO_00371
			Solve for a, b, c, or d in a/b × c/d = e/f (combinations to 12 × 12).	SMMA_LO_00372
			Solve for a, b, or c in a/b ÷ c = d/e (combinations to 12 × 12).	SMMA_LO_00375
			Solve for a, b, c, or d in a/b ÷ c/d = e/f.	SMMA_LO_00377
			Complete the steps to solve for x in ax ÷ b = c in steps.	SMMA_LO_00382
			Complete the steps to solve for x in ax + b = c.	SMMA_LO_00383
			Solve for x in ax + b = c.	SMMA_LO_00384
			Complete the steps to solve for x in ax + b = c (x is from -9 to -1).	SMMA_LO_00392
			Complete the steps to solve for x in ax - b = c (x is from -9 to 2).	SMMA_LO_00393
			Complete the steps to solve for x in ax - b = c (x is from -9 to 9).	SMMA_LO_00394
			Solve for a, b, or c in a × b/c = d/e (combinations to 12 × 12).	SMMA_LO_01798
			Solve a two-step equation (integers).	SMMA_LO_01846
			Solve a two-step equation (fractions, multiplication).	SMMA_LO_01850
			Solve a two-step equation (decimals).	SMMA_LO_01851
			Transform a given multi-step equation into a simpler form.	SMMA_LO_02079
			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
			Solve an inequality of the form px + q > r or px + q < r; then graph the solution on a number line.	SMMA_LO_02084
			F: Solve for a two-step equation in context.	SMMA_LO_01638

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
7.11.B	S	The student is expected to determine if the given value(s) make(s) one-variable, two-step equations and inequalities true.	Determine whether a given value for x is a solution for ax + b = c (x is from -9 to 9).	SMMA_LO_00397
7.11.C	S	The student is expected to write and solve equations using geometry concepts, including the sum of the angles in a triangle, and angle relationships.	F: Establish that vertical angles are congruent.	SMMA_LO_00670
			F: Find the measure of the missing angle in a diagram.	SMMA_LO_00674
			F: Solve a problem involving equal angle measures.	SMMA_LO_00677
7.12.A	R	The student is expected to compare two groups of numeric data using comparative dot plots or box plots by comparing their shapes, centers, and spreads.	Find and compare the average variation of two sets of data.	SMMA_LO_01221
7.12.B	S	The student is expected to use data from a random sample to make inferences about a population.	Make predictions based on a sample.	SMMA_LO_01223
7.12.C	S	The student is expected to compare two populations based on data in random samples from these populations, including informal comparative inferences about differences between the two populations.	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 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
			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
7.13.A	S	The student is expected to calculate the sales tax for a given purchase and calculate income tax for earned wages.	Find the total cost, given an amount and the sales tax percentage.	SMMA_LO_00178
			F: Identify a correct expression to solve a problem about sales tax.	SMMA_LO_00845
7.13.E	S	The student is expected to calculate and compare simple interest and compound interest earnings.	Solve for a variable in the formula for simple interest (whole numbers and decimals).	SMMA_LO_01805
8.2.B	S	The student is expected to approximate the value of an irrational number, including π and square roots of numbers less than 225, and locate that rational number approximation on a number line.	F: Find the square root of a number using a calculator (numbers to 4000).	SMMA_LO_01120

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
8.2.C	S	The student is expected to convert between standard decimal notation and scientific notation.	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
			Write very large numbers in scientific notation.	SMMA_LO_02071
			F: Explain patterns in the number of zeros of the product and in the placement of the decimal point when multiplying a number by powers of ten.	SMMA_LO_02046
8.2.D	R	The student is expected to order a set of real numbers arising from mathematical and real-world contexts.	Drag rational and irrational values to their correct positions on a number line.	SMMA_LO_02141
8.3.A	S	The student is expected to generalize that the ratio of corresponding sides of similar shapes are proportional, including a shape and its dilation.	Use similar triangles to explain why the slope m is the same between any two distinct points on a nonvertical line in the coordinate plane.	SMMA_LO_02075
8.3.C	R	The student is expected to use an algebraic representation to explain the effect of a given positive rational scale factor applied to two-dimensional figures on a coordinate plane with the origin as the center of dilation.	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
8.4.A	S	The student is expected to use similar right triangles to develop an understanding that slope, m, given as the rate comparing the change in y-values to the change in x-values, $(y_2 - y_1)/ (x_2 - x_1)$, is the same for any two points (x_1, y_1) and (x_2, y_2) on the same line.	Use similar triangles to explain why the slope m is the same between any two distinct points on a nonvertical line in the coordinate plane.	SMMA_LO_02075
8.4.B	R	The student is expected to graph proportional relationships, interpreting the unit rate as the slope of the line that models the relationship.	Graph proportional relationships and interpret the unit rate as the slope of the graph.	SMMA_LO_02073

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
8.4.C	R	The student is expected to use data from a table or graph to determine the rate of change or slope and y-intercept in mathematical and real-world problems.	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
8.5.B	S	The student is expected to represent linear non-proportional situations with tables, graphs, and equations in the form of $y = mx + b$, where $b \neq 0$.	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
8.5.C	R	The student is expected to contrast bivariate sets of data that suggest a linear relationship with bivariate sets of data that do not suggest a linear relationship from a graphical representation.	Identify positive, negative, or no association for sets of actual data.	SMMA_LO_01222
8.5.D	R	The student is expected to use a trend line that approximates the linear relationship between bivariate sets of data to make predictions.	Choose an approximation based on a trend line for bivariate data.	SMMA_LO_02143
8.5.E	S	The student is expected to solve problems involving direct variation.	Solve a proportion problem in context.	SMMA_LO_01284
8.5.G	R	The student is expected to identify functions using sets of ordered pairs, tables, mappings, and graphs.	Given a list of ordered pairs of a relation, identify two ordered pairs that show the relation is not a function.	SMMA_LO_01811
			Given a graph of a relation, identify two ordered pairs on the graph that show the relation is not a function.	SMMA_LO_01812
			Given a set of graphs of relations, identify which graphs represent functions.	SMMA_LO_01835
			Complete a table of values and graph the equation of a quadratic function.	SMMA_LO_01836

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
8.5.I	R	The student is expected to write an equation in the form y = mx + b to model a linear relationship between two quantities using verbal, numerical, tabular, and graphical representations.	Identify an expression to describe the pattern generated by a table.	SMMA_LO_01741
8.6.C	S	The student is expected to use models and diagrams to explain the Pythagorean theorem.	Explain a proof of the Pythagorean Theorem.	SMMA_LO_02131
8.7.A	R	The student is expected to solve problems involving the volume of cylinders, cones, and spheres.	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
			F: Identify geometric solids (prisms, pyramids, cones, or spheres).	SMMA_LO_00667
8.7.B	R	The student is expected to use previous knowledge of surface area to make connections to the formulas for lateral and total surface area and determine solutions for problems involving rectangular prisms, triangular prisms, and cylinders.	Generalize a figure for surface area, and then use that formula to find the surface area of a given figure.	SMMA_LO_02144
			F: Complete sentences about bases, faces, edges, and vertices of geometric solids.	SMMA_LO_00652
			F: Identify geometric solids (prisms, pyramids, cones, or spheres).	SMMA_LO_00667
8.7.C	R	The student is expected to use the Pythagorean Theorem and its converse to solve problems.	Find the measurement of the hypotenuse using the Pythagorean theorem. (2D)	SMMA_LO_01854
			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
			Explain a proof of the converse of the Pythagorean Theorem.	SMMA_LO_02132
8.7.D	S	The student is expected to determine the distance between two points on a coordinate plane using the Pythagorean Theorem.	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
8.8.C	R	The student is expected to model and solve one-variable equations with variables on both sides of the equal sign that represent mathematical and real-world problems using rational number coefficients and constants.	Generate and solve an equation with variables on both sides of the equal sign in a real-world context.	SMMA_LO_02145

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
8.8.D	S	The student is expected to use informal arguments to establish facts about the angle sum and exterior angle of triangles, the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles.	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 two angles.	SMMA_LO_02129
			Determine whether or not a diagram gives enough information to determine whether or not two triangles are similar. If so, identify the triangles as similar or not similar.	SMMA_LO_02130
8.9.A	S	The student is expected to identify and verify the values of x and y that simultaneously satisfy two linear equations in the form y = mx + b from the intersections of the graphed equations.	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
			Model a real-world problem with a system of linear equations. Then solve it by locating the intersection point of the graphs of the two equations.	SMMA_LO_02134
8.10.A	S	The student is expected to generalize the properties of orientation and congruence of rotations, reflections, translations, and dilations of two-dimensional shapes on a coordinate plane.	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
			Identify a reflection, a rotation, and a translation of a geometric figure.	SMMA_LO_00665
			Identify a transformation as a slide, flip, or a turn.	SMMA_LO_01776
			F: Identify congruent angles.	SMMA_LO_00637
			F: 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
8.10.B	S	The student is expected to differentiate between transformations that preserve congruence and those that do not.	Identify the figure that is the same size and shape as a given figure.	SMMA_LO_00600
			Identify congruent figures on a geoboard.	SMMA_LO_00606
			Determine the missing coordinate of a vertex of a triangle in a transformation.	SMMA_LO_01736
			Given two congruent figures, transform one figure so that it lines up with the other. Then, identify the sequence of transformations used.	SMMA_LO_02124

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.

TX Standard	Readiness/ Supporting	TX Standard Text	Item Description	Item ID
8.10.C	R	The student is expected to explain the effect of translations, reflections over the x- or y-axis, and rotations limited to 90°, 180°, 270°, and 360° as applied to two-dimensional shapes on a coordinate plane using an algebraic representation.	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
			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 properties of the rotation.	SMMA_LO_02122
			Translate a figure on a coordinate plane; verify properties of the rotation.	SMMA_LO_02123
			Reflect a figure, find the coordinates of the reflected figure, and describe the effect of the reflection on the coordinates.	SMMA_LO_02125
			F: 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
8.11.A	S	The student is expected to construct a scatterplot and describe the observed data to address questions of association such as linear, non-linear, and no association between bivariate data.	Identify positive, negative, or no association for sets of actual data.	SMMA_LO_01222
8.11.B	R	The student is expected to determine the mean absolute deviation and use this quantity as a measure of the average distance data are from the mean using a data set of no more than 10 data points.	Find and compare the average variation of two sets of data.	SMMA_LO_01221
8.12.D	R	The student is expected to calculate and compare simple interest and compound interest earnings.	Solve for a variable in the formula for simple interest (whole numbers and decimals).	SMMA_LO_01805

"F" denotes a learning object that reinforces the foundational skills needed for understanding and mastery of the content described in the standard.