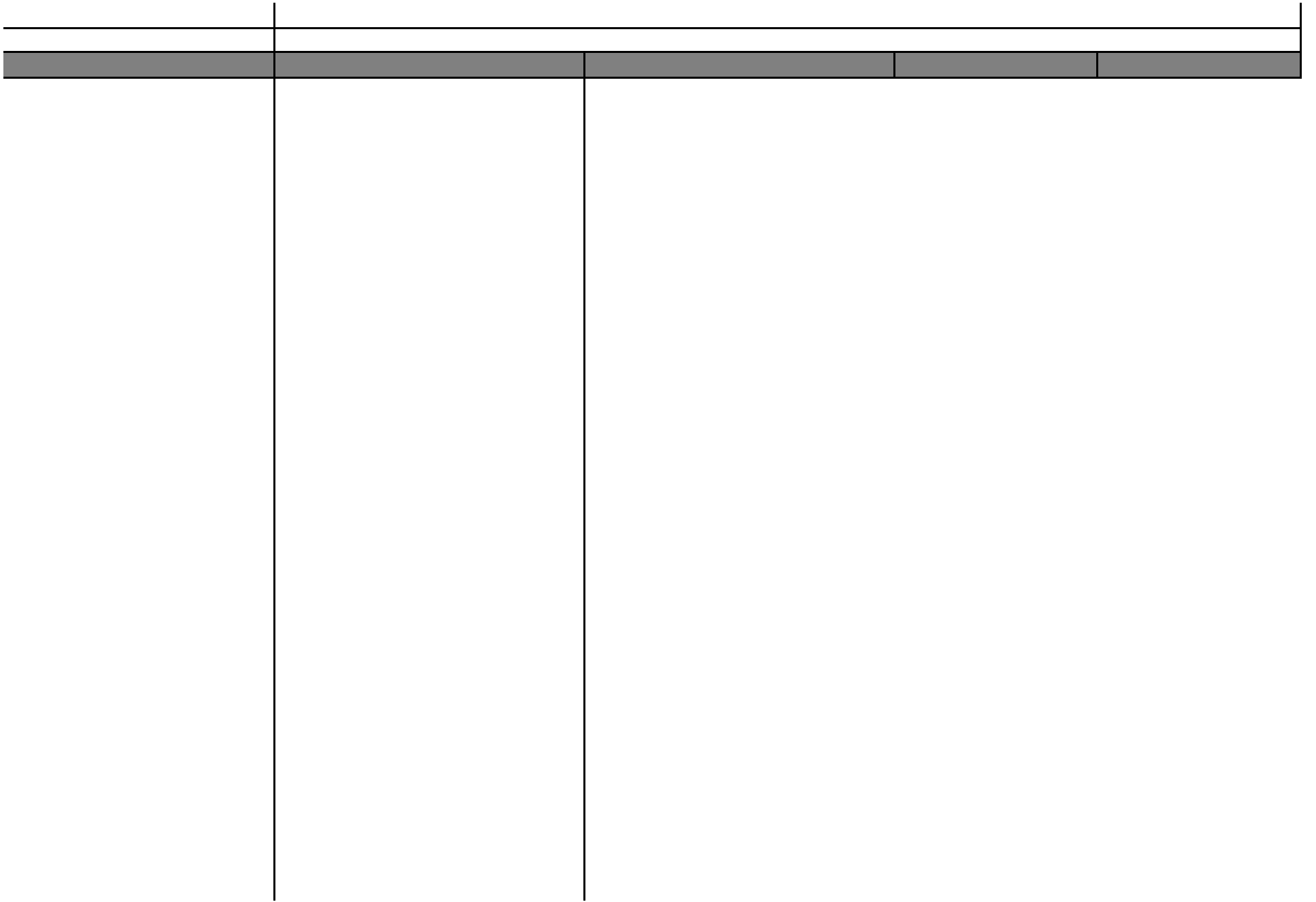


<b>Subject</b>	<b>Chapter 111. Mathematics</b>			
<b>Course Title</b>				



Subject	Chapter 111. Mathematics			
Course Title	§111.6. Math, Grade 4, Beginning with School Year 2014-2015			
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:	(C) select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems	(ii) select tools, including manipulatives as appropriate, to solve problems		
(1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:	(C) select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems	(iii) select tools, including paper and pencil as appropriate, to solve problems		
(1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:	(C) select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems	(iv) select tools, including technology as appropriate, to solve problems		
(1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:	(C) select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems	(v) select techniques, including mental math as appropriate, to solve problems		
(1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:	(C) select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems	(vi) select techniques, including estimation as appropriate, to solve problems		

Subject	Chapter 111. Mathematics			
Course Title	§111.6. Math, Grade 4, Beginning with School Year 2014-2015			
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:	(C) select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems	(vii) select techniques, including number sense as appropriate, to solve problems		
(1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:	(D) communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate	(i) communicate mathematical ideas using multiple representations, including symbols as appropriate		
(1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:	(D) communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate	(ii) communicate mathematical ideas using multiple representations, including diagrams as appropriate		
(1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:	(D) communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate	(iii) communicate mathematical ideas using multiple representations, including graphs as appropriate		
(1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:	(D) communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate	(iv) communicate mathematical ideas using multiple representations, including language as appropriate		

Subject	Chapter 111. Mathematics			
Course Title	§111.6. Math, Grade 4, Beginning with School Year 2014-2015			
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:	(D) communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate	(v) communicate mathematical reasoning using multiple representations, including symbols as appropriate		
(1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:	(D) communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate	(vi) communicate mathematical reasoning using multiple representations, including diagrams as appropriate		
(1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:	(D) communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate	(vii) communicate mathematical reasoning using multiple representations, including graphs as appropriate		
(1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:	(D) communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate	(viii) communicate mathematical reasoning using multiple representations, including language as appropriate		
(1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:	(D) communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate	(ix) communicate [mathematical ideas'] implications using multiple representations, including symbols as appropriate		

Subject	Chapter 111. Mathematics			
Course Title	§111.6. Math, Grade 4, Beginning with School Year 2014-2015			
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:	(D) communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate	(x) communicate [mathematical ideas'] implications using multiple representations, including diagrams as appropriate		
(1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:	(D) communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate	(xi) communicate [mathematical ideas'] implications using multiple representations, including graphs as appropriate		
(1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:	(D) communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate	(xii) communicate [mathematical ideas'] implications using multiple representations, including language as appropriate		
(1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:	(D) communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate	(xiii) communicate [mathematical reasoning's] implications using multiple representations, including symbols as appropriate		
(1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:	(D) communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate	(xiv) communicate [mathematical reasoning's] implications using multiple representations, including diagrams as appropriate		

Subject	Chapter 111. Mathematics			
Course Title	§111.6. Math, Grade 4, Beginning with School Year 2014-2015			
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:	(D) communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate	(xv) communicate [mathematical reasoning's] implications using multiple representations, including graphs as appropriate		
(1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:	(D) communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate	(xvi) communicate [mathematical reasoning's] implications using multiple representations, including language as appropriate		
(1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:	(E) create and use representations to organize, record, and communicate mathematical ideas	(i) create representations to organize mathematical ideas		
(1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:	(E) create and use representations to organize, record, and communicate mathematical ideas	(ii) use representations to organize mathematical ideas		
(1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:	(E) create and use representations to organize, record, and communicate mathematical ideas	(iii) create representations to record mathematical ideas		

Subject	Chapter 111. Mathematics			
Course Title	§111.6. Math, Grade 4, Beginning with School Year 2014-2015			
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:	(E) create and use representations to organize, record, and communicate mathematical ideas	(iv) use representations to record mathematical ideas		
(1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:	(E) create and use representations to organize, record, and communicate mathematical ideas	(v) create representations to communicate mathematical ideas		
(1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:	(E) create and use representations to organize, record, and communicate mathematical ideas	(vi) use representations to communicate mathematical ideas		
(1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:	(F) analyze mathematical relationships to connect and communicate mathematical ideas	(i) analyze mathematical relationships to connect mathematical ideas		
(1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:	(F) analyze mathematical relationships to connect and communicate mathematical ideas	(ii) analyze mathematical relationships to communicate mathematical ideas		



Subject	Chapter 111. Mathematics			
Course Title	§111.6. Math, Grade 4, Beginning with School Year 2014-2015			
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:	(G) display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication	(i) display mathematical ideas using precise mathematical language in written or oral communication		
(1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:	(G) display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication	(ii) display mathematical arguments using precise mathematical language in written or oral communication		
(1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:	(G) display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication	(iii) explain mathematical ideas using precise mathematical language in written or oral communication		
(1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:	(G) display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication	(iv) explain mathematical arguments using precise mathematical language in written or oral communication		
(1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:	(G) display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication	(v) justify mathematical ideas using precise mathematical language in written or oral communication		

Subject	<b>Chapter 111. Mathematics</b>			
Course Title	<b>§111.6. Math, Grade 4, Beginning with School Year 2014-2015</b>			
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:				

Subject	Chapter 111. Mathematics			
Course Title	§111.6. Math, Grade 4, Beginning with School Year 2014-2015			
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(2) Number and operations. The student applies mathematical process standards to represent, compare, and order whole numbers and decimals and understand relationships related to place value. The student is expected to:	(B) represent the value of the digit in whole numbers through 1,000,000,000 and decimals to the hundredths using expanded notation and numerals	(ii) represent the value of the digit in whole numbers through 1,000,000,000 using numerals		
(2) Number and operations. The student applies mathematical process standards to represent, compare, and order whole numbers and decimals and understand relationships related to place value. The student is expected to:	(B) represent the value of the digit in whole numbers through 1,000,000,000 and decimals to the hundredths using expanded notation and numerals	(iii) represent the value of the digit in decimals to the hundredths using expanded notation		
(2) Number and operations. The student applies mathematical process standards to represent, compare, and order whole numbers and decimals and understand relationships related to place value. The student is expected to:	(B) represent the value of the digit in whole numbers through 1,000,000,000 and decimals to the hundredths using expanded notation and numerals	(iv) represent the value of the digit in decimals to the hundredths using numerals		
(2) Number and operations. The student applies mathematical process standards to represent, compare, and order whole numbers and decimals and understand relationships related to place value. The student is expected to:	(C) compare and order whole numbers to 1,000,000,000 and represent comparisons using the symbols $>$ , $<$ , or $=$	(i) compare whole numbers to 1,000,000,000		

Subject	Chapter 111. Mathematics			
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TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(2) Number and operations. The student applies mathematical process standards to represent, compare, and order whole numbers and decimals and understand relationships related to place value. The student is expected to:	(C) compare and order whole numbers to 1,000,000,000 and represent comparisons using the symbols $>$ , $<$ , or $=$	(ii) order whole numbers to 1,000,000,000		
(2) Number and operations. The student applies mathematical process standards to represent, compare, and order whole numbers and decimals and understand relationships related to place value. The student is expected to:	(C) compare and order whole numbers to 1,000,000,000 and represent comparisons using the symbols $>$ , $<$ , or $=$	(iii) represent comparisons using the symbols $>$ , $<$ , or $=$		
(2) Number and operations. The student applies mathematical process standards to represent, compare, and order whole numbers and decimals and understand relationships related to place value. The student is expected to:	(D) round whole numbers to a given place value through the hundred thousands place numbers and decimals and understand relationships related to place value. The student is expected to:			


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Course Title	§111.6. Math, Grade 4, Beginning with School Year 2014-2015			
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(2) Number and operations. The student applies mathematical process standards to represent, compare, and order whole numbers and decimals and understand relationships related to place value. The student is expected to:	(E) represent decimals, including tenths and hundredths, using concrete and visual models and money	(vi) represent decimals, including hundredths, using money		
(2) Number and operations. The student applies mathematical process standards to represent, compare, and order whole numbers and decimals and understand relationships related to place value. The student is expected to:	(F) compare and order decimals using concrete and visual models to the hundredths	(i) compare decimals using concrete models to the hundredths		
(2) Number and operations. The student applies mathematical process standards to represent, compare, and order whole numbers and decimals and understand relationships related to place value. The student is expected to:	(F) compare and order decimals using concrete and visual models to the hundredths	(ii) compare decimals using visual models to the hundredths		
(2) Number and operations. The student applies mathematical process standards to represent, compare, and order whole numbers and decimals and understand relationships related to place value. The student is expected to:	(F) compare and order decimals using concrete and visual models to the hundredths	(iii) order decimals using concrete models to the hundredths		


Subject	Chapter 111. Mathematics			
Course Title	§111.6. Math, Grade 4, Beginning with School Year 2014-2015			
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(3) Number and operations. The student applies mathematical process standards to represent and generate fractions to solve problems. The student is expected to:	(A) represent a fraction $a/b$ as a sum of fractions $1/b$ , where $a$ and $b$ are whole numbers and $b > 0$ , including when $a > b$			
(3) Number and operations. The student applies mathematical process standards to represent and generate fractions to solve problems. The student is expected to:	(B) 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	(i) decompose a fraction in more than one way into a sum of fractions with the same denominator using concrete models and recording results with symbolic representations		
(3) Number and operations. The student applies mathematical process standards to represent and generate fractions to solve problems. The student is expected to:	(B) 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	(i) decompose a fraction in more than one way into a sum of fractions with the same denominator  models and recording results with symbolic representations	(A) represent a fraction $a/b$ as a sum of fractions $1/b$ , where $a$ and $b$ are whole	
		and generate fractions to solve problems. The student is expected to:		



Subject	Chapter 111. Mathematics			
Course Title	§111.6. Math, Grade 4, Beginning with School Year 2014-2015			
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(3) Number and operations. The student applies mathematical process standards to represent and generate fractions to solve problems. The student is expected to:	(D) compare two fractions with different numerators and different denominators and represent the comparison using the symbols $>$ , $=$ , or $<$	(ii) compare two fractions with different denominators		
(3) Number and operations. The student applies mathematical process standards to represent and generate fractions to solve problems. The student is expected to:	(D) compare two fractions with different numerators and different denominators and represent the comparison using the symbols $>$ , $=$ , or $<$	(iii) compare two fractions with different numerators and different denominators		
(3) Number and operations. The student applies mathematical process standards to represent and generate fractions to solve problems. The student is expected to:	(D) compare two fractions with different numerators and different denominators and represent the comparison using the symbols $>$ , $=$ , or $<$	(iv) represent the comparison using the symbols $>$ , $=$ , or $<$		
(3) Number and operations. The student applies mathematical process standards to represent and generate fractions to solve problems. The student is expected to:	(E) 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	(i) represent addition of fractions with equal denominators using objects		
(3) Number and operations. The student applies mathematical process standards to represent and generate fractions to solve problems. The student is expected to:	(E) 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	(ii) represent addition of fractions with equal denominators using pictorial models that build to the number line		



Subject	Chapter 111. Mathematics			
Course Title	§111.6. Math, Grade 4, Beginning with School Year 2014-2015			
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(3) Number and operations. The student applies mathematical process standards to represent and generate fractions to solve problems. The student is expected to:	(E) 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	(viii) solve addition of fractions with equal denominators using pictorial models that build to the number line		
(3) Number and operations. The student applies mathematical process standards to represent and generate fractions to solve problems. The student is expected to:	(E) 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	(ix) solve addition of fractions with equal denominators using properties of operations		
(3) Number and operations. The student applies mathematical process standards to represent and generate fractions to solve problems. The student is expected to:	(E) 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	(x) solve subtraction of fractions with equal denominators using objects		
(3) Number and operations. The student applies mathematical process standards to represent and generate fractions to solve problems. The student is expected to:	(E) 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	(xi) solve subtraction of fractions with equal denominators using pictorial models that build to the number line		
(3) Number and operations. The student applies mathematical process standards to represent and generate fractions to solve problems. The student is expected to:	(E) 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	(xii) solve subtraction of fractions with equal denominators using properties of operations		

Subject	Chapter 111. Mathematics			
Course Title	§111.6. Math, Grade 4, Beginning with School Year 2014-2015			
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(3) Number and operations. The student applies mathematical process standards to represent and generate fractions to solve problems. The student is expected to:	(F) 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	(i) evaluate the reasonableness of sums of fractions using benchmark fractions 0, 1/4, 1/2, 3/4, and 1, referring to the same whole		
(3) Number and operations. The student applies mathematical process standards to represent and generate fractions to solve problems. The student is expected to:	(F) 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	(ii) evaluate the reasonableness of differences of fractions using benchmark fractions 0, 1/4, 1/2, 3/4, and 1, referring to the same whole		
(3) Number and operations. The student applies mathematical process standards to represent and generate fractions to solve problems. The student is expected to:	(G) represent fractions and decimals to the tenths or hundredths as distances from zero on a number line	(i) represent fractions to the tenths or hundredths as distances from zero on a number line		
(3) Number and operations. The student applies mathematical process standards to represent and generate fractions to solve problems. The student is expected to:	(G) represent fractions and decimals to the tenths or hundredths as distances from zero on a number line	(ii) represent decimals to the tenths or hundredths as distances from zero on a number line		

Subject	<b>Chapter 111. Mathematics</b>			
Course Title	<b>§111.6. Math, Grade 4, Beginning with School Year 2014-2015</b>			
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(4) Number and operations. The student applies mathematical process standards to develop and use strategies and methods for whole number computations and decimal sums and differences in order to solve problems with efficiency and accuracy. The student is expected to:	(A) add and subtract whole numbers and decimals to the hundredths place using the standard algorithm			

Subject	Chapter 111. Mathematics			
Course Title	§111.6. Math, Grade 4, Beginning with School Year 2014-2015			
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(4) Number and operations. The student applies mathematical process standards to develop and use strategies and methods for whole number computations and decimal sums and differences in order to solve problems with efficiency and accuracy. The student is expected to:	(A) add and subtract whole numbers and decimals to the hundredths place using the standard algorithm	(iv) subtract whole numbers using the standard algorithm		
(4) Number and operations. The student applies mathematical process standards to develop and use strategies and methods for whole number computations and decimal sums and differences in order to solve problems with efficiency and accuracy. The student is expected to:	(A) add and subtract whole numbers and decimals to the hundredths place using the standard algorithm	(v) subtract decimals to the hundredths place using the standard algorithm		
(4) Number and operations. The student applies mathematical process standards to develop and use strategies and methods for whole number computations and decimal sums and differences in order to solve problems with efficiency and accuracy. The student is expected to:	(A) add and subtract whole numbers and decimals to the hundredths place using the standard algorithm	(vi) subtract whole numbers and decimals to the hundredths place using the standard algorithm		

Subject	Chapter 111. Mathematics			
Course Title	§111.6. Math, Grade 4, Beginning with School Year 2014-2015			
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(4) Number and operations. The student applies mathematical process standards to develop and use strategies and methods for whole number computations and decimal sums and differences in order to solve problems with efficiency and accuracy. The student is expected to:	(B) determine products of a number and 10 or 100 using properties of operations and place value understandings	(i) determine products of a number and 10 or 100 using properties of operations		
(4) Number and operations. The student applies mathematical process standards to develop and use strategies and methods for whole number computations and decimal sums and differences in order to solve problems with efficiency and accuracy. The student is expected to:	(B) determine products of a number and 10 or 100 using properties of operations and place value understandings	(ii) determine products of a number and 10 or 100 using place value understandings		
(4) Number and operations. The student applies mathematical process standards to develop and use strategies and methods for whole number computations and decimal sums and differences in order to solve problems with efficiency and accuracy. The student is expected to:	(C) represent the product of 2 two-digit numbers using arrays, area models, or equations, including perfect squares through 15 by 15			





Subject	Chapter 111. Mathematics			
Course Title	§111.6. Math, Grade 4, Beginning with School Year 2014-2015			
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
<p>(4) Number and operations. The student applies mathematical process standards to develop and use strategies and methods for whole number computations and decimal sums and differences in order to solve problems with efficiency and accuracy. The student is expected to:</p>	<p>(D) 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</p>	<p>(iv) use algorithms, including the standard algorithm, to multiply a two-digit number by a two-digit number</p>		
<p>(4) Number and operations. The student applies mathematical process standards to develop and use strategies and methods for whole number computations and decimal sums and differences in order to solve problems with efficiency and accuracy. The student is expected to:</p>	<p>(E) represent the quotient of up to a four-digit whole number divided by a one-digit whole number using arrays, area models, or equations</p>			
<p>(4) Number and operations. The student applies mathematical process standards to develop and use strategies and methods for whole number computations and decimal sums and differences in order to solve problems with efficiency and accuracy. The student is expected to:</p>	<p>(F) use strategies and algorithms, including the standard algorithm, to divide up to a four-digit dividend by a one-digit divisor</p>	<p>(i) use strategies to divide up to a four-digit dividend by a one-digit divisor</p>		



Subject	Chapter 111. Mathematics			

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Course Title	§111.6. Math, Grade 4, Beginning with School Year 2014-2015			
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(5) Algebraic reasoning. The student applies mathematical process standards to develop concepts of expressions and equations. The student is expected to:	(A) represent multi-step problems involving the four operations with whole numbers using strip diagrams and equations with a letter standing for the unknown quantity	(ii) represent multi-step problems involving the four operations with whole numbers using equations with a letter standing for the unknown quantity		
(5) Algebraic reasoning. The student applies mathematical process standards to develop concepts of expressions and equations. The student is expected to:	(B) 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	(i) represent problems using an input-output table 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		
(5) Algebraic reasoning. The student applies mathematical process standards to develop concepts of expressions and equations. The student is expected to:	(B) 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	(ii) represent problems using 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		
(5) Algebraic reasoning. The student applies mathematical process standards to develop concepts of expressions and equations. The student is expected to:	(C) use models to determine the formulas for the perimeter of a rectangle ( $l + w + l + w$ or $2l + 2w$ ), including the special form for perimeter of a square ( $4s$ ) and the area of a rectangle ( $l \times w$ )	(i) use models to determine the formulas for the perimeter of a rectangle ( $l + w + l + w$ or $2l + 2w$ ), including the special form for perimeter of a square ( $4s$ )		
(5) Algebraic reasoning. The student applies mathematical process standards to develop concepts of expressions and equations. The student is expected to:	(C) use models to determine the formulas for the perimeter of a rectangle ( $l + w + l + w$ or $2l + 2w$ ), including the special form for perimeter of a square ( $4s$ ) and the area of a rectangle ( $l \times w$ )	(ii) use models to determine the formula for the area of a rectangle ( $l \times w$ )		

Subject	Chapter 111. Mathematics			
Course Title	§111.6. Math, Grade 4, Beginning with School Year 2014-2015			
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(5) Algebraic reasoning. The student applies mathematical process standards to develop concepts of expressions and equations. The student is expected to:	(D) solve problems related to perimeter and area of rectangles where dimensions are whole numbers	(i) solve problems related to perimeter of rectangles where dimensions are whole numbers		
(5) Algebraic reasoning. The student applies mathematical process standards to develop concepts of expressions and equations. The student is expected to:	(D) solve problems related to perimeter and area of rectangles where dimensions are whole numbers	(ii) solve problems related to area of rectangles where dimensions are whole numbers		
(6) Geometry and measurement. The student applies mathematical process standards to analyze geometric attributes in order to develop generalizations about their properties. The student is expected to:	(A) identify points, lines, line segments, rays, angles, and perpendicular and parallel lines	(i) identify points		
(6) Geometry and measurement. The student applies mathematical process standards to analyze geometric attributes in order to develop generalizations about their properties. The student is expected to:	(A) identify points, lines, line segments, rays, angles, and perpendicular and parallel lines	(ii) identify lines		

<b>Subject</b>	<b>Chapter 111. Mathematics</b>			
<b>Course Title</b>	<b>§111.6. Math, Grade 4, Beginning with School Year 2014-2015</b>			
<b>TEKS (Knowledge and Skills)</b>	<b>Student Expectation</b>	<b>Breakout</b>	<b>Element</b>	<b>Subelement</b>
<p>(6) Geometry and measurement. The student applies mathematical process standards to analyze geometric attributes in order to develop generalizations about their properties. The student is expected to:</p>	<p>(A) identify points, lines, line segments, rays, angles about their properties.</p>			

Subject	Chapter 111. Mathematics			
Course Title	§111.6. Math, Grade 4, Beginning with School Year 2014-2015			
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
<p>(6) Geometry and measurement. The student applies mathematical process standards to analyze geometric attributes in order to develop generalizations about their properties. The student is expected to:</p>	<p>(A) identify points, lines, line segments, rays, angles, and perpendicular and parallel lines</p>	<p>(vii) identify parallel lines</p>		
<p>(6) Geometry and measurement. The student applies mathematical process standards to analyze geometric attributes in order to develop generalizations about their properties. The student is expected to:</p>	<p>(B) identify and draw one or more lines of symmetry, if they exist, for a two-dimensional figure</p>	<p>(i) identify one or more lines of symmetry, if they exist, for a two-dimensional figure</p>		
<p>(6) Geometry and measurement. The student applies mathematical process standards to analyze geometric attributes in order to develop generalizations about their properties. The student is expected to:</p>	<p>(B) identify and draw one or more lines of symmetry, if they exist, for a two-dimensional figure</p>	<p>(ii) draw one or more lines of symmetry, if they exist, for a two-dimensional figure</p>		
<p>(6) Geometry and measurement. The student applies mathematical process standards to analyze geometric attributes in order to develop generalizations about their properties. The student is expected to:</p>	<p>(C) apply knowledge of right angles to identify acute, right, and obtuse triangles</p>	<p>(i) apply knowledge of right angles to identify acute triangles</p>		

<b>Subject</b>	<b>Chapter 111. Mathematics</b>			
<b>Course Title</b>	<b>§111.6. Math, Grade 4, Beginning with School Year 2014-2015</b>			
<b>TEKS (Knowledge and Skills)</b>				



Subject	Chapter 111. Mathematics			
Course Title	§111.6. Math, Grade 4, Beginning with School Year 2014-2015			
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(7) Geometry and measurement. The student applies mathematical process standards to solve problems involving angles less than or equal to 180 degrees. The student is expected to:	(B) illustrate degrees as the units used to measure an angle, where $\frac{1}{360}$ of any circle is one degree and an angle that "cuts" $\frac{n}{360}$ out of any circle whose center is at the angle's vertex has a measure of $n$ degrees. Angle measures are limited to whole numbers	(i) illustrate degrees as the units used to measure an angle, where $\frac{1}{360}$ of any circle is one degree		
(7) Geometry and measurement. The student applies mathematical process standards to solve problems involving angles less than or equal to 180 degrees. The student is expected to:	(B) illustrate degrees as the units used to measure an angle, where $\frac{1}{360}$ of any circle is one degree and an angle that "cuts" $\frac{n}{360}$ out of any circle whose center is at the angle's vertex has a measure of $n$ degrees. Angle measures are limited to whole numbers	(ii) illustrate degrees as the units used to measure an angle, where an angle that "cuts" $\frac{n}{360}$ out of any circle whose center is at the angle's vertex has a measure of $n$ degrees		
(7) Geometry and measurement. The student applies mathematical process standards to solve problems involving angles less than or equal to 180 degrees. The student is expected to:	(C) determine the approximate measures of angles in degrees to the nearest whole number using a protractor			
(7) Geometry and measurement. The student applies mathematical process standards to solve problems involving angles less than or equal to 180 degrees. The student is expected to:	(D) draw an angle with a given measure			
(7) Geometry and measurement. The student applies mathematical process standards to solve problems involving angles less than or equal to 180 degrees. The student is expected to:	(E) determine the measure of an unknown angle formed by two non-overlapping adjacent angles given one or both angle measures			

Subject	Chapter 111. Mathematics			
Course Title	§111.6. Math, Grade 4, Beginning with School Year 2014-2015			
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(8) Geometry and measurement. The student applies mathematical process standards to select appropriate customary and metric units, strategies, and tools to solve problems involving measurement. The student is expected to:	(A) identify relative sizes of measurement units within the customary and metric systems	(i) identify relative sizes of measurement units within the customary systems		
(8) Geometry and measurement. The student applies mathematical process standards to select appropriate customary and metric units, strategies, and tools to solve problems involving measurement. The student is expected to:	(A) identify relative sizes of measurement units within the customary and metric systems	(ii) identify relative sizes of measurement units within the metric systems		
(8) Geometry and measurement. The student applies mathematical process standards to select appropriate customary and metric units, strategies, and tools to solve problems involving measurement. The student is expected to:	(B) 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			
(8) Geometry and measurement. The student applies mathematical process standards to select appropriate customary and metric units, strategies, and tools to solve problems involving measurement. The student is expected to:				

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Course Title	§111.6. Math, Grade 4, Beginning with School Year 2014-2015			
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(8) Geometry and measurement. The student applies mathematical process standards to select appropriate customary and metric units, strategies, and tools to solve problems involving measurement. The student is expected to:	(C) solve problems that deal with measurements of length, intervals of time, liquid volumes, mass, and money using addition, subtraction, multiplication, or division as appropriate	(ii) solve problems that deal with intervals of time using addition, subtraction, multiplication, or division as appropriate		
(8) Geometry and measurement. The student applies mathematical process standards to select appropriate customary and metric units, strategies, and tools to solve problems involving measurement. The student is expected to:	(C) solve problems that deal with measurements of length, intervals of time, liquid volumes, mass, and money using addition, subtraction, multiplication, or division as appropriate	(iii) solve problems that deal with liquid volumes using addition, subtraction, multiplication, or division as appropriate		
(8) Geometry and measurement. The student applies mathematical process standards to select appropriate customary and metric units, strategies, and tools to solve problems involving measurement. The student is expected to:	(C) solve problems that deal with measurements of length, intervals of time, liquid volumes, mass, and money using addition, subtraction, multiplication, or division as appropriate	(iv) solve problems that deal with mass using addition, subtraction, multiplication, or division as appropriate		
(8) Geometry and measurement. The student applies mathematical process standards to select appropriate customary and metric units, strategies, and tools to solve problems involving measurement. The student is expected to:	(C) solve problems that deal with measurements of length, intervals of time, liquid volumes, mass, and money using addition, subtraction, multiplication, or division as appropriate	(v) solve problems that deal with money using addition, subtraction, multiplication, or division as appropriate		

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Course Title	§111.6. Math, Grade 4, Beginning with School Year 2014-2015			
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(9) Data analysis. The student applies mathematical process standards to solve problems by collecting, organizing, displaying, and interpreting data. The student is expected to:	(A) represent data on a frequency table, dot plot, or stem-and-leaf plot marked with whole numbers and fractions	(i) represent data on a frequency table, dot plot, or stem-and-leaf plot marked with whole numbers		
(9) Data analysis. The student applies mathematical process standards to solve problems by collecting, organizing, displaying, and interpreting data. The student is expected to:	(A) represent data on a frequency table, dot plot, or stem-and-leaf plot marked with whole numbers and fractions	(ii) represent data on a frequency table, dot plot, or stem-and-leaf plot marked with fractions		
(9) Data analysis. The student applies mathematical process standards to solve problems by collecting, organizing, displaying, and interpreting data. The student is expected to:	(A) represent data on a frequency table, dot plot, or stem-and-leaf plot marked with whole numbers and fractions	(iii) represent data on a frequency table, dot plot, or stem-and-leaf plot marked with whole numbers and fractions		
(9) Data analysis. The student applies mathematical process standards to solve problems by collecting, organizing, displaying, and interpreting data. The student is expected to:	(B) 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	(i) solve one-step problems using data in whole number form in a frequency table, dot plot, or stem-and-leaf plot		
(9) Data analysis. The student applies mathematical process standards to solve problems by collecting, organizing, displaying, and interpreting data. The student is expected to:	(B) 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	(ii) solve one-step problems using data in decimal form in a frequency table, dot plot, or stem-and-leaf plot		



Subject	Chapter 111. Mathematics			
Course Title	§111.6. Math, Grade 4, Beginning with School Year 2014-2015			
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(10) Personal financial literacy. The student applies mathematical process standards to manage one's financial resources effectively for lifetime financial security. The student is expected to:	(B) calculate profit in a given situation			
(10) Personal financial literacy. The student applies mathematical process standards to manage one's financial resources effectively for lifetime financial security. The student is expected to:	(C) compare the advantages and disadvantages of various savings options	(i) compare the advantages of various savings options		
(10) Personal financial literacy. The student applies mathematical process standards to manage one's financial resources effectively for lifetime financial security. The student is expected to:	(C) compare the advantages and disadvantages of various savings options	(ii) compare the disadvantages of various savings options		
(10) Personal financial literacy. The student applies mathematical process standards to manage one's financial resources effectively for lifetime financial security. The student is expected to:	(D) describe how to allocate a weekly allowance among spending; saving, including for college; and sharing			

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TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(10) Personal financial literacy. The student applies mathematical process standards to manage one's financial resources effectively for lifetime financial security. The student is expected to:	(E) describe the basic purpose of financial institutions, including keeping money safe, borrowing money, and lending	(i) describe the basic purpose of financial institutions, including keeping money safe		
(10) Personal financial literacy. The student applies mathematical process standards to manage one's financial resources effectively for lifetime financial security. The student is expected to:	(E) describe the basic purpose of financial institutions, including keeping money safe, borrowing money, and lending	(ii) describe the basic purpose of financial institutions, including borrowing money		
(10) Personal financial literacy. The student applies mathematical process standards to manage one's financial resources effectively for lifetime financial security. The student is expected to:	(E) describe the basic purpose of financial institutions, including keeping money safe, borrowing money, and lending	(iii) describe the basic purpose of financial institutions, including lending		