

#	Grade Name	Domain Name	Cluster Name	Standard Name	CC Code	UMath X - Associated Lessons
1.)	Grade 3	Operations and Algebraic Thinking	Represent and solve problems involving multiplication and division.	Interpret products of whole numbers, e.g., interpret $5 \times 7$ as the total number of objects in 5 groups of 7 objects each. For example, describe a context in which a total number of objects can be expressed as $5 \times 7$ .	3.OA.01	<ul style="list-style-type: none"> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiplication Facts &gt; Groups of 6</li> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiplication Facts &gt; Groups of 7</li> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiplication Facts &gt; Groups of 8</li> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiplication Facts &gt; Groups of 9</li> <li>Fractions &gt; Products, Multiples, Factors &gt; Factors &gt; Introduction &gt; Factors 18</li> <li>Fractions &gt; Products, Multiples, Factors &gt; Factors &gt; Introduction &gt; Factors 15</li> <li>Fractions &gt; Products, Multiples, Factors &gt; Factors &gt; Introduction &gt; Factors 5</li> <li>Fractions &gt; Products, Multiples, Factors &gt; Factors &gt; Introduction &gt; Factors 20</li> <li>Fractions &gt; Products, Multiples, Factors &gt; Factors &gt; Introduction &gt; Factors 16</li> <li>Fractions &gt; Products, Multiples, Factors &gt; Factors &gt; Introduction &gt; Factors 12</li> <li>Fractions &gt; Products, Multiples, Factors &gt; Factors &gt; Introduction &gt; Factors 8</li> <li>Operations &gt; Introduce Multiplication Concretely &gt; C &gt; Grouping Eggs in Bowls</li> <li>Operations &gt; Introduce Multiplication Concretely &gt; C &gt; Grouping Chairs in Rows</li> <li>Operations &gt; Introduce Multiplication Concretely &gt; C &gt; Eggs in Bowls... Introduce <math>\tilde{A}</math>—</li> <li>Operations &gt; Introduce Multiplication Concretely &gt; C &gt; Chairs in Rows ... Introduce <math>\tilde{A}</math>—</li> <li>Operations &gt; Introduce Multiplication Concretely &gt; C &gt; Multiplication - Repeated Addition</li> <li>Operations &gt; Introduce Multiplication Sentences &gt; C &gt; Multiplication Sentences #1</li> <li>Operations &gt; Introduce Multiplication Sentences &gt; C &gt; Multiplication Sentences #2</li> <li>Operations &gt; Introduce Multiplication Facts... 2, 3, 4, 5 &gt; C &gt; Multiplication: Groups of 2</li> <li>Operations &gt; Introduce Multiplication Facts... 2, 3, 4, 5 &gt; C &gt; Multiplication: Groups of 3</li> <li>Operations &gt; Introduce Multiplication Facts... 2, 3, 4, 5 &gt; C &gt; Multiplication: Groups of 4</li> <li>Operations &gt; Introduce Multiplication Facts... 2, 3, 4, 5 &gt; C &gt; Multiplication: Groups of 5</li> <li>Operations &gt; Introduce Multiplication by 1 and by 0 &gt; C &gt; Multiplication: Groups of 1</li> <li>Operations &gt; Introduce Multiplication by 1 and by 0 &gt; C &gt; Multiplication: Groups of 0</li> <li>Operations &gt; Introduce Multiplication Facts... 6, 7, 8, 9 &gt; D &gt; Multiplication: Groups of 6</li> <li>Operations &gt; Introduce Multiplication Facts... 6, 7, 8, 9 &gt; D &gt; Multiplication: Groups of 7</li> <li>Operations &gt; Introduce Multiplication Facts... 6, 7, 8, 9 &gt; D &gt; Multiplication: Groups of 8</li> <li>Operations &gt; Introduce Multiplication Facts... 6, 7, 8, 9 &gt; D &gt; Multiplication: Groups of 9</li> <li>Operations &gt; Patterns in Multiplication &gt; C &gt; <math>\tilde{A}</math>—table - Groups of 2</li> <li>Operations &gt; Patterns in Multiplication &gt; C &gt; <math>\tilde{A}</math>—table - Groups of 3</li> <li>Operations &gt; Patterns in Multiplication &gt; C &gt; <math>\tilde{A}</math>—table - Groups of 4</li> <li>Operations &gt; Patterns in Multiplication &gt; C &gt; <math>\tilde{A}</math>—table - Groups of 5</li> <li>Operations &gt; Patterns in Multiplication &gt; C &gt; <math>\tilde{A}</math>—table - Groups of 5 to 0</li> <li>Operations &gt; Patterns in Multiplication &gt; D &gt; <math>\tilde{A}</math>—table - Groups of 6</li> <li>Operations &gt; Patterns in Multiplication &gt; D &gt; <math>\tilde{A}</math>—table - Groups of 7</li> <li>Operations &gt; Patterns in Multiplication &gt; D &gt; <math>\tilde{A}</math>—table - Groups of 8</li> <li>Operations &gt; Patterns in Multiplication &gt; D &gt; <math>\tilde{A}</math>—table - Groups of 9</li> <li>Operations &gt; Patterns in Multiplication &gt; D &gt; <math>\tilde{A}</math>—table - Groups of 10</li> <li>Operations &gt; Introduction to Arrays &gt; C &gt; Introduction to Arrays with Multiplication</li> <li>Operations &gt; Introduction to Arrays &gt; C &gt; Build</li> </ul>

2.)	Grade 3	Operations and Algebraic Thinking	Represent and solve problems involving multiplication and division.	Interpret whole-number quotients of whole numbers, e.g., interpret 56 divided by 8 as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each. For example, describe a context in which a number of shares or a number of groups can be expressed as 56 divided by 8.	3.OA.02	<p>Arrays with Multiplication</p> <ul style="list-style-type: none"> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Quotients of Whole Numbers &gt; Interpretation 1 &gt; Example 1</li> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Quotients of Whole Numbers &gt; Interpretation 1 &gt; Example 2</li> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Quotients of Whole Numbers &gt; Interpretation 2 &gt; Example 1</li> <li>Operations &gt; Introduction to Division &gt; C &gt; Equal Groups of Eggs</li> <li>Operations &gt; Introduction to Division &gt; C &gt; Sharing Oranges Equally</li> <li>Operations &gt; Introduction to Division &gt; C &gt; Division Introduction - Eggs</li> <li>Operations &gt; Introduction to Division &gt; C &gt; Division Introduction - Oranges</li> <li>Operations &gt; Introduction to Division &gt; C &gt; Division - How many Groups?</li> <li>Operations &gt; Introduction Division Facts... 2, 3, 4, 5 &gt; C &gt; Division - Groups of 2</li> <li>Operations &gt; Introduction Division Facts... 2, 3, 4, 5 &gt; C &gt; Division - Groups of 3</li> <li>Operations &gt; Introduction Division Facts... 2, 3, 4, 5 &gt; C &gt; Division - Groups of 4</li> <li>Operations &gt; Introduction Division Facts... 2, 3, 4, 5 &gt; C &gt; Division - Groups of 5</li> <li>Operations &gt; Introduction Division Facts... 6, 7, 8, 9 &gt; D &gt; Division - Groups of 6</li> <li>Operations &gt; Introduction Division Facts... 6, 7, 8, 9 &gt; D &gt; Division - Groups of 7</li> <li>Operations &gt; Introduction Division Facts... 6, 7, 8, 9 &gt; D &gt; Division - Groups of 8</li> <li>Operations &gt; Introduction Division Facts... 6, 7, 8, 9 &gt; D &gt; Division - Groups of 9</li> <li>Place Value &gt; Break Numbers into Groups &gt; B &gt; Making Groups</li> <li>Place Value &gt; Break Numbers into Groups &gt; C &gt; Break 12 into Groups</li> <li>Place Value &gt; Break Numbers into Groups &gt; C &gt; Break 15 into Groups</li> <li>Place Value &gt; Break Numbers into Groups &gt; C &gt; Break 27 into Groups</li> <li>Place Value &gt; Break Numbers into Groups &gt; C &gt; Breaking into Groups of Ten</li> <li>Place Value &gt; Break Numbers into Groups &gt; C &gt; Groups of Items</li> </ul>
						<ul style="list-style-type: none"> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Word Problems by Various Methods &gt; Example 1 - Oranges</li> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Word Problems by Various Methods &gt; Example 2 - Bananas</li> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Word Problems by Various Methods &gt; Example 3 - Cycling</li> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Word Problems by Various Methods &gt; Example 4 - Baseball Cards</li> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Word Problems by Various Methods &gt; Example 5 - Cookies</li> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Word Problems by Various Methods &gt; Example 6 - Running</li> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Word Problems by Various Methods &gt; Example 7 - Apples</li> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Word Problems by Various Methods &gt; Example 8 - Savings</li> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Word Problems by Various Methods &gt; Example 9 - Sit-ups</li> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Word Problems by Various Methods &gt; Example 10 - Taxi</li> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Word Problems by Various Methods &gt; Example 11 - Skipping</li> <li>Operations &gt; Introduce Multiplication Concretely &gt; C &gt; Grouping Eggs in Bowls</li> <li>Operations &gt; Introduce Multiplication Concretely &gt; C &gt; Grouping Chairs in Rows</li> </ul>

3.)	Grade 3	Operations and Algebraic Thinking	Represent and solve problems involving multiplication and division.	Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.	3.OA.03	<ul style="list-style-type: none"> <li>• Operations &gt; Introduce Multiplication Concretely &gt; C &gt; Eggs in Bowls... Introduce <math>\tilde{A}</math>—</li> <li>• Operations &gt; Introduce Multiplication Concretely &gt; C &gt; Chairs in Rows ... Introduce <math>\tilde{A}</math>—</li> <li>• Operations &gt; Introduce Multiplication Concretely &gt; C &gt; Multiplication - Repeated Addition</li> <li>• Operations &gt; Introduce Multiplication Sentences &gt; C &gt; Multiplication Sentences #1</li> <li>• Operations &gt; Introduce Multiplication Sentences &gt; C &gt; Multiplication Sentences #2</li> <li>• Operations &gt; Introduce Multiplication Facts... 2, 3, 4, 5 &gt; C &gt; Multiplication: Groups of 2</li> <li>• Operations &gt; Introduce Multiplication Facts... 2, 3, 4, 5 &gt; C &gt; Multiplication: Groups of 3</li> <li>• Operations &gt; Introduce Multiplication Facts... 2, 3, 4, 5 &gt; C &gt; Multiplication: Groups of 4</li> <li>• Operations &gt; Introduce Multiplication Facts... 2, 3, 4, 5 &gt; C &gt; Multiplication: Groups of 5</li> <li>• Operations &gt; Introduce Multiplication by 1 and by 0 &gt; C &gt; Multiplication: Groups of 1</li> <li>• Operations &gt; Introduce Multiplication by 1 and by 0 &gt; C &gt; Multiplication: Groups of 0</li> <li>• Operations &gt; Introduce Multiplication Facts... 6, 7, 8, 9 &gt; D &gt; Multiplication: Groups of 6</li> <li>• Operations &gt; Introduce Multiplication Facts... 6, 7, 8, 9 &gt; D &gt; Multiplication: Groups of 7</li> <li>• Operations &gt; Introduce Multiplication Facts... 6, 7, 8, 9 &gt; D &gt; Multiplication: Groups of 8</li> <li>• Operations &gt; Introduce Multiplication Facts... 6, 7, 8, 9 &gt; D &gt; Multiplication: Groups of 9</li> <li>• Operations &gt; Patterns in Multiplication &gt; C &gt; <math>\tilde{A}</math>—table - Groups of 2</li> <li>• Operations &gt; Patterns in Multiplication &gt; C &gt; <math>\tilde{A}</math>—table - Groups of 3</li> <li>• Operations &gt; Patterns in Multiplication &gt; C &gt; <math>\tilde{A}</math>—table - Groups of 4</li> <li>• Operations &gt; Patterns in Multiplication &gt; C &gt; <math>\tilde{A}</math>—table - Groups of 5</li> <li>• Operations &gt; Patterns in Multiplication &gt; C &gt; <math>\tilde{A}</math>—table - Groups of 5 to 0</li> <li>• Operations &gt; Patterns in Multiplication &gt; D &gt; <math>\tilde{A}</math>—table - Groups of 6</li> <li>• Operations &gt; Patterns in Multiplication &gt; D &gt; <math>\tilde{A}</math>—table - Groups of 7</li> <li>• Operations &gt; Patterns in Multiplication &gt; D &gt; <math>\tilde{A}</math>—table - Groups of 8</li> <li>• Operations &gt; Patterns in Multiplication &gt; D &gt; <math>\tilde{A}</math>—table - Groups of 9</li> <li>• Operations &gt; Patterns in Multiplication &gt; D &gt; <math>\tilde{A}</math>—table - Groups of 10</li> <li>• Operations &gt; Introduction to Arrays &gt; C &gt; Introduction to Arrays with Multiplication</li> <li>• Operations &gt; Introduction to Arrays &gt; C &gt; Build Arrays with Multiplication</li> </ul>
<ul style="list-style-type: none"> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiplication and Division Equations &gt; Example 1</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiplication and Division Equations &gt; Example 2</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiplication and Division Equations &gt; Example 3</li> <li>• Operations &gt; Introduce Multiplication Sentences &gt; C &gt; Multiplication Sentences #1</li> <li>• Operations &gt; Introduce Multiplication Sentences &gt; C &gt; Multiplication Sentences #2</li> <li>• Operations &gt; Introduce Multiplication Facts... 2, 3, 4, 5 &gt; C &gt; Multiplication: Groups of 2</li> <li>• Operations &gt; Introduce Multiplication Facts... 2, 3, 4, 5 &gt; C &gt; Multiplication: Groups of 3</li> <li>• Operations &gt; Introduce Multiplication Facts... 2, 3, 4, 5 &gt; C &gt; Multiplication: Groups of 4</li> <li>• Operations &gt; Introduce Multiplication Facts... 2, 3, 4, 5 &gt; C &gt; Multiplication: Groups of 5</li> <li>• Operations &gt; Introduce Multiplication by 1 and by 0 &gt; C &gt; Multiplication: Groups of 1</li> <li>• Operations &gt; Introduce Multiplication by 1 and by 0 &gt; C &gt; Multiplication: Groups of 0</li> <li>• Operations &gt; Introduce Multiplication Facts... 6, 7, 8, 9 &gt; D &gt; Multiplication: Groups of 6</li> <li>• Operations &gt; Introduce Multiplication Facts... 6, 7, 8, 9 &gt; D &gt; Multiplication: Groups of 7</li> <li>• Operations &gt; Introduce Multiplication Facts... 6, 7, 8, 9 &gt; D &gt; Multiplication: Groups of 8</li> <li>• Operations &gt; Introduce Multiplication Facts... 6, 7, 8, 9 &gt; D &gt; Multiplication: Groups of 9</li> </ul>						

4.)	Grade 3	Operations and Algebraic Thinking	Represent and solve problems involving multiplication and division.	<p>Determine the unknown whole number in a multiplication or division equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations <math>8 \times ? = 48</math>, <math>5 = ? / 3</math>, <math>6 \times 6 = ?</math>.</p>	3.OA.04	<ul style="list-style-type: none"> <li>• Operations &gt; Patterns in Multiplication &gt; C &gt; <math>\bar{A}</math>—table - Groups of 2</li> <li>• Operations &gt; Patterns in Multiplication &gt; C &gt; <math>\bar{A}</math>—table - Groups of 3</li> <li>• Operations &gt; Patterns in Multiplication &gt; C &gt; <math>\bar{A}</math>—table - Groups of 4</li> <li>• Operations &gt; Patterns in Multiplication &gt; C &gt; <math>\bar{A}</math>—table - Groups of 5</li> <li>• Operations &gt; Patterns in Multiplication &gt; C &gt; <math>\bar{A}</math>—table - Groups of 5 to 10</li> <li>• Operations &gt; Patterns in Multiplication &gt; D &gt; <math>\bar{A}</math>—table - Groups of 6</li> <li>• Operations &gt; Patterns in Multiplication &gt; D &gt; <math>\bar{A}</math>—table - Groups of 7</li> <li>• Operations &gt; Patterns in Multiplication &gt; D &gt; <math>\bar{A}</math>—table - Groups of 8</li> <li>• Operations &gt; Patterns in Multiplication &gt; D &gt; <math>\bar{A}</math>—table - Groups of 9</li> <li>• Operations &gt; Patterns in Multiplication &gt; D &gt; <math>\bar{A}</math>—table - Groups of 10</li> <li>• Operations &gt; Introduction to Arrays &gt; C &gt; Introduction to Arrays with Multiplication</li> <li>• Operations &gt; Introduction to Arrays &gt; C &gt; Build Arrays with Multiplication</li> <li>• Operations &gt; Introduction to Division &gt; C &gt; Equal Groups of Eggs</li> <li>• Operations &gt; Introduction to Division &gt; C &gt; Sharing Oranges Equally</li> <li>• Operations &gt; Introduction to Division &gt; C &gt; Division Introduction - Eggs</li> <li>• Operations &gt; Introduction to Division &gt; C &gt; Division Introduction - Oranges</li> <li>• Operations &gt; Introduction to Division &gt; C &gt; Division - How many Groups?</li> <li>• Operations &gt; Introduction Division Facts... 2, 3, 4, 5 &gt; C &gt; Division - Groups of 2</li> <li>• Operations &gt; Introduction Division Facts... 2, 3, 4, 5 &gt; C &gt; Division - Groups of 3</li> <li>• Operations &gt; Introduction Division Facts... 2, 3, 4, 5 &gt; C &gt; Division - Groups of 4</li> <li>• Operations &gt; Introduction Division Facts... 2, 3, 4, 5 &gt; C &gt; Division - Groups of 5</li> <li>• Operations &gt; Introduction Division Facts... 6, 7, 8, 9 &gt; D &gt; Division - Groups of 6</li> <li>• Operations &gt; Introduction Division Facts... 6, 7, 8, 9 &gt; D &gt; Division - Groups of 7</li> <li>• Operations &gt; Introduction Division Facts... 6, 7, 8, 9 &gt; D &gt; Division - Groups of 8</li> <li>• Operations &gt; Introduction Division Facts... 6, 7, 8, 9 &gt; D &gt; Division - Groups of 9</li> </ul>
				Apply properties of operations as	<ul style="list-style-type: none"> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Associative Property &gt; Example 1</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Associative Property &gt; Example 2</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Commutative Property &gt; <math>5 \times 1 = 1 \times 5</math></li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Commutative Property &gt; <math>5 \times 2 = 2 \times 5</math></li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Commutative Property &gt; <math>5 \times 3 = 3 \times 5</math></li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Commutative Property &gt; <math>4 \times 3 = 3 \times 4</math></li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply by a Single Digit Multiplier &gt; The Distributive Method &gt; Example 1</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply by a Single Digit Multiplier &gt; The Distributive Method &gt; Example 2</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply by a Single Digit Multiplier &gt; The Distributive Method &gt; Example 3</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply by a Single Digit Multiplier &gt; The Distributive Method &gt; Question 1</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply by a Single Digit Multiplier &gt; The Distributive</li> </ul>	

5.)	Grade 3	Operations and Algebraic Thinking	Understand properties of multiplication and the relationship between multiplication and division.	strategies to multiply and divide. Examples: If $6 \times 4 = 24$ is known, then $4 \times 6 = 24$ is also known. (Commutative property of multiplication.) $3 \times 5 \times 2$ can be found by $3 \times 5 = 15$ , then $15 \times 2 = 30$ , or by $5 \times 2 = 10$ , then $3 \times 10 = 30$ . (Associative property of multiplication.) Knowing that $8 \times 5 = 40$ and $8 \times 2 = 16$ , one can find $8 \times 7$ as $8 \times (5 + 2) = (8 \times 5) + (8 \times 2) = 40 + 16 = 56$ . (Distributive property.)	3.OA.05	<ul style="list-style-type: none"> <li>Method &gt; Question 2</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply by a Single Digit Multiplier &gt; The Distributive Method &gt; Question 3</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Order of Operations &gt; Order of Operations in Multiplication &gt; Trial 1</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Order of Operations &gt; Order of Operations in Multiplication &gt; Trial 2</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Order of Operations &gt; Order of Operations in Multiplication &gt; Example 1</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Order of Operations &gt; Order of Operations in Multiplication &gt; Example 2</li> <li>• Whole Numbers &amp; Integers &gt; Order of Operations &gt; Word Problems &gt; Garbage</li> <li>• Whole Numbers &amp; Integers &gt; Order of Operations &gt; Word Problems &gt; Babysitting</li> <li>• Whole Numbers &amp; Integers &gt; Order of Operations &gt; Word Problems &gt; Shipping</li> <li>• Whole Numbers &amp; Integers &gt; Multiplying Integers &gt; Order in Multiplication &gt; Explanation 1</li> <li>• Whole Numbers &amp; Integers &gt; Multiplying Integers &gt; Order in Multiplication &gt; Explanation 2</li> <li>• Whole Numbers &amp; Integers &gt; Multiplying Integers &gt; Order in Multiplication &gt; Example 1</li> <li>• Whole Numbers &amp; Integers &gt; Order of Operations &gt; Order in Multiplication Whole Numbers &gt; Trial 1</li> <li>• Whole Numbers &amp; Integers &gt; Order of Operations &gt; Order in Multiplication Whole Numbers &gt; Trial 2</li> <li>• Whole Numbers &amp; Integers &gt; Order of Operations &gt; Order in Multiplication Whole Numbers &gt; Conclusion</li> <li>• Whole Numbers &amp; Integers &gt; Order of Operations &gt; Order in Multiplication Whole Numbers &gt; Example 1</li> <li>• Whole Numbers &amp; Integers &gt; Order of Operations &gt; Order in Multiplication Whole Numbers &gt; Example 2</li> <li>• Operations &gt; Demonstrate the Commutative Property &gt; C &gt; Multiplication - Any Order</li> </ul>
6.)	Grade 3	Operations and Algebraic Thinking	Understand properties of multiplication and the relationship between multiplication and division.	Understand division as an unknown-factor problem. For example, find 32 divided by 8 by finding the number that makes 32 when multiplied by 8.	3.OA.06	<ul style="list-style-type: none"> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Teams - Division and Multiplication</li> </ul>
7.)	Grade 3	Operations and Algebraic Thinking	Multiply and divide within 100.	Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$ , one knows $40$ divided by $5 = 8$ ) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.	3.OA.07	<ul style="list-style-type: none"> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; The 10 x 10 Multiplication Table &gt; User Picks</li> <li>• Fractions &gt; Products, Multiples, Factors &gt; Multiplication Table... to 10 x 10 &gt; Computer Picks</li> <li>• Fractions &gt; Products, Multiples, Factors &gt; Multiplication Table... to 10 x 10 &gt; User Picks</li> <li>• Fractions &gt; Products, Multiples, Factors &gt; Multiples &gt; The Concept</li> <li>• Fractions &gt; Products, Multiples, Factors &gt; Multiples &gt; Example 1</li> <li>• Fractions &gt; Products, Multiples, Factors &gt; Multiples &gt; Example 2</li> <li>• Fractions &gt; Products, Multiples, Factors &gt; Multiples &gt; Example 3</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; The 10 x 10 Multiplication Table &gt; Computer Picks</li> <li>• Operations &gt; Note Patterns in a 10<math>\bar{A}</math>—10 Multiplication Table &gt; D &gt; x table - User Picks</li> <li>• Operations &gt; Note Patterns in a 10<math>\bar{A}</math>—10</li> </ul>

						Multiplication Table > D > x table - Computer Picks
8.)	Grade 3	Operations and Algebraic Thinking	Solve problems involving the four operations, and identify and explain patterns in arithmetic.	Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.	3.OA.08	<ul style="list-style-type: none"> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Two Step Word Problems &gt; Example 1</li> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Two Step Word Problems &gt; Example 2</li> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Two Step Word Problems &gt; Example 3</li> <li>Whole Numbers &amp; Integers &gt; Addition and Subtraction of Whole Numbers &gt; Two Step Word Problems &gt; Example 1</li> <li>Whole Numbers &amp; Integers &gt; Addition and Subtraction of Whole Numbers &gt; Two Step Word Problems &gt; Example 2</li> <li>Whole Numbers &amp; Integers &gt; Addition and Subtraction of Whole Numbers &gt; Two Step Word Problems &gt; Example 3</li> </ul>
9.)	Grade 3	Operations and Algebraic Thinking	Solve problems involving the four operations, and identify and explain patterns in arithmetic.	Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. For example, observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equal addends.	3.OA.09	<ul style="list-style-type: none"> <li>Counting &gt; Skip Counting and Patterns &gt; C &gt; Patterns in Rows</li> <li>Operations &gt; Note Patterns in a 10<math>\times</math>10 Multiplication Table &gt; D &gt; x table - Patterns in Rows</li> <li>Operations &gt; Note Patterns in a 10<math>\times</math>10 Multiplication Table &gt; D &gt; x table - Patterns in Columns</li> <li>Operations &gt; Note Patterns in a 10<math>\times</math>10 Multiplication Table &gt; D &gt; x table - Other Patterns</li> </ul>
10.)	Grade 3	Number and Operations in Base Ten	Use place value understanding and properties of operations to perform multi-digit arithmetic.	Use place value understanding to round whole numbers to the nearest 10 or 100.	3.NBT.01	<ul style="list-style-type: none"> <li>Whole Numbers &amp; Integers &gt; The Meaning of Whole Numbers &gt; Rounding Large Numbers &gt; Example 1</li> <li>Whole Numbers &amp; Integers &gt; The Meaning of Whole Numbers &gt; Rounding Large Numbers &gt; Example 2</li> <li>Whole Numbers &amp; Integers &gt; The Meaning of Whole Numbers &gt; Rounding Large Numbers &gt; Example 3</li> <li>Comparing and Ordering &gt; Introduce... "Greater Than"; "Less Than" &gt; C &gt; To the Nearest Ten</li> </ul>
						<ul style="list-style-type: none"> <li>Whole Numbers &amp; Integers &gt; Addition and Subtraction of Whole Numbers &gt; Add... Partial Sums &gt; Example 1 - With Blocks</li> <li>Whole Numbers &amp; Integers &gt; Addition and Subtraction of Whole Numbers &gt; Add... Partial Sums &gt; Example 2 - With Blocks</li> <li>Whole Numbers &amp; Integers &gt; Addition and Subtraction of Whole Numbers &gt; Add... Partial Sums &gt; Example 3 - Without Blocks</li> <li>Whole Numbers &amp; Integers &gt; Addition and Subtraction of Whole Numbers &gt; Add... Partial Sums &gt; Example 4 - Without Blocks</li> <li>Whole Numbers &amp; Integers &gt; Addition and Subtraction of Whole Numbers &gt; Add... Partial Sums &gt; Example 5 - Without Blocks</li> <li>Whole Numbers &amp; Integers &gt; Addition and Subtraction of Whole Numbers &gt; Add... Right to Left &gt; Example 1 - With Blocks</li> <li>Whole Numbers &amp; Integers &gt; Addition and Subtraction of Whole Numbers &gt; Add... Right to Left &gt; Example 2 - With Blocks</li> <li>Whole Numbers &amp; Integers &gt; Addition and Subtraction of Whole Numbers &gt; Add... Right to Left &gt; Example 3 - Without Blocks</li> <li>Whole Numbers &amp; Integers &gt; Addition and Subtraction of Whole Numbers &gt; Add... Right to Left &gt; Example 4 - Without Blocks</li> <li>Whole Numbers &amp; Integers &gt; Addition and Subtraction of Whole Numbers &gt; Add... Trade First &gt; Example 1 - With Blocks</li> <li>Whole Numbers &amp; Integers &gt; Addition and Subtraction of Whole Numbers &gt; Add... Trade First &gt; Example 2 - With Blocks</li> <li>Whole Numbers &amp; Integers &gt; Addition and Subtraction of Whole Numbers &gt; Add... Trade First &gt; Example 3 - Without Blocks</li> <li>Whole Numbers &amp; Integers &gt; Addition and Subtraction of Whole Numbers &gt; Add... Trade First &gt; Example 4 - Without Blocks</li> </ul>

11.)

Grade  
3

Number and  
Operations  
in Base Ten

Use place value understanding and properties of operations to perform multi-digit arithmetic.

Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.

3.NBT.02

- Whole Numbers & Integers > Addition and Subtraction of Whole Numbers > Add... Trade First > Example 5 - Without Blocks
- Whole Numbers & Integers > Addition and Subtraction of Whole Numbers > Subtract... Add Up > Example 1 - With Blocks
- Whole Numbers & Integers > Addition and Subtraction of Whole Numbers > Subtract... Add Up > Example 2 - With Blocks
- Whole Numbers & Integers > Addition and Subtraction of Whole Numbers > Subtract... Add Up > Example 3 - With Blocks
- Whole Numbers & Integers > Addition and Subtraction of Whole Numbers > Subtract... Add Up > Example 4 - With Blocks
- Whole Numbers & Integers > Addition and Subtraction of Whole Numbers > Subtract... Add Up > Example 5 - Without Blocks
- Whole Numbers & Integers > Addition and Subtraction of Whole Numbers > Subtract... Right to Left > Example 1 - With Blocks
- Whole Numbers & Integers > Addition and Subtraction of Whole Numbers > Subtract... Right to Left > Example 2 - With Blocks
- Whole Numbers & Integers > Addition and Subtraction of Whole Numbers > Subtract... Right to Left > Example 3 - Without Blocks
- Whole Numbers & Integers > Addition and Subtraction of Whole Numbers > Subtract... Trade First > Example 1 - With Blocks
- Whole Numbers & Integers > Addition and Subtraction of Whole Numbers > Subtract... Trade First > Example 2 - With Blocks
- Whole Numbers & Integers > Addition and Subtraction of Whole Numbers > Subtract... Trade First > Example 3 - Without Blocks
- Whole Numbers & Integers > Addition and Subtraction of Whole Numbers > Subtract... Add Up to Zero > Example 1
- Whole Numbers & Integers > Addition and Subtraction of Whole Numbers > More Word Problems > Example 1
- Whole Numbers & Integers > Addition and Subtraction of Whole Numbers > More Word Problems > Example 2
- Whole Numbers & Integers > Addition and Subtraction of Whole Numbers > More Word Problems > Example 3
- Whole Numbers & Integers > Addition and Subtraction of Whole Numbers > More Word Problems > Example 4
- Whole Numbers & Integers > Addition and Subtraction of Whole Numbers > More Word Problems > Example 5
- Whole Numbers & Integers > Addition and Subtraction of Whole Numbers > More Word Problems > Example 6
- Whole Numbers & Integers > Addition and Subtraction of Whole Numbers > More Word Problems > Example 7
- Operations > Add 3 Digit Numbers... Concretely > D > Addition Without Regrouping
- Operations > Add 3 Digit Numbers... Concretely > D > Addition With Regrouping
- Operations > Add 3 Digit Numbers... Concretely > D > Addition With Regrouping - Any Column
- Operations > Add 3 Digit Numbers... Abstractly > D > Addition Without Regrouping
- Operations > Add 3 Digit Numbers... Abstractly > D > Addition With Regrouping #1
- Operations > Add 3 Digit Numbers... Abstractly > D > Addition With Regrouping #2
- Operations > Add 3 Digit Numbers... Abstractly > D > Addition With Regrouping #3
- Operations > Subtract 3 Digit Numbers... Concretely > D > Subtraction Without Regrouping
- Operations > Subtract 3 Digit Numbers... Concretely > D > Subtraction With Regrouping #1
- Operations > Subtract 3 Digit Numbers... Concretely > D > Subtraction With Regrouping #2
- Operations > Subtract 3 Digit Numbers... Concretely > D > Subtraction With Regrouping #3
- Operations > Subtract 3 Digit Numbers... Concretely > D > Subtraction With Regrouping -

						<ul style="list-style-type: none"> <li>Any Column</li> <li>Operations &gt; Subtract 3 Digit Numbers... Abstractly &gt; D &gt; Subtraction Without Regrouping</li> <li>Operations &gt; Subtract 3 Digit Numbers... Abstractly &gt; D &gt; Subtraction With Regrouping #1</li> <li>Operations &gt; Subtract 3 Digit Numbers... Abstractly &gt; D &gt; Subtraction With Regrouping #2</li> <li>Operations &gt; Subtract 3 Digit Numbers... Abstractly &gt; D &gt; Subtraction With Regrouping #3</li> <li>Operations &gt; Subtract 3 Digit Numbers... Abstractly &gt; D &gt; Subtraction With Regrouping #4</li> </ul>
12.)	Grade 3	Number and Operations in Base Ten	Use place value understanding and properties of operations to perform multi-digit arithmetic.	Multiply one-digit whole numbers by multiples of 10 in the range 10-90 (e.g., $9 \times 80$ , $5 \times 60$ ) using strategies based on place value and properties of operations.	3.NBT.03	<ul style="list-style-type: none"> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Patterns in Multiplication &gt; Patterns in Multiplication by 10</li> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Patterns in Multiplication &gt; Example 1</li> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply Single Digit by Multiple of 10 &gt; Example 1</li> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply Single Digit by Multiple of 10 &gt; Example 2</li> </ul>
						<ul style="list-style-type: none"> <li>Fractions &gt; The Meaning of Fractions &gt; Introduction...Think, Write, Say &gt; Circles</li> <li>Fractions &gt; The Meaning of Fractions &gt; Introduction...Think, Write, Say &gt; Squares</li> <li>Fractions &gt; The Meaning of Fractions &gt; Introduction...Think, Write, Say &gt; Balls</li> <li>Fractions &gt; The Meaning of Fractions &gt; Introduction...Think, Write, Say &gt; Examples</li> <li>Fractions &gt; The Meaning of Fractions &gt; Parts of a Fraction</li> <li>Fractions &gt; The Meaning of Fractions &gt; Part of a Whole &gt; One Half</li> <li>Fractions &gt; The Meaning of Fractions &gt; Part of a Whole &gt; One Third</li> <li>Fractions &gt; The Meaning of Fractions &gt; Part of a Whole &gt; One Quarter</li> <li>Fractions &gt; The Meaning of Fractions &gt; Parts of a Whole &gt; Two Fifths</li> <li>Fractions &gt; The Meaning of Fractions &gt; Parts of a Whole &gt; Three Eighths</li> <li>Fractions &gt; The Meaning of Fractions &gt; Parts of a Whole &gt; Seven Tenths</li> <li>Fractions &gt; The Meaning of Fractions &gt; Write the Fraction &gt; Question 1</li> <li>Fractions &gt; The Meaning of Fractions &gt; Write the Fraction &gt; Question 2</li> <li>Fractions &gt; The Meaning of Fractions &gt; Write the Fraction &gt; Question 3</li> <li>Fractions &gt; The Meaning of Fractions &gt; Write the Fraction &gt; Question 4</li> <li>Fractions &gt; The Meaning of Fractions &gt; Pattern Blocks &gt; Example 1</li> <li>Fractions &gt; The Meaning of Fractions &gt; Pattern Blocks &gt; Example 2</li> <li>Fractions &gt; The Meaning of Fractions &gt; Pattern Blocks &gt; Example 3</li> <li>Fractions &gt; The Meaning of Fractions &gt; Pattern Blocks &gt; Example 4</li> <li>Fractions &gt; The Meaning of Fractions &gt; Fraction Strips &gt; Concept 1</li> <li>Fractions &gt; The Meaning of Fractions &gt; Fraction Strips &gt; Concept 2</li> <li>Fractions &gt; The Meaning of Fractions &gt; Fraction Strips &gt; Concept 3</li> <li>Fractions &gt; The Meaning Of Fractions &gt; Wholes and Parts &gt; Fractions of a Shape &gt; Task 1 - Quarters of a Shape</li> <li>Fractions &gt; The Meaning Of Fractions &gt; Wholes and Parts &gt; Fractions of a Shape &gt; Task 2 - Thirds of a Shape</li> <li>Fractions &gt; The Meaning Of Fractions &gt; Wholes and Parts &gt; Fractions of a Shape &gt; Task 4 - Sixths of a Shape</li> <li>Fractions &gt; The Meaning Of Fractions &gt; Wholes and Parts &gt; Fractions of a Shape &gt; Task 5 - Eighths of a Shape</li> <li>Fractions &gt; The Meaning Of Fractions &gt; Fractions of a Shape &gt; Fraction of a Square &gt;</li> </ul>



13.)	Grade 3	Number and Operations - Fractions	Develop understanding of fractions as numbers.	Understand a fraction $\frac{1}{b}$ as the quantity formed by 1 part when a whole is partitioned into $b$ equal parts; understand a fraction $\frac{a}{b}$ as the quantity formed by $a$ parts of size $\frac{1}{b}$ .	3.NF.01	<ul style="list-style-type: none"> <li>• One Half</li> <li>• Fractions &gt; The Meaning Of Fractions &gt; Fractions of a Shape &gt; Fraction of a Square &gt; One Quarter</li> <li>• Fractions &gt; The Meaning Of Fractions &gt; Fractions of a Shape &gt; Fraction of a Square &gt; One Eighth</li> <li>• Fractions &gt; The Meaning Of Fractions &gt; Fractions of a Shape &gt; Fraction of a Square &gt; Three Eighths</li> <li>• Fractions &gt; The Meaning Of Fractions &gt; Fractions of a Shape &gt; Fraction of a Hexagon &gt; One Sixth</li> <li>• Fractions &gt; The Meaning Of Fractions &gt; Fractions of a Shape &gt; Fraction of a Hexagon &gt; One Third</li> <li>• Fractions &gt; The Meaning Of Fractions &gt; Fractions of a Shape &gt; Fraction of a Hexagon &gt; Two Thirds</li> <li>• Fractions &gt; The Meaning Of Fractions &gt; Fractions of a Shape &gt; Fraction of a Hexagon &gt; One Half</li> <li>• Fractions &gt; The Meaning Of Fractions &gt; Fractions of a Shape &gt; Fraction of a Hexagon &gt; Five Sixths</li> <li>• Fractions &gt; The Meaning Of Fractions &gt; Fractions of Odd Shapes &gt; Example 1</li> <li>• Fractions &gt; The Meaning Of Fractions &gt; Fractions of Odd Shapes &gt; Example 2</li> <li>• Fractions &gt; The Meaning Of Fractions &gt; Fraction of a Pie &gt; Example 1</li> <li>• Fractions &gt; The Meaning Of Fractions &gt; Fraction of a Pie &gt; Example 2</li> <li>• Fractions &gt; The Meaning Of Fractions &gt; Fractions of a Shape &gt; Fraction of an Octagon &gt; One Eighth</li> <li>• Fractions &gt; The Meaning Of Fractions &gt; Fractions of a Shape &gt; Fraction of an Octagon &gt; One Quarter</li> <li>• Fractions &gt; The Meaning Of Fractions &gt; Fractions of a Shape &gt; Fraction of an Octagon &gt; One Half</li> <li>• Fractions &gt; The Meaning Of Fractions &gt; Fractions of a Shape &gt; Fraction of an Octagon &gt; Five Eighths</li> <li>• Fractions &gt; The Meaning Of Fractions &gt; Fractions of a Shape &gt; Fraction of an Octagon &gt; Three Fourths</li> <li>• Fractions &gt; The Meaning Of Fractions &gt; Fractions of a Shape &gt; Fraction of a Shape: 3 Choices</li> <li>• Counting &gt; Introduce Fractions... Part of a Whole &gt; B &gt; One Half</li> <li>• Counting &gt; Introduce Fractions... Part of a Whole &gt; B &gt; One Third</li> <li>• Counting &gt; Introduce Fractions... Part of a Whole &gt; B &gt; One Quarter</li> <li>• Counting &gt; Introduce Common Fractions... Parts of a Whole &gt; B &gt; One Half of a Shape</li> <li>• Counting &gt; Introduce Common Fractions... Parts of a Whole &gt; B &gt; Two Thirds of a Shape</li> <li>• Counting &gt; Introduce Common Fractions... Parts of a Whole &gt; B &gt; Three Quarters of a Shape</li> <li>• Counting &gt; Introduce Common Fractions... Parts of a Whole &gt; B &gt; Fifths to Tenths #1</li> <li>• Counting &gt; Introduce Common Fractions... Parts of a Whole &gt; C &gt; Fifths to Tenths #2</li> <li>• Counting &gt; Introduce Common Fractions... Parts of a Whole &gt; C &gt; Write the Fraction #1</li> <li>• Counting &gt; Introduce Common Fractions... Parts of a Whole &gt; C &gt; Write the Fraction #2</li> <li>• Counting &gt; Introduce Fraction of a Set &gt; C &gt; Fraction of a Set</li> </ul>
				Understand a fraction as a number on the number line; represent fractions on a number line diagram.  a.) Represent a fraction $\frac{1}{b}$ on	<ul style="list-style-type: none"> <li>• a.)</li> <li>• Fractions &gt; The Meaning of Fractions &gt; Fractions on a Number Line &gt; Halves</li> <li>• Fractions &gt; The Meaning of Fractions &gt; Fractions on a Number Line &gt; Thirds</li> <li>• Fractions &gt; The Meaning of Fractions &gt; Fractions on a Number Line &gt; Quarters</li> <li>• Fractions &gt; The Meaning of Fractions &gt; Fractions on a Number Line &gt; Summary</li> <li>• Fractions &gt; The Meaning of Fractions &gt; Fraction of a Gas Tank</li> <li>• b.)</li> <li>• Fractions &gt; The Meaning of Fractions &gt; Fractions</li> </ul>	

14.)	Grade 3	Number and Operations - Fractions	Develop understanding of fractions as numbers.	<p>a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into b equal parts. Recognize that each part has size <math>1/b</math> and that the endpoint of the part based at 0 locates the number <math>1/b</math> on the number line.</p> <p>b.) Represent a fraction <math>a/b</math> on a number line diagram by marking off a lengths <math>1/b</math> from 0. Recognize that the resulting interval has size <math>a/b</math> and that its endpoint locates the number <math>a/b</math> on the number line.</p>	3.NF.02	<ul style="list-style-type: none"> <li>• on a Number Line &gt; Halves</li> <li>• Fractions &gt; The Meaning of Fractions &gt; Fractions on a Number Line &gt; Thirds</li> <li>• Fractions &gt; The Meaning of Fractions &gt; Fractions on a Number Line &gt; Quarters</li> <li>• Fractions &gt; The Meaning of Fractions &gt; Fractions on a Number Line &gt; Summary</li> <li>• Fractions &gt; The Meaning of Fractions &gt; Fractions on a Number Line &gt; Place Them &gt; Example 1</li> <li>• Fractions &gt; The Meaning of Fractions &gt; Fractions on a Number Line &gt; Place Them &gt; Example 2</li> <li>• Fractions &gt; The Meaning of Fractions &gt; Fractions on a Number Line &gt; Place Them &gt; Example 3</li> <li>• Fractions &gt; The Meaning of Fractions &gt; Fractions on a Number Line &gt; Place Them &gt; Example 4</li> <li>• Fractions &gt; The Meaning of Fractions &gt; Fraction of a Gas Tank</li> <li>• Fractions &gt; The Meaning Of Fractions &gt; Comparison of Fractions &gt; Concept 2 - Circles &gt; Example 2</li> <li>• Fractions &gt; The Meaning Of Fractions &gt; Comparison of Fractions &gt; Concept 2 - Circles &gt; Example 3</li> <li>• Fractions &gt; The Meaning Of Fractions &gt; Comparison of Fractions &gt; Concept 2 - Circles &gt; Example 4</li> </ul>
15.)	Grade 3	Number and Operations - Fractions	Develop understanding of fractions as numbers.	<p>Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.</p> <p>a.) Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line.</p> <p>b.) Recognize and generate simple equivalent fractions, e.g., <math>1/2 = 2/4</math>, <math>4/6 = 2/3</math>. Explain why the fractions are equivalent, e.g., by using a visual fraction model.</p> <p>c.) Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. Examples: Express 3 in the form <math>3 = 3/1</math>; recognize that <math>6/1 = 6</math>; locate <math>4/4</math> and 1 at the same point of a number line diagram.</p> <p>d.) Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with the symbols <math>&gt;</math>, <math>=</math>, or <math>&lt;</math>, and justify the conclusions, e.g., by using a visual fraction model.</p>	3.NF.03	<ul style="list-style-type: none"> <li>• a.)</li> <li>• Fractions &gt; Equivalent Fractions &gt; Equivalent Fractions on a Numberline</li> <li>• b.)</li> <li>• Fractions &gt; Equivalent Fractions &gt; Introduction &gt; Square</li> <li>• Fractions &gt; Equivalent Fractions &gt; Introduction &gt; Triangle</li> <li>• Fractions &gt; Equivalent Fractions &gt; Pattern Blocks &gt; Hexagon 1</li> <li>• Fractions &gt; Equivalent Fractions &gt; Pattern Blocks &gt; Hexagon 2</li> <li>• Fractions &gt; Equivalent Fractions &gt; Fraction Strips &gt; Concept 1</li> <li>• Fractions &gt; Equivalent Fractions &gt; Equivalent Fractions in a Multiplication Table</li> <li>• Fractions &gt; Equivalent Fractions &gt; Equivalent Fractions...The Pattern</li> <li>• Fractions &gt; Multiplication and Division of Decimals &gt; Preliminaries to Division &gt; Graphic Example</li> <li>• Fractions &gt; Multiplication and Division of Decimals &gt; Preliminaries to Division &gt; Multiplication Table</li> <li>• c.)</li> <li>• Fractions &gt; Equivalent Fractions &gt; One</li> <li>• Fractions &gt; Improper Fractions and Mixed Numbers &gt; The Concept... Cubes &gt; One Whole &gt; Example 1</li> <li>• Fractions &gt; Improper Fractions and Mixed Numbers &gt; The Concept... Cubes &gt; One Whole &gt; Example 2</li> <li>• Fractions &gt; Improper Fractions and Mixed Numbers &gt; The Concept... Cubes &gt; One Whole &gt; Example 3</li> <li>• d.)</li> <li>• Fractions &gt; The Meaning of Fractions &gt; Comparison of Fractions &gt; Concept 1 - Fraction Strips</li> <li>• Fractions &gt; The Meaning of Fractions &gt; Comparison of Fractions &gt; Concept 2 - Circles &gt; Example 1</li> <li>• Fractions &gt; The Meaning of Fractions &gt; Comparison of Fractions &gt; Concept 2 - Circles &gt; Example 2</li> <li>• Fractions &gt; The Meaning of Fractions &gt; Comparison of Fractions &gt; Concept 2 - Circles &gt; Example 3</li> <li>• Fractions &gt; The Meaning of Fractions &gt; Comparison of Fractions &gt; Concept 2 - Circles &gt; Example 4</li> <li>• Fractions &gt; Equivalent Fractions &gt; Comparison of Fractions</li> <li>• Comparing and Ordering &gt; Compare Fractions &gt; D &gt; Compare Fractions</li> <li>• Measurement &amp; Geometry &gt; Time &gt; Telling</li> </ul>

16.)	Grade 3	Measurement and Data	Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.	Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.	3.MD.01	<ul style="list-style-type: none"> <li>• Time Revisited &gt; Ex 1: On the Hour</li> <li>• Measurement &amp; Geometry &gt; Time &gt; Telling Time Revisited &gt; Ex 2: Fifteen Minutes After the Hour</li> <li>• Measurement &amp; Geometry &gt; Time &gt; Telling Time Revisited &gt; Ex 3: Fifteen Minutes Before the Hour</li> <li>• Measurement &amp; Geometry &gt; Time &gt; Telling Time Revisited &gt; Ex 4: On the Half Hour</li> <li>• Measurement &amp; Geometry &gt; Time &gt; Telling Time Revisited &gt; Ex 5: Times Before and After the Hour to Five Minutes</li> <li>• Measurement &amp; Geometry &gt; Time &gt; Elapsed Time Revisited &gt; Ex 1: Using an Analog Clock</li> <li>• Measurement &amp; Geometry &gt; Time &gt; Elapsed Time Revisited &gt; Ex 2: Using a Number Line</li> <li>• Measurement &amp; Geometry &gt; Time &gt; Word Problems Involving Time &gt; Example 1</li> <li>• Measurement &amp; Geometry &gt; Time &gt; Word Problems Involving Time &gt; Example 2</li> <li>• Measurement &amp; Geometry &gt; Time &gt; Word Problems Involving Time &gt; Example 3</li> <li>• Comparing and Ordering &gt; Understand Measurement of Time &gt; C &gt; Times to the Minute</li> <li>• Comparing and Ordering &gt; Describe Elapsed Time... Hours, 5 Minutes &gt; C &gt; Elapsed Time in Hours...#1</li> <li>• Comparing and Ordering &gt; Describe Elapsed Time... Hours, 5 Minutes &gt; C &gt; Elapsed Time in Hours...#2</li> <li>• Comparing and Ordering &gt; Describe Elapsed Time... Hours, 5 Minutes &gt; D &gt; Elapsed Time - 5 Minutes... #1</li> <li>• Comparing and Ordering &gt; Describe Elapsed Time... Hours, 5 Minutes &gt; D &gt; Elapsed Time - 5 Minutes... #2</li> <li>• Comparing and Ordering &gt; Describe Elapsed Time... Hours, 5 Minutes &gt; D &gt; Times Goes By - Analog</li> <li>• Comparing and Ordering &gt; Describe Elapsed Time... Hours, 5 Minutes &gt; D &gt; Times Goes By - Digital</li> <li>• Comparing and Ordering &gt; Describe Elapsed Time... Minutes &gt; D &gt; Elapsed Time - Minutes... #1</li> <li>• Comparing and Ordering &gt; Describe Elapsed Time... Minutes &gt; D &gt; Elapsed Time - Minutes... #2</li> <li>• Comparing and Ordering &gt; Describe Back in Time... Hours, 5 Minutes &gt; C &gt; Back in Time in Hours... #1</li> <li>• Comparing and Ordering &gt; Describe Back in Time... Hours, 5 Minutes &gt; C &gt; Back in Time in Hours... #2</li> <li>• Comparing and Ordering &gt; Describe Back in Time... Hours, 5 Minutes &gt; D &gt; Back in Time - 5 Minutes... #1</li> <li>• Comparing and Ordering &gt; Describe Back in Time... Hours, 5 Minutes &gt; D &gt; Back in Time - 5 Minutes... #2</li> <li>• Comparing and Ordering &gt; Describe Back in Time... Hours, 5 Minutes &gt; D &gt; Early and Late</li> <li>• Comparing and Ordering &gt; Describe Back in Time... Minutes &gt; D &gt; Elapsed Time - Minutes... #1</li> <li>• Comparing and Ordering &gt; Describe Back in Time... Minutes &gt; D &gt; Elapsed Time - Minutes... #2</li> <li>• Problem Solving &gt; Strategies &gt; Draw a Picture &gt; A Trip to School</li> </ul>
						<ul style="list-style-type: none"> <li>• Measurement &amp; Geometry &gt; Capacity &gt; Definition &gt; Benchmarks &gt; Metric</li> <li>• Measurement &amp; Geometry &gt; Capacity &gt; Definition &gt; Benchmarks &gt; US Standard</li> <li>• Measurement &amp; Geometry &gt; Guess &amp; Measure - Metric &gt; Example 1</li> <li>• Measurement &amp; Geometry &gt; Guess &amp; Measure - Metric &gt; Example 2</li> <li>• Measurement &amp; Geometry &gt; Guess &amp; Measure - Metric &gt; Example 3</li> <li>• Measurement &amp; Geometry &gt; Guess &amp; Measure - Metric &gt; Example 4</li> <li>• Measurement &amp; Geometry &gt; Guess &amp; Measure - Metric &gt; Example 5</li> <li>• Measurement &amp; Geometry &gt; Guess &amp; Measure - US Standard &gt; Example 1</li> <li>• Measurement &amp; Geometry &gt; Guess &amp; Measure -</li> </ul>

17.)	Grade 3	Measurement and Data	Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.	Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.	3.MD.02	<ul style="list-style-type: none"> <li>US Standard &gt; Example 2</li> <li>• Measurement &amp; Geometry &gt; Guess &amp; Measure - US Standard &gt; Example 3</li> <li>• Measurement &amp; Geometry &gt; Mass &amp; Weight &gt; Definitions</li> <li>• Measurement &amp; Geometry &gt; Mass &amp; Weight &gt; Benchmarks</li> <li>• Measurement &amp; Geometry &gt; Mass &amp; Weight &gt; Balance Scale Introduction</li> <li>• Measurement &amp; Geometry &gt; Mass &amp; Weight &gt; Guess &amp; Measure - Metric &gt; Example 1</li> <li>• Measurement &amp; Geometry &gt; Mass &amp; Weight &gt; Guess &amp; Measure - Metric &gt; Example 2</li> <li>• Measurement &amp; Geometry &gt; Mass &amp; Weight &gt; Guess &amp; Measure - Metric &gt; Example 3</li> <li>• Measurement &amp; Geometry &gt; Mass &amp; Weight &gt; Guess &amp; Measure - Metric &gt; Example 4 - Fractions</li> <li>• Measurement &amp; Geometry &gt; Mass &amp; Weight &gt; Guess &amp; Measure - Metric &gt; Example 5 - Fractions</li> <li>• Measurement &amp; Geometry &gt; Mass &amp; Weight &gt; Guess &amp; Measure - US Standard &gt; Example 1</li> <li>• Measurement &amp; Geometry &gt; Mass &amp; Weight &gt; Guess &amp; Measure - US Standard &gt; Example 2</li> <li>• Measurement &amp; Geometry &gt; Mass &amp; Weight &gt; Guess &amp; Measure - US Standard &gt; Example 3</li> <li>• Measurement &amp; Geometry &gt; Mass &amp; Weight &gt; Guess &amp; Measure - US Standard &gt; Example 4</li> <li>•</li> </ul>
18.)	Grade 3	Measurement and Data	Represent and interpret data.	Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step "how many more" and "how many less" problems using information presented in scaled bar graphs. For example, draw a bar graph in which each square in the bar graph might represent 5 pets.	3.MD.03	<ul style="list-style-type: none"> <li>• Graphing &gt; Reading &amp; Sketching Graphs &gt; Graphs With a Scale &gt; Example 2... Books and Days</li> <li>• Graphing &gt; Reading &amp; Sketching Graphs &gt; Graphs With a Scale &gt; Example 3... The Travel Log</li> <li>• Graphing &gt; Statistics &gt; An Introduction &gt; Pictograph 1</li> <li>• Graphing &gt; Statistics &gt; An Introduction &gt; Pictograph 2</li> <li>• Graphing &gt; Statistics &gt; An Introduction &gt; Bar Graph 1</li> <li>• Graphing &gt; Statistics &gt; An Introduction &gt; Bar Graph 2</li> <li>• Graphing &gt; Statistics &gt; Presenting Data &gt; Bar Graph &gt; Example 1... Energy</li> <li>• Graphing &gt; Statistics &gt; Presenting Data &gt; Bar Graph &gt; Example 2... Lengths of Rivers</li> <li>• Operations &gt; Given Graph... Perform Operations &gt; C &gt; Operations with Tally Charts</li> <li>• Operations &gt; Given Graph... Perform Operations &gt; C &gt; Operations with Pictographs</li> <li>• Operations &gt; Given Graph... Perform Operations &gt; C &gt; Operations with Bar Graphs</li> <li>• Problem Solving &gt; Strategies &gt; Make a Graph &gt; D &gt; Classroom Shoes</li> <li>• Problem Solving &gt; Strategies &gt; Make a Graph &gt; D &gt; Animals</li> </ul>
19.)	Grade 3	Measurement and Data	Represent and interpret data.	Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units-whole numbers, halves, or quarters.	3.MD.04	<ul style="list-style-type: none"> <li>• Graphing &gt; Statistics &gt; Line Plot &gt; Creating a Line Plot &gt; Example 1</li> <li>• Graphing &gt; Statistics &gt; Line Plot &gt; Interpreting a Line Plot &gt; Example 1</li> </ul>
				Recognize area as an attribute of plane figures and understand		<ul style="list-style-type: none"> <li>• a.)</li> <li>• Algebra &gt; Tiles And Algebra &gt; Area &gt; Area... The Concept</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Introduction to Area &gt; Unit Square</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Introduction to Area &gt; The Square Grid</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Areas of Polygons &gt; Area of a Rectangle &gt; Concept</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Areas of Polygons &gt; Area of a Rectangle &gt; Example 1</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area</li> </ul>

20.)	Grade 3	Measurement and Data	Geometric measurement: understand concepts of area and relate area to multiplication and to addition.	<p>concepts of area measurement.</p> <p>a.) A square with side length 1 unit, called "a unit square," is said to have "one square unit" of area, and can be used to measure area.</p> <p>b.) A plane figure which can be covered without gaps or overlaps by <math>n</math> unit squares is said to have an area of <math>n</math> square units.</p>	3.MD.05	<p>of Polygons &gt; Areas of Polygons &gt; Area of a Rectangle &gt; Example 2</p> <p>b.)</p> <ul style="list-style-type: none"> <li>Algebra &gt; Tiles And Algebra &gt; Area &gt; Area... The Concept</li> <li>Algebra &gt; Tiles And Algebra &gt; Area &gt; Area... Example 1</li> <li>Algebra &gt; Tiles And Algebra &gt; Area &gt; Area... Example 2</li> <li>Algebra &gt; Tiles And Algebra &gt; Area &gt; Area... Example 3</li> <li>Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Introduction to Area &gt; Units</li> <li>Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Areas of Polygons &gt; Area of a Rectangle &gt; Concept</li> <li>Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Areas of Polygons &gt; Area of a Rectangle &gt; Example 1</li> <li>Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Areas of Polygons &gt; Area of a Rectangle &gt; Example 2</li> <li>Exponents &gt; Pythagorean Theorem &gt; Squares on a Grid &gt; Example 2</li> <li>Operations &gt; Finding the Area of a Shape &gt; D &gt; Area of a Shaded Region #1</li> <li>Operations &gt; Finding the Area of a Shape &gt; D &gt; Area of a Shaded Region #2</li> </ul>
21.)	Grade 3	Measurement and Data	Geometric measurement: understand concepts of area and relate area to multiplication and to addition.	Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units).	3.MD.06	<ul style="list-style-type: none"> <li>Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Introduction to Area &gt; Units</li> <li>Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Areas of Polygons &gt; Area of a Rectangle &gt; Concept</li> <li>Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Areas of Polygons &gt; Area of a Rectangle &gt; Example 1</li> <li>Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Areas of Polygons &gt; Area of a Rectangle &gt; Example 2</li> <li>Algebra &gt; Tiles And Algebra &gt; Area &gt; Area... The Concept</li> <li>Algebra &gt; Tiles And Algebra &gt; Area &gt; Area... Example 1</li> <li>Algebra &gt; Tiles And Algebra &gt; Area &gt; Area... Example 2</li> <li>Algebra &gt; Tiles And Algebra &gt; Area &gt; Area... Example 3</li> <li>Exponents &gt; Pythagorean Theorem &gt; Squares on a Grid &gt; Example 1</li> <li>Exponents &gt; Pythagorean Theorem &gt; Squares on a Grid &gt; Example 2</li> </ul>
22.)	Grade 3	Measurement and Data	Geometric measurement: understand concepts of area and relate area to	<p>Relate area to the operations of multiplication and addition.</p> <p>a.) Find the area of a rectangle with whole-number side lengths by tiling it, and show that the area is the same as would be found by multiplying the side lengths.</p> <p>b.) Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning.</p> <p>c.) Use tiling to show in a</p>	3.MD.07	<p>a.)</p> <ul style="list-style-type: none"> <li>Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Areas of Polygons &gt; Area of a Rectangle &gt; Concept</li> </ul> <p>b.)</p> <ul style="list-style-type: none"> <li>Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Areas of Polygons &gt; Area of a Rectangle &gt; Example 3</li> <li>Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Areas of Polygons &gt; Area of a Rectangle &gt; Example 4</li> </ul> <p>c.)</p> <ul style="list-style-type: none"> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply by a Single Digit Multiplier &gt; The Distributive Method &gt; Example 1</li> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply by a Single Digit Multiplier &gt; The Distributive Method &gt; Example 2</li> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply by a Single Digit Multiplier &gt; The Distributive Method &gt; Example 3</li> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply by a Single Digit Multiplier &gt; The Distributive Method &gt; Question 1</li> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply by a Single Digit Multiplier &gt; The Distributive Method &gt; Question 2</li> </ul>

			<p>multiplication and to addition.</p> <p>concrete case that the area of a rectangle with whole-number side lengths <math>a</math> and <math>b + c</math> is the sum of <math>a \times b</math> and <math>a \times c</math>. Use area models to represent the distributive property in mathematical reasoning.</p> <p>d.) Recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real world problems.</p>		<ul style="list-style-type: none"> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply by a Single Digit Multiplier &gt; The Distributive Method &gt; Question 3</li> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply by a Single Digit Multiplier &gt; Distributive Law Revisited &gt; Ex. 1 - Rectangle Area</li> <li>Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Areas of Polygons &gt; Area of a Rectangle &gt; Example 1</li> <li>Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Areas of Polygons &gt; Area of a Rectangle &gt; Example 2</li> <li>Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Areas of Polygons &gt; Area of a Rectangle &gt; Example 4</li> </ul> <p>d.)</p> <ul style="list-style-type: none"> <li>Exponents &gt; Pythagorean Theorem &gt; Squares on a Grid &gt; Example 3</li> <li>Exponents &gt; Pythagorean Theorem &gt; Squares on a Grid &gt; Example 4</li> <li>Operations &gt; Finding the Area of a Shape &gt; D &gt; Area of a Shaded Region 1</li> <li>Operations &gt; Finding the Area of a Shape &gt; D &gt; Area of a Shaded Region 2</li> </ul>
23.)	Grade 3	Measurement and Data	<p>Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.</p> <p>Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.</p>	3.MD.08	<ul style="list-style-type: none"> <li>Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Given Area and Perimeter - Create Shape &gt; Example 1</li> <li>Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Given Area and Perimeter - Create Shape &gt; Example 2</li> <li>Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Given Area and Perimeter - Create Shape &gt; Example 3</li> <li>Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Given Area and Perimeter - Create Shape &gt; Example 4</li> <li>Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Walk Around a Polygon &gt; Joan Walks</li> <li>Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Walk Around a Polygon &gt; Perimeter of Various Shapes &gt; Example 1</li> <li>Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Walk Around a Polygon &gt; Perimeter of Various Shapes &gt; Example 2</li> <li>Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Walk Around a Polygon &gt; Perimeter of Various Shapes &gt; Example 3</li> <li>Operations &gt; Finding the Perimeter of a Shape &gt; C &gt; Perimeter of a Rectangle</li> <li>Operations &gt; Finding the Perimeter of a Shape &gt; D &gt; Perimeter of a 2D Shape</li> </ul>
24.)	Grade 3	Geometry	<p>Reason with shapes and their attributes.</p> <p>Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.</p>	3.G.01	<ul style="list-style-type: none"> <li>Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Polygons &gt; What are They?</li> <li>Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Polygons &gt; Regular v. Irregular</li> <li>Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Polygons &gt; Quadrilaterals &gt; Definition</li> <li>Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Polygons &gt; Quadrilaterals &gt; Classifications &gt; Trapezoid</li> <li>Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Polygons &gt; Quadrilaterals &gt; Classifications &gt; Parallelogram</li> <li>Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Polygons &gt; Quadrilaterals &gt; Classifications &gt; Rectangle</li> <li>Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Polygons &gt; Quadrilaterals &gt; Classifications &gt; Rhombus</li> <li>Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Polygons &gt; Quadrilaterals &gt; Classifications &gt; Square</li> </ul>
					<ul style="list-style-type: none"> <li>Fractions &gt; The Meaning of Fractions &gt; Introduction...Think, Write, Say &gt; Circles</li> <li>Fractions &gt; The Meaning of Fractions &gt; Introduction...Think, Write, Say &gt; Squares</li> <li>Fractions &gt; The Meaning of Fractions &gt; Introduction...Think, Write, Say &gt; Balls</li> <li>Fractions &gt; The Meaning of Fractions &gt;</li> </ul>

25.)	Grade 3	Geometry	Reason with shapes and their attributes.	Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. For example, partition a shape into 4 parts with equal area, and describe the area of each part as $\frac{1}{4}$ of the area of the shape.	3.G.02	<ul style="list-style-type: none"> <li>Introduction...Think, Write, Say &gt; Examples</li> <li>• Fractions &gt; The Meaning of Fractions &gt; Parts of a Fraction</li> <li>• Fractions &gt; The Meaning of Fractions &gt; Part of a Whole &gt; One Half</li> <li>• Fractions &gt; The Meaning of Fractions &gt; Part of a Whole &gt; One Third</li> <li>• Fractions &gt; The Meaning of Fractions &gt; Part of a Whole &gt; One Quarter</li> <li>• Fractions &gt; The Meaning of Fractions &gt; Parts of a Whole &gt; Two Fifths</li> <li>• Fractions &gt; The Meaning of Fractions &gt; Parts of a Whole &gt; Three Eighths</li> <li>• Fractions &gt; The Meaning of Fractions &gt; Parts of a Whole &gt; Seven Tenths</li> <li>• Fractions &gt; The Meaning of Fractions &gt; Write the Fraction &gt; Question 1</li> <li>• Fractions &gt; The Meaning of Fractions &gt; Write the Fraction &gt; Question 2</li> <li>• Fractions &gt; The Meaning of Fractions &gt; Write the Fraction &gt; Question 3</li> <li>• Fractions &gt; The Meaning of Fractions &gt; Write the Fraction &gt; Question 4</li> <li>• Fractions &gt; The Meaning of Fractions &gt; Pattern Blocks &gt; Example 1</li> <li>• Fractions &gt; The Meaning of Fractions &gt; Pattern Blocks &gt; Example 2</li> <li>• Fractions &gt; The Meaning of Fractions &gt; Pattern Blocks &gt; Example 3</li> <li>• Fractions &gt; The Meaning of Fractions &gt; Pattern Blocks &gt; Example 4</li> </ul>
26.)	Grade 4	Operations and Algebraic Thinking	Use the four operations with whole numbers to solve problems.	Interpret a multiplication equation as a comparison, e.g., interpret $35 = 5 \times 7$ as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations.	4.OA.01	<ul style="list-style-type: none"> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Commutative Property &gt; <math>5 \times 1 = 1 \times 5</math></li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Commutative Property &gt; <math>5 \times 2 = 2 \times 5</math></li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Commutative Property &gt; <math>5 \times 3 = 3 \times 5</math></li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Commutative Property &gt; <math>4 \times 3 = 3 \times 4</math></li> </ul>
27.)	Grade 4	Operations and Algebraic Thinking	Use the four operations with whole numbers to solve problems.	Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.	4.OA.02	<ul style="list-style-type: none"> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Word Problems by Various Methods &gt; Example 1 - Oranges</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Word Problems by Various Methods &gt; Example 2 - Bananas</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Word Problems by Various Methods &gt; Example 3 - Cycling</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Word Problems by Various Methods &gt; Example 4 - Baseball Cards</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Word Problems by Various Methods &gt; Example 5 - Cookies</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Word Problems by Various Methods &gt; Example 6 - Running</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Word Problems by Various Methods &gt; Example 7 - Apples</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Word Problems by Various Methods &gt; Example 8 - Savings</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Word Problems by Various Methods &gt; Example 9 - Sit-ups</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Word Problems by Various Methods &gt; Example 10 - Taxi</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Word Problems by Various Methods &gt; Example 11 - Skipping</li> </ul>
				Solve multistep word problems posed with whole numbers and having whole-number answers		<ul style="list-style-type: none"> <li>• Whole Numbers &amp; Integers &gt; Addition and Subtraction of Whole Numbers &gt; Two Step Word Problems &gt; Example 1</li> <li>• Whole Numbers &amp; Integers &gt; Addition and Subtraction of Whole Numbers &gt; Two Step Word Problems &gt; Example 2</li> <li>• Whole Numbers &amp; Integers &gt; Addition and Subtraction of Whole Numbers &gt; Two Step</li> </ul>

28.)	Grade 4	Operations and Algebraic Thinking	Use the four operations with whole numbers to solve problems.	using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.	4.OA.03	<ul style="list-style-type: none"> <li>Word Problems &gt; Example 3</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Two Step Word Problems &gt; Example 1</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Two Step Word Problems &gt; Example 2</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Two Step Word Problems &gt; Example 3</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Word Problems by Various Methods &gt; Example 11 - Skipping</li> <li>• Problem Solving &gt; Strategies &gt; Guess and Check &gt; D &gt; The Camp</li> </ul>
29.)	Grade 4	Operations and Algebraic Thinking	Gain familiarity with factors and multiples.	Find all factor pairs for a whole number in the range 1-100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1-100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1-100 is prime or composite.	4.OA.04	<ul style="list-style-type: none"> <li>• Fractions &gt; Products, Multiples, Factors &gt; Factors &gt; Introduction &gt; Factors 8</li> <li>• Fractions &gt; Products, Multiples, Factors &gt; Factors &gt; Introduction &gt; Factors 12</li> <li>• Fractions &gt; Products, Multiples, Factors &gt; Factors &gt; Introduction &gt; Factors 16</li> <li>• Fractions &gt; Products, Multiples, Factors &gt; Factors &gt; Introduction &gt; Factors 20</li> <li>• Fractions &gt; Products, Multiples, Factors &gt; Factors &gt; Introduction &gt; Factors 5</li> <li>• Fractions &gt; Products, Multiples, Factors &gt; Factors &gt; Introduction &gt; Factors 15</li> <li>• Fractions &gt; Products, Multiples, Factors &gt; Factors &gt; Introduction &gt; Factors 18</li> <li>• Fractions &gt; Products, Multiples, Factors &gt; Factors &gt; Prime Numbers &gt; Prime Numbers: 2</li> <li>• Fractions &gt; Products, Multiples, Factors &gt; Factors &gt; Prime Numbers &gt; Prime Numbers: 3</li> <li>• Fractions &gt; Products, Multiples, Factors &gt; Factors &gt; Prime Numbers &gt; Prime Numbers: 5</li> <li>• Fractions &gt; Products, Multiples, Factors &gt; Factors &gt; Prime Numbers &gt; Prime Numbers: 7</li> <li>• Fractions &gt; Products, Multiples, Factors &gt; Factors &gt; Prime Numbers &gt; Prime Numbers: 11</li> <li>• Fractions &gt; Products, Multiples, Factors &gt; Factors &gt; Prime Numbers &gt; Prime Numbers: 13</li> <li>• Fractions &gt; Products, Multiples, Factors &gt; Factors &gt; Prime Numbers &gt; Prime Numbers: 17</li> <li>• Fractions &gt; Products, Multiples, Factors &gt; Factors &gt; Prime Numbers &gt; Prime Numbers: 19</li> <li>• Fractions &gt; Products, Multiples, Factors &gt; Factors &gt; Composite Numbers</li> <li>• Fractions &gt; Products, Multiples, Factors &gt; Multiples &gt; The Concept</li> <li>• Fractions &gt; Products, Multiples, Factors &gt; Multiples &gt; Example 1</li> <li>• Fractions &gt; Products, Multiples, Factors &gt; Multiples &gt; Example 2</li> <li>• Fractions &gt; Products, Multiples, Factors &gt; Multiples &gt; Example 3</li> <li>• Fractions &gt; Products, Multiples, Factors &gt; Factors &gt; Factor Trees &gt; Example 1</li> <li>• Fractions &gt; Products, Multiples, Factors &gt; Factors &gt; Factor Trees &gt; Example 2</li> <li>• Fractions &gt; Products, Multiples, Factors &gt; Factors &gt; Factor Trees &gt; Example 3</li> <li>• Fractions &gt; Products, Multiples, Factors &gt; Factors &gt; Factor Trees &gt; Example 4</li> <li>• Algebra &gt; Patterns, Patterns, Patterns &gt; Prime And Composite &gt; Prime Numbers &gt; 2</li> <li>• Algebra &gt; Patterns, Patterns, Patterns &gt; Prime And Composite &gt; Prime Numbers &gt; 3</li> <li>• Algebra &gt; Patterns, Patterns, Patterns &gt; Prime And Composite &gt; Prime Numbers &gt; 5</li> <li>• Algebra &gt; Patterns, Patterns, Patterns &gt; Prime And Composite &gt; Prime Numbers &gt; 7</li> <li>• Algebra &gt; Patterns, Patterns, Patterns &gt; Prime And Composite &gt; Prime Numbers &gt; 11</li> <li>• Algebra &gt; Patterns, Patterns, Patterns &gt; Prime And Composite &gt; Prime Numbers &gt; 13</li> <li>• Algebra &gt; Patterns, Patterns, Patterns &gt; Prime And Composite &gt; Prime Numbers &gt; 17</li> <li>• Algebra &gt; Patterns, Patterns, Patterns &gt; Prime And Composite &gt; Prime Numbers &gt; 19</li> <li>• Algebra &gt; Patterns, Patterns, Patterns &gt; Prime And Composite &gt; Composite Numbers</li> <li>• Algebra &gt; Patterns, Patterns, Patterns &gt; Factor Pairs In Arrays &gt; Factors of 8</li> <li>• Algebra &gt; Patterns, Patterns, Patterns &gt; Factor Pairs In Arrays &gt; Factors of 12</li> <li>• Algebra &gt; Patterns, Patterns, Patterns &gt; Factor</li> </ul>



						<ul style="list-style-type: none"> <li>Pairs In Arrays &gt; Factors of 16</li> <li>Algebra &gt; Patterns, Patterns, Patterns &gt; Factor Pairs In Arrays &gt; Factors of 20</li> <li>Algebra &gt; Patterns, Patterns, Patterns &gt; Factor Pairs In Arrays &gt; Factors of 5</li> <li>Algebra &gt; Patterns, Patterns, Patterns &gt; Factor Pairs In Arrays &gt; Factors of 15</li> <li>Algebra &gt; Patterns, Patterns, Patterns &gt; Factor Pairs In Arrays &gt; Factors of 18</li> </ul>
30.)	Grade 4	Operations and Algebraic Thinking	Generate and analyze patterns.	Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself. For example, given the rule "Add 3" and the starting number 1, generate terms in the resulting sequence and observe that the terms appear to alternate between odd and even numbers. Explain informally why the numbers will continue to alternate in this way.	4.OA.05	<ul style="list-style-type: none"> <li>Algebra &gt; Patterns, Patterns, Patterns &gt; Object Patterns &gt; Example 1</li> <li>Algebra &gt; Patterns, Patterns, Patterns &gt; Object Patterns &gt; Example 2</li> <li>Algebra &gt; Patterns, Patterns, Patterns &gt; Object Patterns &gt; Example 3</li> <li>Algebra &gt; Patterns, Patterns, Patterns &gt; Object Patterns &gt; Example 4</li> <li>Algebra &gt; Patterns, Patterns, Patterns &gt; Object Patterns &gt; Example 5</li> <li>Algebra &gt; Patterns, Patterns, Patterns &gt; Object Patterns &gt; Example 6</li> <li>Algebra &gt; Patterns, Patterns, Patterns &gt; Object Patterns &gt; Example 7</li> <li>Algebra &gt; Patterns, Patterns, Patterns &gt; Object Patterns &gt; Example 8</li> <li>Algebra &gt; Patterns, Patterns, Patterns &gt; Object Patterns &gt; Example 9</li> <li>Algebra &gt; Patterns, Patterns, Patterns &gt; Generating &amp; Comparing Number Patterns &gt; Example 1 &gt; Generate the Patterns</li> <li>Algebra &gt; Patterns, Patterns, Patterns &gt; Generating &amp; Comparing Number Patterns &gt; Example 2 &gt; Generate the Patterns</li> <li>Problem Solving &gt; Strategies &gt; Find a Pattern &gt; D &gt; Toy Animals</li> </ul>
31.)	Grade 4	Number and Operations in Base Ten	Generalize place value understanding for multidigit whole numbers.	Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. For example, recognize that 700 divided by 70 = 10 by applying concepts of place value and division.	4.NBT.01	<ul style="list-style-type: none"> <li>Whole Numbers &amp; Integers &gt; The Meaning of Whole Numbers &gt; Place Value to 999,999 &gt; Examples &gt; Example 1</li> <li>Whole Numbers &amp; Integers &gt; The Meaning of Whole Numbers &gt; Place Value to 999,999 &gt; Examples &gt; Example 2</li> <li>Whole Numbers &amp; Integers &gt; The Meaning of Whole Numbers &gt; Place Value to 999,999 &gt; Examples &gt; Example 3</li> <li>Whole Numbers &amp; Integers &gt; The Meaning of Whole Numbers &gt; Place Value to 999,999 &gt; Examples &gt; Example 4</li> <li>Whole Numbers &amp; Integers &gt; The Meaning of Whole Numbers &gt; Place Value to 999,999 &gt; Examples &gt; Example 5</li> </ul>
						<ul style="list-style-type: none"> <li>Whole Numbers &amp; Integers &gt; The Meaning of Whole Numbers &gt; Expanded Notation &gt; To 999 &gt; Example 1</li> <li>Whole Numbers &amp; Integers &gt; The Meaning of Whole Numbers &gt; Expanded Notation &gt; To 999 &gt; Example 2</li> <li>Whole Numbers &amp; Integers &gt; The Meaning of Whole Numbers &gt; Expanded Notation &gt; To 9999 &gt; Example 1</li> <li>Whole Numbers &amp; Integers &gt; The Meaning of Whole Numbers &gt; Expanded Notation &gt; To 9999 &gt; Example 2</li> <li>Whole Numbers &amp; Integers &gt; The Meaning of Whole Numbers &gt; Expanded Notation &gt; Write as Numerals &gt; Example 1</li> <li>Whole Numbers &amp; Integers &gt; The Meaning of Whole Numbers &gt; Expanded Notation &gt; Write as Numerals &gt; Example 2</li> <li>Whole Numbers &amp; Integers &gt; The Meaning of Whole Numbers &gt; Place Value to 999,999 &gt; Examples &gt; Example 1</li> <li>Whole Numbers &amp; Integers &gt; The Meaning of Whole Numbers &gt; Place Value to 999,999 &gt; Examples &gt; Example 2</li> <li>Whole Numbers &amp; Integers &gt; The Meaning of Whole Numbers &gt; Place Value to 999,999 &gt; Examples &gt; Example 3</li> <li>Whole Numbers &amp; Integers &gt; The Meaning of Whole Numbers &gt; Place Value to 999,999 &gt; Examples &gt; Example 4</li> <li>Whole Numbers &amp; Integers &gt; The Meaning of Whole Numbers &gt; Place Value to 999,999 &gt; Examples &gt; Example 5</li> <li>Whole Numbers &amp; Integers &gt; The Meaning of</li> </ul>

32.)	Grade 4	Number and Operations in Base Ten	Generalize place value understanding for multidigit whole numbers.	Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using $>$ , $=$ , and $<$ symbols to record the results of comparisons.	4.NBT.02	<ul style="list-style-type: none"> <li>Whole Numbers &gt; Comparing Large Numbers &gt; Example 1</li> <li>• Whole Numbers &amp; Integers &gt; The Meaning of Whole Numbers &gt; Comparing Large Numbers &gt; Example 2</li> <li>• Whole Numbers &amp; Integers &gt; The Meaning of Whole Numbers &gt; Comparing Large Numbers &gt; Example 3</li> <li>• Whole Numbers &amp; Integers &gt; The Meaning of Whole Numbers &gt; Comparing Large Numbers &gt; Example 4</li> <li>• Whole Numbers &amp; Integers &gt; The Meaning of Whole Numbers &gt; Seeing The Number &gt; To Tens &gt; Example 1</li> <li>• Whole Numbers &amp; Integers &gt; The Meaning of Whole Numbers &gt; Seeing The Number &gt; To Tens &gt; Example 2</li> <li>• Whole Numbers &amp; Integers &gt; The Meaning of Whole Numbers &gt; Seeing The Number &gt; To Hundreds &gt; Example 1</li> <li>• Whole Numbers &amp; Integers &gt; The Meaning of Whole Numbers &gt; Seeing The Number &gt; To Hundreds &gt; Example 2</li> <li>• Whole Numbers &amp; Integers &gt; The Meaning of Whole Numbers &gt; Seeing The Number &gt; To Thousands &gt; Example 1</li> <li>• Whole Numbers &amp; Integers &gt; The Meaning of Whole Numbers &gt; Seeing The Number &gt; To Thousands &gt; Example 2</li> <li>• Whole Numbers &amp; Integers &gt; The Meaning of Whole Numbers &gt; Seeing The Number &gt; To Thousands &gt; Example 3</li> <li>• Whole Numbers &amp; Integers &gt; The Meaning of Whole Numbers &gt; Expanded Notation &gt; Write as Numerals &gt; Example 1</li> <li>• Whole Numbers &amp; Integers &gt; The Meaning of Whole Numbers &gt; Expanded Notation &gt; Write as Numerals &gt; Example 2</li> <li>• Whole Numbers &amp; Integers &gt; The Meaning of Whole Numbers &gt; Represent Numbers in Many Ways &gt; Example 1</li> <li>• Whole Numbers &amp; Integers &gt; The Meaning of Whole Numbers &gt; Represent Numbers in Many Ways &gt; Example 2</li> <li>• Whole Numbers &amp; Integers &gt; The Meaning of Whole Numbers &gt; Represent Numbers in Many Ways &gt; Example 3</li> <li>• Whole Numbers &amp; Integers &gt; The Meaning of Whole Numbers &gt; Represent Numbers in Many Ways &gt; Example 4</li> <li>• Whole Numbers &amp; Integers &gt; The Meaning of Whole Numbers &gt; Represent Numbers in Many Ways &gt; Example 5</li> </ul>
33.)	Grade 4	Number and Operations in Base Ten	Generalize place value understanding for multidigit whole numbers.	Use place value understanding to round multi-digit whole numbers to any place.	4.NBT.03	<ul style="list-style-type: none"> <li>• Whole Numbers &amp; Integers &gt; The Meaning of Whole Numbers &gt; Rounding Large Numbers &gt; Examples &gt; Example 1</li> <li>• Whole Numbers &amp; Integers &gt; The Meaning of Whole Numbers &gt; Rounding Large Numbers &gt; Examples &gt; Example 2</li> <li>• Whole Numbers &amp; Integers &gt; The Meaning of Whole Numbers &gt; Rounding Large Numbers &gt; Examples &gt; Example 3</li> <li>• Whole Numbers &amp; Integers &gt; The Meaning of Whole Numbers &gt; Rounding Large Numbers &gt; Examples &gt; Example 4</li> <li>• Whole Numbers &amp; Integers &gt; The Meaning of Whole Numbers &gt; Rounding Large Numbers &gt; Examples &gt; Example 5</li> </ul>
						<ul style="list-style-type: none"> <li>• Whole Numbers &amp; Integers &gt; Addition and Subtraction of Whole Numbers &gt; Add... Right to Left &gt; Example 1 - With Blocks</li> <li>• Whole Numbers &amp; Integers &gt; Addition and Subtraction of Whole Numbers &gt; Add... Right to Left &gt; Example 2 - With Blocks</li> <li>• Whole Numbers &amp; Integers &gt; Addition and Subtraction of Whole Numbers &gt; Add... Right to Left &gt; Example 3 - Without Blocks</li> <li>• Whole Numbers &amp; Integers &gt; Addition and Subtraction of Whole Numbers &gt; Add... Right to Left &gt; Example 4 - Without Blocks</li> <li>• Whole Numbers &amp; Integers &gt; Addition and Subtraction of Whole Numbers &gt; Add... Right to Left &gt; Example 5 - Without Blocks</li> <li>• Whole Numbers &amp; Integers &gt; Addition and Subtraction of Whole Numbers &gt; Add... Right to Left &gt; Example 6 - Without Blocks</li> </ul>

34.)	Grade 4	Number and Operations in Base Ten	Use place value understanding and properties of operations to perform multi-digit arithmetic.	Fluently add and subtract multi-digit whole numbers using the standard algorithm.	4.NBT.04	<ul style="list-style-type: none"> <li>• Whole Numbers &amp; Integers &gt; Addition and Subtraction of Whole Numbers &gt; Word Problems by Various Methods &gt; Example 1 - Kilometers</li> <li>• Whole Numbers &amp; Integers &gt; Addition and Subtraction of Whole Numbers &gt; Word Problems by Various Methods &gt; Example 6 - Water in a Jug</li> <li>• Whole Numbers &amp; Integers &gt; Addition and Subtraction of Whole Numbers &gt; Word Problems by Various Methods &gt; Example 7 - Coins</li> <li>• Whole Numbers &amp; Integers &gt; Addition and Subtraction of Whole Numbers &gt; Word Problems by Various Methods &gt; Example 10 - Minutes Walking</li> <li>• Whole Numbers &amp; Integers &gt; Addition and Subtraction of Whole Numbers &gt; Subtract... Right to Left &gt; Example 1 - With Blocks</li> <li>• Whole Numbers &amp; Integers &gt; Addition and Subtraction of Whole Numbers &gt; Subtract... Right to Left &gt; Example 2 - With Blocks</li> <li>• Whole Numbers &amp; Integers &gt; Addition and Subtraction of Whole Numbers &gt; Subtract... Right to Left &gt; Example 3 - Without Blocks</li> <li>• Whole Numbers &amp; Integers &gt; Addition and Subtraction of Whole Numbers &gt; Subtract... Right to Left &gt; Example 4 - Without Blocks</li> <li>• Whole Numbers &amp; Integers &gt; Addition and Subtraction of Whole Numbers &gt; Subtract... Right to Left &gt; Example 5 - Without Blocks</li> <li>• Whole Numbers &amp; Integers &gt; Addition and Subtraction of Whole Numbers &gt; Subtract... Right to Left &gt; Example 6 - Without Blocks</li> <li>• Whole Numbers &amp; Integers &gt; Addition and Subtraction of Whole Numbers &gt; Word Problems by Various Methods &gt; Example 2 - Quarters</li> <li>• Whole Numbers &amp; Integers &gt; Addition and Subtraction of Whole Numbers &gt; Word Problems by Various Methods &gt; Example 3 - Baseball Cards</li> <li>• Whole Numbers &amp; Integers &gt; Addition and Subtraction of Whole Numbers &gt; Word Problems by Various Methods &gt; Example 4 - Dollars</li> <li>• Whole Numbers &amp; Integers &gt; Addition and Subtraction of Whole Numbers &gt; Word Problems by Various Methods &gt; Example 5 - Pennies</li> <li>• Whole Numbers &amp; Integers &gt; Addition and Subtraction of Whole Numbers &gt; Word Problems by Various Methods &gt; Example 8 - Jelly Beans</li> <li>• Whole Numbers &amp; Integers &gt; Addition and Subtraction of Whole Numbers &gt; Word Problems by Various Methods &gt; Example 9 - Photographs</li> <li>• Whole Numbers &amp; Integers &gt; Addition and Subtraction of Whole Numbers &gt; Word Problems by Various Methods &gt; Example 11 - Cost of a Car</li> </ul>
						<ul style="list-style-type: none"> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Commutative Property &gt; <math>5 \times 1 = 1 \times 5</math></li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Commutative Property &gt; <math>5 \times 2 = 2 \times 5</math></li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Commutative Property &gt; <math>5 \times 3 = 3 \times 5</math></li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Commutative Property &gt; <math>4 \times 3 = 3 \times 4</math></li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply by a Single Digit Multiplier &gt; Repeated Addition &gt; Example 1 - With Blocks</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply by a Single Digit Multiplier &gt; Repeated Addition &gt; Example 2 - With Blocks</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply by a Single Digit Multiplier &gt; Repeated Addition &gt; Example 3 - Without Blocks</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply by a Single Digit Multiplier &gt; Repeated Addition &gt; Example 4 - Without Blocks</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply by a Single Digit Multiplier &gt; Partial Product - Area &gt; Example 1 - With Blocks</li> </ul>

Use place value

Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-

- Whole Numbers & Integers > Multiplication and Division of Whole Numbers > Multiply by a Single Digit Multiplier > Partial Product - Area > Example 2 - With Blocks
- Whole Numbers & Integers > Multiplication and Division of Whole Numbers > Multiply by a Single Digit Multiplier > Partial Product - Area > Example 3 - With Blocks
- Whole Numbers & Integers > Multiplication and Division of Whole Numbers > Multiply by a Single Digit Multiplier > Partial Product - Area > Example 4 - Without Blocks
- Whole Numbers & Integers > Multiplication and Division of Whole Numbers > Multiply by a Single Digit Multiplier > Partial Product - Area > Example 5 - Without Blocks
- Whole Numbers & Integers > Multiplication and Division of Whole Numbers > Multiply by a Single Digit Multiplier > Partial Product - Area > Example 6 - Without Blocks
- Whole Numbers & Integers > Multiplication and Division of Whole Numbers > Multiply by a Single Digit Multiplier > Partial Product - Area > Question 1
- Whole Numbers & Integers > Multiplication and Division of Whole Numbers > Multiply by a Single Digit Multiplier > Partial Product - Area > Question 2
- Whole Numbers & Integers > Multiplication and Division of Whole Numbers > Multiply by a Single Digit Multiplier > Partial Product - Area > Question 3
- Whole Numbers & Integers > Multiplication and Division of Whole Numbers > Multiply by a Two Digit Multiplier > Partial Product - Area > Example 1 - With Blocks
- Whole Numbers & Integers > Multiplication and Division of Whole Numbers > Multiply by a Two Digit Multiplier > Partial Product - Area > Example 2 - With Blocks
- Whole Numbers & Integers > Multiplication and Division of Whole Numbers > Multiply by a Two Digit Multiplier > Partial Product - Area > Example 3 - With Blocks
- Whole Numbers & Integers > Multiplication and Division of Whole Numbers > Multiply by a Two Digit Multiplier > Partial Product - Area > Example 4 - Without Blocks
- Whole Numbers & Integers > Multiplication and Division of Whole Numbers > Multiply by a Two Digit Multiplier > Partial Product - Area > Example 5 - Without Blocks
- Whole Numbers & Integers > Multiplication and Division of Whole Numbers > Multiply by a Two Digit Multiplier > Partial Product - Area > Example 6 - Without Blocks
- Whole Numbers & Integers > Multiplication and Division of Whole Numbers > Multiply by a Two Digit Multiplier > Partial Product - Area > Question 1
- Whole Numbers & Integers > Multiplication and Division of Whole Numbers > Multiply by a Two Digit Multiplier > Partial Product - Area > Question 2
- Whole Numbers & Integers > Multiplication and Division of Whole Numbers > Multiply by a Two Digit Multiplier > Partial Product - Area > Question 3
- Whole Numbers & Integers > Multiplication and Division of Whole Numbers > Multiply by a Single Digit Multiplier > The Distributive Method > Example 1
- Whole Numbers & Integers > Multiplication and Division of Whole Numbers > Multiply by a Single Digit Multiplier > The Distributive Method > Example 2
- Whole Numbers & Integers > Multiplication and Division of Whole Numbers > Multiply by a Single Digit Multiplier > The Distributive Method > Example 3
- Whole Numbers & Integers > Multiplication and Division of Whole Numbers > Multiply by a Single Digit Multiplier > The Distributive Method > Question 1
- Whole Numbers & Integers > Multiplication and Division of Whole Numbers > Multiply by a Single Digit Multiplier > The Distributive Method > Question 2

35.)

Grade  
4

Number and  
Operations  
in Base Ten

understanding  
and properties  
of operations  
to perform  
multi-digit  
arithmetic.

digit numbers, using strategies  
based on place value and the  
properties of operations.  
Illustrate and explain the  
calculation by using equations,  
rectangular arrays, and/or area  
models.

4.NBT.05

- Whole Numbers & Integers > Multiplication and Division of Whole Numbers > Multiply by a Single Digit Multiplier > The Distributive Method > Question 3
- Whole Numbers & Integers > Multiplication and Division of Whole Numbers > Multiply by a Two Digit Multiplier > The Distributive Method > Example 1
- Whole Numbers & Integers > Multiplication and Division of Whole Numbers > Multiply by a Two Digit Multiplier > The Distributive Method > Example 2
- Whole Numbers & Integers > Multiplication and Division of Whole Numbers > Multiply by a Two Digit Multiplier > The Distributive Method > Example 3
- Whole Numbers & Integers > Multiplication and Division of Whole Numbers > Multiply by a Two Digit Multiplier > The Distributive Method > Question 1
- Whole Numbers & Integers > Multiplication and Division of Whole Numbers > Multiply by a Two Digit Multiplier > The Distributive Method > Question 2
- Whole Numbers & Integers > Multiplication and Division of Whole Numbers > Multiply by a Two Digit Multiplier > The Distributive Method > Question 3
- Whole Numbers & Integers > Multiplication and Division of Whole Numbers > Multiply by a Single Digit Multiplier > Standard Method > Example 1
- Whole Numbers & Integers > Multiplication and Division of Whole Numbers > Multiply by a Single Digit Multiplier > Standard Method > Example 2
- Whole Numbers & Integers > Multiplication and Division of Whole Numbers > Multiply by a Single Digit Multiplier > Standard Method > Example 3
- Whole Numbers & Integers > Multiplication and Division of Whole Numbers > Multiply by a Single Digit Multiplier > Standard Method > Question 1
- Whole Numbers & Integers > Multiplication and Division of Whole Numbers > Multiply by a Single Digit Multiplier > Standard Method > Question 2
- Whole Numbers & Integers > Multiplication and Division of Whole Numbers > Multiply by a Single Digit Multiplier > Standard Method > Question 3
- Whole Numbers & Integers > Multiplication and Division of Whole Numbers > Multiply by a Two Digit Multiplier > The Standard Method > Example 1
- Whole Numbers & Integers > Multiplication and Division of Whole Numbers > Multiply by a Two Digit Multiplier > The Standard Method > Example 2
- Whole Numbers & Integers > Multiplication and Division of Whole Numbers > Multiply by a Two Digit Multiplier > The Standard Method > Example 3
- Whole Numbers & Integers > Multiplication and Division of Whole Numbers > Multiply by a Two Digit Multiplier > The Standard Method > Question 1
- Whole Numbers & Integers > Multiplication and Division of Whole Numbers > Multiply by a Two Digit Multiplier > The Standard Method > Question 2
- Whole Numbers & Integers > Multiplication and Division of Whole Numbers > Multiply by a Two Digit Multiplier > The Standard Method > Question 3
- Whole Numbers & Integers > Multiplication and Division of Whole Numbers > Multiply by a Single Digit Multiplier > Standard Method > Example 1
- Whole Numbers & Integers > Multiplication and Division of Whole Numbers > Multiply by a Single Digit Multiplier > Standard Method > Example 2
- Whole Numbers & Integers > Multiplication and Division of Whole Numbers > Multiply by a Single Digit Multiplier > Standard Method > Example 3

						<ul style="list-style-type: none"> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply by a Single Digit Multiplier &gt; Standard Method &gt; Question 1</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply by a Single Digit Multiplier &gt; Standard Method &gt; Question 2</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply by a Single Digit Multiplier &gt; Standard Method &gt; Question 3</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply by a Two Digit Multiplier &gt; The Lattice Method &gt; Example 1</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply by a Two Digit Multiplier &gt; The Lattice Method &gt; Example 2</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply by a Two Digit Multiplier &gt; The Lattice Method &gt; Example 3</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply by a Two Digit Multiplier &gt; The Lattice Method &gt; Question 1</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply by a Two Digit Multiplier &gt; The Lattice Method &gt; Question 2</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply by a Two Digit Multiplier &gt; The Lattice Method &gt; Question 3</li> </ul>
36.)	Grade 4	Number and Operations in Base Ten	Use place value understanding and properties of operations to perform multi-digit arithmetic.	Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.	4.NBT.06	<ul style="list-style-type: none"> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Divide by a Single Digit Divisor &gt; Fair Sharing &gt; Example 1 - With Blocks</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Divide by a Single Digit Divisor &gt; Fair Sharing &gt; Example 2 - Without Blocks</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Divide by a Single Digit Divisor &gt; Fair Sharing &gt; Question 1</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Divide by a Single Digit Divisor &gt; Fair Sharing &gt; Question 2</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Divide by a Single Digit Divisor &gt; Fair Sharing &gt; Question 3</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Divide by a Single Digit Divisor &gt; Fair Sharing &gt; Question 4</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Divide by a Single Digit Divisor &gt; Fair Sharing &gt; Question 5</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Divide by a Single Digit Divisor &gt; Fair Sharing &gt; Question 6</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Divide by Partial Quotients &gt; Partial Quotient - Example 1</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Divide by Partial Quotients &gt; Partial Quotient - Example 2</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Divide by Partial Quotients &gt; Partial Quotient - Example 3</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Divide by Partial Quotients &gt; Partial Quotient - Example 4</li> </ul>
				Explain why a fraction $\frac{a}{b}$ is equivalent to a fraction $\frac{(n \times a)}{(n \times b)}$ by using visual fraction		<ul style="list-style-type: none"> <li>• Fractions &gt; Equivalent Fractions &gt; Pattern Blocks &gt; Hexagon 1</li> <li>• Fractions &gt; Equivalent Fractions &gt; Pattern Blocks &gt; Hexagon 2</li> <li>• Fractions &gt; Equivalent Fractions &gt; The Clock &gt; Introduction 1</li> <li>• Fractions &gt; Equivalent Fractions &gt; The Clock &gt; Introduction 2</li> <li>• Fractions &gt; Equivalent Fractions &gt; The Clock &gt; Examples</li> <li>• Fractions &gt; Equivalent Fractions &gt; Slicing &gt; Example 1</li> </ul>

37.)	Grade 4	Number and Operations - Fractions	Extend understanding of fraction equivalence and ordering.	models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions.	4.NF.01	<ul style="list-style-type: none"> <li>Fractions &gt; Equivalent Fractions &gt; Slicing &gt; Example 2</li> <li>Fractions &gt; Equivalent Fractions &gt; Slicing &gt; Example 3</li> <li>Fractions &gt; Equivalent Fractions &gt; Slicing &gt; Example 4</li> <li>Fractions &gt; Equivalent Fractions &gt; Slicing &gt; Example 5</li> <li>Fractions &gt; Equivalent Fractions &gt; Slicing &gt; Example 6</li> <li>Fractions &gt; Multiplication and Division of Decimals &gt; Preliminaries to Division &gt; Graphic Example</li> <li>Fractions &gt; Multiplication and Division of Decimals &gt; Preliminaries to Division &gt; Multiplication Table</li> </ul>
38.)	Grade 4	Number and Operations - Fractions	Extend understanding of fraction equivalence and ordering.	Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as $1/2$ . Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols $>$ , $=$ , or $<$ , and justify the conclusions, e.g., by using a visual fraction model.	4.NF.02	<ul style="list-style-type: none"> <li>Fractions &gt; Equivalent Fractions &gt; Comparison of Fractions</li> <li>Fractions &gt; Equivalent Fractions &gt; Fraction Strips &gt; Concept 2</li> <li>Fractions &gt; Equivalent Fractions &gt; The Clock &gt; Introduction 1</li> <li>Fractions &gt; Equivalent Fractions &gt; The Clock &gt; Introduction 2</li> <li>Fractions &gt; Equivalent Fractions &gt; The Clock &gt; Examples</li> <li>Fractions &gt; Equivalent Fractions &gt; On a Square Grid &gt; Example 1</li> <li>Fractions &gt; Equivalent Fractions &gt; On a Dot Grid &gt; Example 1</li> <li>Fractions &gt; Multiplication and Division of Decimals &gt; Compare Fractions &gt; Compare Fractions... Method 1</li> </ul>
39.)	Grade 4	Number and Operations - Fractions	Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.	<p>Understand a fraction <math>a/b</math> with <math>a &gt; 1</math> as a sum of fractions <math>1/b</math>.</p> <p>a.) Understand addition and subtraction of fractions as joining and separating parts referring to the same whole.</p> <p>b.) Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decompositions, e.g., by using a visual fraction model. Examples: <math>3/8 = 1/8 + 1/8 + 1/8</math>; <math>3/8 = 1/8 + 2/8</math>; <math>2 1/8 = 1 + 1 + 1/8 = 8/8 + 8/8 + 1/8</math>.</p> <p>c.) Add and subtract mixed numbers with like denominators, e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction.</p> <p>d.) Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fraction models and</p>	4.NF.03	<ul style="list-style-type: none"> <li>a.) <ul style="list-style-type: none"> <li>Fractions &gt; Adding Fractions &gt; Pattern Blocks &gt; Hexagon 1</li> <li>Fractions &gt; Adding Fractions &gt; Adding Fractions on the Number Line &gt; Example 1</li> <li>Fractions &gt; Adding Fractions &gt; Adding Fractions on the Number Line &gt; Example 2</li> <li>Fractions &gt; Adding Fractions &gt; Adding Fractions on the Number Line &gt; Example 3</li> <li>Fractions &gt; Subtracting Fractions &gt; Pattern Blocks &gt; Hexagon 1</li> <li>Fractions &gt; Subtracting Fractions &gt; Fraction Strips &gt; Concept 1</li> <li>Fractions &gt; Subtracting Fractions &gt; Subtracting Fractions on a Number Line &gt; Example 1</li> <li>Fractions &gt; Subtracting Fractions &gt; Subtracting Fractions on a Number Line &gt; Example 2</li> </ul> </li> <li>b.) <ul style="list-style-type: none"> <li>Fractions &gt; The Meaning Of Fractions &gt; Pattern Blocks &gt; Example 1</li> <li>Fractions &gt; The Meaning Of Fractions &gt; Pattern Blocks &gt; Example 2</li> <li>Fractions &gt; The Meaning Of Fractions &gt; Pattern Blocks &gt; Example 3</li> <li>Fractions &gt; Subtracting Fractions &gt; Pattern Blocks &gt; Hexagon 1</li> </ul> </li> <li>c.) <ul style="list-style-type: none"> <li>Fractions &gt; Improper Fractions and Mixed Numbers &gt; Adding Mixed Numbers &gt; Method 1 &gt; Example 1</li> <li>Fractions &gt; Improper Fractions and Mixed Numbers &gt; Adding Mixed Numbers &gt; Method 1 &gt; Example 2</li> <li>Fractions &gt; Improper Fractions and Mixed Numbers &gt; Subtracting Mixed Numbers &gt; Method 1</li> <li>Fractions &gt; Improper Fractions and Mixed Numbers &gt; Subtracting Mixed Numbers &gt; Method 2</li> </ul> </li> <li>d.) <ul style="list-style-type: none"> <li>Fractions &gt; Adding Fractions &gt; Pattern Blocks &gt; Hexagon 1</li> <li>Fractions &gt; Adding Fractions &gt; Fraction Strips &gt; Concept 1</li> <li>Fractions &gt; Adding Fractions &gt; Word Problems &gt; Alexanders Friend</li> </ul> </li> </ul>

				equations to represent the problem.		<ul style="list-style-type: none"> <li>Fractions &gt; Subtracting Fractions &gt; Pattern Blocks &gt; Hexagon 1</li> </ul>
40.)	Grade 4	Number and Operations - Fractions	Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.	<p>Apply and extend previous understandings of multiplication to multiply a fraction by a whole number.</p> <p>a.) Understand a fraction <math>a/b</math> as a multiple of <math>1/b</math>. For example, use a visual fraction model to represent <math>5/4</math> as the product <math>5 \times (1/4)</math>, recording the conclusion by the equation <math>5/4 = 5 \times (1/4)</math>.</p> <p>b.) Understand a multiple of <math>a/b</math> as a multiple of <math>1/b</math>, and use this understanding to multiply a fraction by a whole number. For example, use a visual fraction model to express <math>3 \times (2/5)</math> as <math>6 \times (1/5)</math>, recognizing this product as <math>6/5</math>. (In general, <math>n \times (a/b) = (n \times a)/b</math>.)</p> <p>c.) Solve word problems involving multiplication of a fraction by a whole number, e.g., by using visual fraction models and equations to represent the problem. For example, if each person at a party will eat <math>3/8</math> of a pound of roast beef, and there will be 5 people at the party, how many pounds of roast beef will be needed? Between what two whole numbers does your answer lie?</p>	4.NF.04	<ul style="list-style-type: none"> <li>a.) <ul style="list-style-type: none"> <li>Fractions &gt; Multiplying Fractions &gt; Developing the Rule &gt; Ex. 1 - Whole Number X Unit Fraction</li> <li>Fractions &gt; Multiplying Fractions &gt; Real World Problems with Pictures &gt; The Blanket</li> </ul> </li> <li>b.) <ul style="list-style-type: none"> <li>Fractions &gt; Multiplying Fractions &gt; Developing the Rule &gt; Ex. 1 - Whole Number X Unit Fraction</li> <li>Fractions &gt; Multiplying Fractions &gt; Developing the Rule &gt; Ex. 2 - Whole Number X Any Fraction</li> </ul> </li> <li>c.) <ul style="list-style-type: none"> <li>Fractions &gt; Multiplying Fractions &gt; Developing the Rule &gt; Ex. 3 - Proper Fraction X Proper Fraction</li> <li>Fractions &gt; Multiplying Fractions &gt; Developing the Rule &gt; Ex. 4 - Proper Fraction X Proper Fraction</li> <li>Fractions &gt; Multiplying Fractions &gt; Developing the Rule &gt; Ex. 5 - Whole Number X Mixed Number</li> </ul> </li> </ul>
41.)	Grade 4	Number and Operations - Fractions	Understand decimal notation for fractions, and compare decimal fractions.	Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100. For example, express $3/10$ as $30/100$ , and add $3/10 + 4/100 = 34/100$ .	4.NF.05	<ul style="list-style-type: none"> <li>Fractions &gt; Introduction to Decimals &gt; Equivalent Decimals &gt; Example 1</li> <li>Fractions &gt; Introduction to Decimals &gt; Equivalent Decimals &gt; Example 2</li> </ul>
						<ul style="list-style-type: none"> <li>Counting &gt; Introduce Decimals &gt; D &gt; Tenths and Decimals</li> <li>Counting &gt; Introduce Decimals &gt; D &gt; Ones and Tenths</li> <li>Fractions &gt; Introduction to Decimals &gt; Introduction to Decimals &gt; Tenths and Decimals &gt; Example 1</li> <li>Fractions &gt; Introduction to Decimals &gt; Introduction to Decimals &gt; Tenths and Decimals &gt; Example 2</li> <li>Fractions &gt; Introduction to Decimals &gt; Introduction to Decimals &gt; Tenths and Decimals &gt; Example 3</li> <li>Fractions &gt; Introduction to Decimals &gt; Introduction to Decimals &gt; Tenths and Decimals &gt; Example 4</li> <li>Fractions &gt; Introduction to Decimals &gt; Introduction to Decimals &gt; Ones and Tenths &gt; Example 1</li> <li>Fractions &gt; Introduction to Decimals &gt;</li> </ul>



42.)	Grade 4	Number and Operations - Fractions	Understand decimal notation for fractions, and compare decimal fractions.	Use decimal notation for fractions with denominators 10 or 100. For example, rewrite 0.62 as $\frac{62}{100}$ ; describe a length as 0.62 meters; locate 0.62 on a number line diagram.	4.NF.06	<ul style="list-style-type: none"> <li>Introduction to Decimals &gt; Ones and Tenths &gt; Example 2</li> <li>• Fractions &gt; Introduction to Decimals &gt; Introduction to Decimals &gt; Ones and Tenths &gt; Example 3</li> <li>• Fractions &gt; Introduction to Decimals &gt; Introduction to Decimals &gt; Ones and Tenths &gt; Example 4</li> <li>• Fractions &gt; Introduction to Decimals &gt; Introduction to Decimals &gt; Decimals on a Numberline &gt; Example 1</li> <li>• Fractions &gt; Introduction to Decimals &gt; Introduction to Decimals &gt; Decimals on a Numberline &gt; Example 2</li> <li>• Fractions &gt; Introduction to Decimals &gt; Introduction to Decimals &gt; Decimals on a Numberline &gt; Example 3</li> <li>• Fractions &gt; Introduction to Decimals &gt; Introduction to Decimals &gt; Decimals on a Numberline &gt; Example 4</li> <li>• Fractions &gt; Introduction to Decimals &gt; Introduction to Decimals &gt; Place Value &gt; Ones and Tenths 1</li> <li>• Fractions &gt; Introduction to Decimals &gt; Introduction to Decimals &gt; Place Value &gt; Ones and Tenths 2</li> <li>• Fractions &gt; Introduction to Decimals &gt; Introduction to Decimals &gt; Place Value &gt; Tens, Ones, and Tenths</li> <li>• Fractions &gt; Introduction to Decimals &gt; Introduction to Decimals &gt; Place Value &gt; Decimals on a Numberline</li> <li>• Fractions &gt; Introduction to Decimals &gt; Introduction to Decimals &gt; Place Value &gt; Hundreds and Tenths</li> <li>• Fractions &gt; Introduction to Decimals &gt; Ones, Tenths, Hundredths, Thousandths &gt; Decimals to Tenths &gt; Example 1</li> <li>• Fractions &gt; Introduction to Decimals &gt; Ones, Tenths, Hundredths, Thousandths &gt; Decimals to Tenths &gt; Example 2</li> <li>• Fractions &gt; Introduction to Decimals &gt; Ones, Tenths, Hundredths, Thousandths &gt; Decimals to Hundredths &gt; Example 1</li> <li>• Fractions &gt; Introduction to Decimals &gt; Ones, Tenths, Hundredths, Thousandths &gt; Decimals to Hundredths &gt; Example 2</li> <li>• Fractions &gt; Introduction to Decimals &gt; Ones, Tenths, Hundredths, Thousandths &gt; Decimals to Hundredths &gt; Example 3</li> <li>• Fractions &gt; Introduction to Decimals &gt; Ones, Tenths, Hundredths, Thousandths &gt; Decimals to Hundredths &gt; Example 4</li> <li>• Fractions &gt; Introduction to Decimals &gt; Ones, Tenths, Hundredths, Thousandths &gt; Decimals to Hundredths &gt; Example 5</li> <li>• Fractions &gt; Introduction to Decimals &gt; Estimation on the Decimal Line &gt; Level 1: 0 to 1</li> <li>• Fractions &gt; Introduction to Decimals &gt; Estimation on the Decimal Line &gt; Level 2: 0 to 5</li> <li>• Fractions &gt; Introduction to Decimals &gt; Expanded Notation &gt; To Hundredths &gt; Example 1</li> <li>• Fractions &gt; Introduction to Decimals &gt; Expanded Notation &gt; To Hundredths &gt; Example 2</li> <li>• Fractions &gt; Multiplication and Division of Decimals &gt; Fractions to Decimals &gt; Method 2 - A Special Equivalent Fraction &gt; Example 1</li> <li>• Fractions &gt; Multiplication and Division of Decimals &gt; Fractions to Decimals &gt; Method 2 - A Special Equivalent Fraction &gt; Example 2</li> <li>• Fractions &gt; Multiplication and Division of Decimals &gt; Fractions to Decimals &gt; Method 2 - A Special Equivalent Fraction &gt; Example 3</li> <li>• Fractions &gt; Multiplication and Division of Decimals &gt; Fractions to Decimals &gt; Method 2 - A Special Equivalent Fraction &gt; Example 4</li> </ul>
43.)	Grade 4	Number and Operations - Fractions	Understand decimal notation for fractions, and compare decimal	Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols	4.NF.07	<ul style="list-style-type: none"> <li>• Fractions &gt; Introduction to Decimals &gt; Comparing Decimals &gt; Example 1</li> <li>• Fractions &gt; Introduction to Decimals &gt; Comparing Decimals &gt; Example 2</li> <li>• Comparing and Ordering &gt; Compare Decimals &gt; D &gt; Compare Decimals</li> </ul>

			fractions.	>, =, or <, and justify the conclusions, e.g., by using a visual model.		
44.)	Grade 4	Measurement and Data	Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.	Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a twocolumn table. For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ...	4.MD.01	<ul style="list-style-type: none"> <li>Measurement &amp; Geometry &gt; An Introduction to Measurement &gt; Metric Conversions - Length &gt; Understanding Metric Prefixes</li> <li>Measurement &amp; Geometry &gt; An Introduction to Measurement &gt; Metric Conversions - Length &gt; Metric Prefixes at Work</li> <li>Measurement &amp; Geometry &gt; An Introduction to Measurement &gt; Metric Conversions - Length &gt; Metric Match &gt; Introduction</li> <li>Measurement &amp; Geometry &gt; An Introduction to Measurement &gt; Metric Conversions - Length &gt; Metric Match &gt; Examples</li> <li>Measurement &amp; Geometry &gt; An Introduction to Measurement &gt; Metric Conversions - Length &gt; Converting</li> <li>Measurement &amp; Geometry &gt; An Introduction to Measurement &gt; US Standard Conversions - Length &gt; Converting</li> </ul>
45.)	Grade 4	Measurement and Data	Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.	Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.	4.MD.02	<ul style="list-style-type: none"> <li>Fractions &gt; Adding Fractions &gt; Word Problems &gt; Alexanders Friend</li> <li>Fractions &gt; Addition and Subtraction of Decimals &gt; Decimals Around Us &gt; Money &gt; Example 1</li> <li>Fractions &gt; Addition and Subtraction of Decimals &gt; Decimals Around Us &gt; Money &gt; Example 2</li> <li>Fractions &gt; Addition and Subtraction of Decimals &gt; Decimals Around Us &gt; Money &gt; Example 3</li> <li>Fractions &gt; Addition and Subtraction of Decimals &gt; Decimals Around Us &gt; Money &gt; Example 4</li> <li>Fractions &gt; Addition and Subtraction of Decimals &gt; Decimals Around Us &gt; Money &gt; Example 5</li> <li>Fractions &gt; Addition and Subtraction of Decimals &gt; Decimals Around Us &gt; School Supplies</li> <li>Fractions &gt; Multiplication and Division of Decimals &gt; Decimals Around Us Word Problems &gt; Example 2 - Bananas</li> <li>Fractions &gt; Multiplication and Division of Decimals &gt; Decimals Around Us Word Problems &gt; Example 4 - Baseball Cards</li> <li>Fractions &gt; Multiplication and Division of Decimals &gt; Decimals Around Us Word Problems &gt; Example 5 - Cookies</li> <li>Fractions &gt; Multiplication and Division of Decimals &gt; Decimals Around Us Word Problems &gt; Example 8 - Saving</li> <li>Fractions &gt; Addition and Subtraction of Decimals &gt; Decimals Around Us &gt; Length in Metric Units &gt; Example 1</li> <li>Measurement &amp; Geometry &gt; Time &gt; Elapsed Time Revisited &gt; Ex 3: Elapsed Time to Work</li> </ul>
46.)	Grade 4	Measurement and Data	Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.	Apply the area and perimeter formulas for rectangles in real world and mathematical problems. For example, find the width of a rectangular room given the area of the flooring and the length, by viewing the area formula as a multiplication equation with an unknown factor.	4.MD.03	<ul style="list-style-type: none"> <li>Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Walk Around a Polygon &gt; Perimeter of Various Shapes &gt; Example 1</li> <li>Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Walk Around a Polygon &gt; Perimeter of Various Shapes &gt; Example 2</li> <li>Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Walk Around a Polygon &gt; Find the Perimeter</li> <li>Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Areas of Polygons &gt; Area of a Rectangle &gt; Concept</li> <li>Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Areas of Polygons &gt; Area of a Rectangle &gt; Example 3</li> <li>Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Areas of Polygons &gt; Area of a Rectangle &gt; Example 4</li> <li>Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Problems Section &gt; The Tablecloth</li> </ul>
				Make a line plot to display a data set of measurements in fractions of a unit ( $\frac{1}{2}$ , $\frac{1}{4}$ , $\frac{1}{8}$ ). Solve problems involving addition and		<ul style="list-style-type: none"> <li>Graphing &gt; Statistics &gt; Line Plot &gt; Creating a Line Plot &gt; Example 1</li> </ul>

47.)	Grade 4	Measurement and Data	Represent and interpret data.	subtraction of fractions by using information presented in line plots. For example, from a line plot find and interpret the difference in length between the longest and shortest specimens in an insect collection.	4.MD.04	<ul style="list-style-type: none"> <li>Graphing &gt; Statistics &gt; Line Plot &gt; Creating a Line Plot &gt; Example 2</li> <li>Graphing &gt; Statistics &gt; Line Plot &gt; Interpreting a Line Plot &gt; Example 1</li> <li>Graphing &gt; Statistics &gt; Line Plot &gt; Interpreting a Line Plot &gt; Example 2</li> </ul>
48.)	Grade 4	Measurement and Data	Geometric measurement: understand concepts of angle and measure angles.	<p>Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement:</p> <p>a.) An angle is measured with reference to a circle with its center at the common endpoint of the rays, by considering the fraction of the circular arc between the points where the two rays intersect the circle. An angle that turns through <math>\frac{1}{360}</math> of a circle is called a "one-degree angle," and can be used to measure angles.</p> <p>b.) An angle that turns through <math>n</math> one-degree angles is said to have an angle measure of <math>n</math> degrees.</p>	4.MD.05	<ul style="list-style-type: none"> <li>a.) <ul style="list-style-type: none"> <li>Measurement &amp; Geometry &gt; Angles and Their Measure &gt; The Degree</li> <li>Measurement &amp; Geometry &gt; Angles and Their Measure &gt; Classify Angles &gt; Classification</li> <li>Measurement &amp; Geometry &gt; Angles and Their Measure &gt; Classify Angles &gt; Memory Game</li> </ul> </li> <li>b.) <ul style="list-style-type: none"> <li>Measurement &amp; Geometry &gt; Angles and Their Measure &gt; Estimating Angle Measure</li> </ul> </li> </ul>
49.)	Grade 4	Measurement and Data	Geometric measurement: understand concepts of angle and measure angles.	Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure.	4.MD.06	<ul style="list-style-type: none"> <li>Measurement &amp; Geometry &gt; Angles and Their Measure &gt; Measuring Angles &gt; Introduction</li> <li>Measurement &amp; Geometry &gt; Angles and Their Measure &gt; Measuring Angles &gt; With a Protractor</li> <li>Measurement &amp; Geometry &gt; Angles and Their Measure &gt; Measuring Angles &gt; With Hands of a Clock</li> </ul>
50.)	Grade 4	Measurement and Data	Geometric measurement: understand concepts of angle and measure angles.	Recognize angle measure as additive. When an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve addition and subtraction problems to find unknown angles on a diagram in real world and mathematical problems, e.g., by using an equation with a symbol for the unknown angle measure.	4.MD.07	<ul style="list-style-type: none"> <li>Measurement &amp; Geometry &gt; Angles and Their Measure &gt; Measuring Adjacent Angles &gt; Example 1</li> <li>Measurement &amp; Geometry &gt; Angles and Their Measure &gt; Measuring Adjacent Angles &gt; Example 2</li> </ul>
51.)	Grade 4	Geometry	Draw and identify lines and angles, and classify shapes by properties of their lines and angles.	Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.	4.G.01	<ul style="list-style-type: none"> <li>Measurement &amp; Geometry &gt; Angles and Their Measure &gt; Classify Angles &gt; Classification</li> <li>Measurement &amp; Geometry &gt; Angles and Their Measure &gt; Classify Angles &gt; Memory Game</li> <li>Measurement &amp; Geometry &gt; Angles and Polygons &gt; Parallel and Perpendicular Lines &gt; Example 1</li> <li>Measurement &amp; Geometry &gt; Angles and Polygons &gt; Parallel and Perpendicular Lines &gt; Example 2</li> <li>Measurement &amp; Geometry &gt; Angles and Polygons &gt; Parallel and Perpendicular Lines &gt; Example 3</li> <li>Measurement &amp; Geometry &gt; Angles and Polygons &gt; Parallel and Perpendicular Lines &gt;</li> </ul>

52.)	Grade 4	Geometry	Draw and identify lines and angles, and classify shapes by properties of their lines and angles.	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. Recognize right triangles as a category, and identify right triangles.	4.G.02	<p>Example 4</p> <ul style="list-style-type: none"> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Polygons &gt; What Are They?</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Polygons &gt; Regular v. Irregular</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Polygons &gt; Triangles &gt; Definition</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Polygons &gt; Triangles &gt; Classifications &gt; By Sides</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Polygons &gt; Triangles &gt; Classifications &gt; By Angles</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Polygons &gt; Quadrilaterals &gt; Definition</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Polygons &gt; Quadrilaterals &gt; Classifications &gt; Trapezoid</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Polygons &gt; Quadrilaterals &gt; Classifications &gt; Parallelogram</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Polygons &gt; Quadrilaterals &gt; Classifications &gt; Rectangle</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Polygons &gt; Quadrilaterals &gt; Classifications &gt; Rhombus</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Polygons &gt; Quadrilaterals &gt; Classifications &gt; Square</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Classify Polygons &gt; Venn Diagrams &gt; Red &amp; Regular</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Classify Polygons &gt; Venn Diagrams &gt; Parallel &amp; Perpendicular Lines</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Classify Polygons &gt; Hierarchy &gt; Polygons</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Classify Polygons &gt; Hierarchy &gt; Quadrilaterals</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Classify Polygons &gt; Hierarchy &gt; Triangles</li> </ul>
53.)	Grade 4	Geometry	Draw and identify lines and angles, and classify shapes by properties of their lines and angles.	Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry.	4.G.03	<ul style="list-style-type: none"> <li>• Graphing &gt; Transformations &gt; Lines of Symmetry &gt; An Introduction</li> <li>• Graphing &gt; Transformations &gt; Lines of Symmetry &gt; Example 1</li> <li>• Graphing &gt; Transformations &gt; Lines of Symmetry &gt; Example 2</li> <li>• Graphing &gt; Transformations &gt; Lines of Symmetry &gt; Example 3</li> <li>• Graphing &gt; Transformations &gt; Lines of Symmetry &gt; Example 4</li> <li>• Graphing &gt; Transformations &gt; Symmetry Match &gt; Puzzle - 1</li> <li>• Graphing &gt; Transformations &gt; Symmetry Match &gt; Puzzle - 2</li> <li>• Graphing &gt; Transformations &gt; Complete the Symmetrical Shape &gt; Example 1</li> <li>• Graphing &gt; Transformations &gt; Complete the Symmetrical Shape &gt; Example 2</li> </ul>
		Operations	Write and	Use parentheses, brackets, or		<ul style="list-style-type: none"> <li>• Whole Numbers &amp; Integers &gt; Order of Operations &gt; Why Use Order of Operations Whole Numbers</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Order of Operations &gt; Example Questions &gt; Example 5</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Order of Operations &gt; Example Questions &gt; Example 7</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Order of Operations &gt; Example Questions &gt; Example 8</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Order of Operations &gt; Example Questions &gt; Example 9</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Order of Operations &gt; Example Questions &gt; Example 10</li> <li>• Whole Numbers &amp; Integers &gt; Order of Operations &gt; Please Excuse My Dear Aunt Sally</li> <li>• Whole Numbers &amp; Integers &gt; Order of Operations</li> </ul>

54.)	Grade 5	and Algebraic Thinking	interpret numerical expressions.	braces in numerical expressions, and evaluate expressions with these symbols.	5.OA.01	<ul style="list-style-type: none"> <li>&gt; Example Questions - Whole Numbers &gt; Example 5</li> <li>• Whole Numbers &amp; Integers &gt; Order of Operations &gt; Example Questions - Whole Numbers &gt; Example 6</li> <li>• Whole Numbers &amp; Integers &gt; Order of Operations &gt; Example Questions - Whole Numbers &gt; Example 7</li> <li>• Whole Numbers &amp; Integers &gt; Order of Operations &gt; Example Questions - Whole Numbers &gt; Example 8</li> <li>• Whole Numbers &amp; Integers &gt; Order of Operations &gt; Example Questions - Whole Numbers &gt; Example 9</li> <li>• Whole Numbers &amp; Integers &gt; Order of Operations &gt; Example Questions - Whole Numbers &gt; Example 10</li> <li>• Whole Numbers &amp; Integers &gt; Order of Operations &gt; Word Problems &gt; Garbage</li> <li>• Whole Numbers &amp; Integers &gt; Order of Operations &gt; Word Problems &gt; Babysitting</li> <li>• Whole Numbers &amp; Integers &gt; Order of Operations &gt; Word Problems &gt; Shipping</li> </ul>
55.)	Grade 5	Operations and Algebraic Thinking	Write and interpret numerical expressions.	Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. For example, express the calculation "add 8 and 7, then multiply by 2" as $2 \times (8 + 7)$ . Recognize that $3 \times (18932 + 921)$ is three times as large as $18932 + 921$ , without having to calculate the indicated sum or product.	5.OA.02	<ul style="list-style-type: none"> <li>• Equations &gt; Problem Solving &gt; The Translation Machine &gt; Numerical Expressions &gt; Example 1</li> <li>• Equations &gt; Problem Solving &gt; The Translation Machine &gt; Numerical Expressions &gt; Example 2</li> <li>• Equations &gt; Problem Solving &gt; Operation Word Sort</li> <li>• Equations &gt; Problem Solving &gt; Writing Numerical Expressions &gt; Example 1</li> <li>• Equations &gt; Problem Solving &gt; Writing Numerical Expressions &gt; Example 2</li> <li>• Equations &gt; Problem Solving &gt; Writing Numerical Expressions &gt; Story Problems &gt; Example 1</li> <li>• Equations &gt; Problem Solving &gt; Writing Numerical Expressions &gt; Story Problems &gt; Example 2</li> </ul>
56.)	Grade 5	Operations and Algebraic Thinking	Analyze patterns and relationships.	Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane. For example, given the rule "Add 3" and the starting number 0, and given the rule "Add 6" and the starting number 0, generate terms in the resulting sequences, and observe that the terms in one sequence are twice the corresponding terms in the other sequence. Explain informally why this is so.	5.OA.03	<ul style="list-style-type: none"> <li>• Equations &gt; Problem Solving &gt; The Translation Machine &gt; Numerical Expressions &gt; Example 1</li> <li>• Equations &gt; Problem Solving &gt; The Translation Machine &gt; Numerical Expressions &gt; Example 2</li> <li>• Equations &gt; Problem Solving &gt; Writing Numerical Expressions &gt; Example 1</li> <li>• Equations &gt; Problem Solving &gt; Writing Numerical Expressions &gt; Example 2</li> <li>• Equations &gt; Problem Solving &gt; Writing Numerical Expressions &gt; Story Problems &gt; Example 1</li> <li>• Equations &gt; Problem Solving &gt; Writing Numerical Expressions &gt; Story Problems &gt; Example 2</li> <li>• Equations &gt; Problem Solving &gt; Operation Word Sort</li> <li>• Algebra &gt; Patterns, Patterns, Patterns &gt; Generating &amp; Comparing Number Patterns &gt; Example 1 &gt; Generate the Patterns</li> <li>• Algebra &gt; Patterns, Patterns, Patterns &gt; Generating &amp; Comparing Number Patterns &gt; Example 1 &gt; Create Ordered Pairs</li> <li>• Algebra &gt; Patterns, Patterns, Patterns &gt; Generating &amp; Comparing Number Patterns &gt; Example 1 &gt; Graph</li> <li>• Algebra &gt; Patterns, Patterns, Patterns &gt; Generating &amp; Comparing Number Patterns &gt; Example 2 &gt; Generate the Patterns</li> <li>• Algebra &gt; Patterns, Patterns, Patterns &gt; Generating &amp; Comparing Number Patterns &gt; Example 2 &gt; Create Ordered Pairs</li> <li>• Algebra &gt; Patterns, Patterns, Patterns &gt; Generating &amp; Comparing Number Patterns &gt; Example 2 &gt; Graph</li> </ul>
						<ul style="list-style-type: none"> <li>• Whole Numbers &amp; Integers &gt; The Meaning of Whole Numbers &gt; Expanded Notation &gt; To 9999 &gt; Example 1</li> <li>• Whole Numbers &amp; Integers &gt; The Meaning of Whole Numbers &gt; Expanded Notation &gt; Write as Numerals &gt; Example 1</li> <li>• Whole Numbers &amp; Integers &gt; The Meaning of Whole Numbers &gt; Place Value to 999,999 &gt; Examples &gt; Example 1</li> <li>• Whole Numbers &amp; Integers &gt; The Meaning of</li> </ul>

57.)	Grade 5	Number and Operations in Base Ten	Understand the place value system.	Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left.	5.NBT.01	<ul style="list-style-type: none"> <li>Whole Numbers &gt; Place Value to 999,999 &gt; Examples &gt; Example 2</li> <li>• Whole Numbers &amp; Integers &gt; The Meaning of Whole Numbers &gt; Place Value to 999,999 &gt; Examples &gt; Example 3</li> <li>• Whole Numbers &amp; Integers &gt; The Meaning of Whole Numbers &gt; Place Value to 999,999 &gt; Examples &gt; Example 4</li> <li>• Whole Numbers &amp; Integers &gt; The Meaning of Whole Numbers &gt; Place Value to 999,999 &gt; Examples &gt; Example 5</li> <li>• Whole Numbers &amp; Integers &gt; The Meaning of Whole Numbers &gt; Place Value to 999,999 &gt; Neighbors</li> <li>• Exponents &gt; Powers of Ten &gt; Example 1 &gt; Example 1</li> <li>• Exponents &gt; Powers of Ten &gt; Example 2 &gt; Example 2</li> <li>• Exponents &gt; Powers of Ten &gt; Example 3 &gt; Example 3</li> </ul>
58.)	Grade 5	Number and Operations in Base Ten	Understand the place value system.	Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10.	5.NBT.02	<ul style="list-style-type: none"> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Patterns in Multiplication &gt; Patterns in Multiplication by 10</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Patterns in Multiplication &gt; Patterns in Multiplication by 100</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Patterns in Multiplication &gt; Patterns in Multiplication by 1000</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Patterns in Multiplication &gt; Example 1</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Patterns in Multiplication &gt; Example 2</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Patterns in Multiplication &gt; Example 3</li> <li>• Exponents &gt; Powers of Ten &gt; Example 1 &gt; Example 1</li> <li>• Exponents &gt; Powers of Ten &gt; Example 2 &gt; Example 2</li> <li>• Exponents &gt; Powers of Ten &gt; Example 3 &gt; Example 3</li> </ul>
59.)	Grade 5	Number and Operations in Base Ten	Understand the place value system.	<p>Read, write, and compare decimals to thousandths.</p> <p>a.) Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., <math>347.392 = 3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times (1/10) + 9 \times (1/100) + 2 \times (1/1000)</math>.</p> <p>b.) Compare two decimals to thousandths based on meanings of the digits in each place, using <math>&gt;</math>, <math>=</math>, and <math>&lt;</math> symbols to record the results of comparisons.</p>	5.NBT.03	<ul style="list-style-type: none"> <li>• a.)</li> <li>• Fractions &gt; Introduction to Decimals &gt; Ones, Tenths, Hundredths, Thousandths &gt; Decimals to Thousandths &gt; Example 4</li> <li>• Fractions &gt; Introduction to Decimals &gt; Ones, Tenths, Hundredths, Thousandths &gt; Decimals to Thousandths &gt; Example 5</li> <li>• Fractions &gt; Introduction to Decimals &gt; Understanding Place Value &gt; Example 1</li> <li>• Fractions &gt; Introduction to Decimals &gt; Understanding Place Value &gt; Example 2</li> <li>• Fractions &gt; Introduction to Decimals &gt; Understanding Place Value &gt; Example 3</li> <li>• Fractions &gt; Introduction to Decimals &gt; Understanding Place Value &gt; Example 4</li> <li>• Fractions &gt; Introduction to Decimals &gt; Expanded Notation &gt; To Thousandths &gt; Example 1</li> <li>• Fractions &gt; Introduction to Decimals &gt; Expanded Notation &gt; To Thousandths &gt; Example 2</li> <li>• Exponents &gt; Powers of Ten &gt; Example 1 &gt; Example 1</li> <li>• Exponents &gt; Powers of Ten &gt; Example 2 &gt; Example 2</li> <li>• Exponents &gt; Powers of Ten &gt; Example 3 &gt; Example 3</li> <li>• b.)</li> <li>• Fractions &gt; Introduction to Decimals &gt; Comparing Decimals &gt; Example 1</li> <li>• Fractions &gt; Introduction to Decimals &gt; Comparing Decimals &gt; Example 2</li> <li>• Fractions &gt; Introduction to Decimals &gt; Comparing Decimals &gt; Example 3</li> <li>• Fractions &gt; Introduction to Decimals &gt; Comparing Decimals &gt; Example 4</li> <li>• Exponents &gt; Powers of Ten &gt; Example 1 &gt; Example 1</li> <li>• Exponents &gt; Powers of Ten &gt; Example 2 &gt; Example 2</li> <li>• Exponents &gt; Powers of Ten &gt; Example 3 &gt; Example 3</li> </ul>

60.)	Grade 5	Number and Operations in Base Ten	Understand the place value system.	Use place value understanding to round decimals to any place.	5.NBT.04	<p>Example 3</p> <ul style="list-style-type: none"> <li>Fractions &gt; Introduction to Decimals &gt; Rounding Decimals &gt; Example 1</li> <li>Fractions &gt; Introduction to Decimals &gt; Rounding Decimals &gt; Example 2</li> <li>Fractions &gt; Introduction to Decimals &gt; Rounding Decimals &gt; Example 3</li> <li>Fractions &gt; Introduction to Decimals &gt; Rounding Decimals &gt; Example 4</li> <li>Fractions &gt; Introduction to Decimals &gt; Rounding Decimals &gt; Example 5</li> <li>Fractions &gt; Introduction to Decimals &gt; Rounding Decimals &gt; Special Case 1</li> <li>Fractions &gt; Introduction to Decimals &gt; Rounding Decimals &gt; Special Case 2</li> <li>Fractions &gt; Introduction to Decimals &gt; Rounding Decimals &gt; Summary</li> <li>Fractions &gt; Multiplication and Division of Decimals &gt; Rounding Decimals &gt; Example 5</li> <li>Fractions &gt; Multiplication and Division of Decimals &gt; Rounding Decimals &gt; Special Case 1</li> <li>Fractions &gt; Multiplication and Division of Decimals &gt; Rounding Decimals &gt; Special Case 2</li> <li>Fractions &gt; Multiplication and Division of Decimals &gt; Rounding Decimals &gt; Summary</li> <li>Fractions &gt; Multiplication and Division of Decimals &gt; Rounding Decimals &gt; Example 6</li> <li>Fractions &gt; Multiplication and Division of Decimals &gt; Rounding Decimals &gt; Example 7</li> <li>Fractions &gt; Multiplication and Division of Decimals &gt; Rounding Decimals &gt; Example 1</li> <li>Fractions &gt; Multiplication and Division of Decimals &gt; Rounding Decimals &gt; Example 3</li> <li>Fractions &gt; Multiplication and Division of Decimals &gt; Rounding Decimals &gt; Example 2</li> <li>Fractions &gt; Multiplication and Division of Decimals &gt; Rounding Decimals &gt; Example 4</li> </ul>
61.)	Grade 5	Number and Operations in Base Ten	Perform operations with multi-digit whole numbers and with decimals to hundredths.	Fluently multiply multi-digit whole numbers using the standard algorithm.	5.NBT.05	<ul style="list-style-type: none"> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply by a Single Digit Multiplier &gt; Standard Method &gt; Example 1</li> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply by a Single Digit Multiplier &gt; Standard Method &gt; Example 2</li> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply by a Single Digit Multiplier &gt; Standard Method &gt; Example 3</li> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply by a Single Digit Multiplier &gt; Standard Method &gt; Question 1</li> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply by a Single Digit Multiplier &gt; Standard Method &gt; Question 2</li> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply by a Single Digit Multiplier &gt; Standard Method &gt; Question 3</li> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply by a Two Digit Multiplier &gt; The Standard Method &gt; Example 1</li> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply by a Two Digit Multiplier &gt; The Standard Method &gt; Example 2</li> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply by a Two Digit Multiplier &gt; The Standard Method &gt; Example 3</li> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply by a Two Digit Multiplier &gt; The Standard Method &gt; Question 1</li> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply by a Two Digit Multiplier &gt; The Standard Method &gt; Question 2</li> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply by a Two Digit Multiplier &gt; The Standard Method &gt; Question 3</li> <li>Whole Numbers &amp; Integers &gt; Multiplication and</li> </ul>

62.)	Grade 5	Number and Operations in Base Ten	Perform operations with multi-digit whole numbers and with decimals to hundredths.	Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.	5.NBT.06	<ul style="list-style-type: none"> <li>• Division of Whole Numbers &gt; Multiply by a Two Digit Multiplier &gt; The Standard Method &gt; Question 4</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply by a Two Digit Multiplier &gt; The Standard Method &gt; Question 5</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Divide by a Single Digit Divisor &gt; Fair Sharing &gt; Example 1 - With Blocks</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Divide by a Single Digit Divisor &gt; Fair Sharing &gt; Example 2 - Without Blocks</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Divide by a Single Digit Divisor &gt; Fair Sharing &gt; Question 1</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Divide by a Single Digit Divisor &gt; Fair Sharing &gt; Question 2</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Divide by a Single Digit Divisor &gt; Fair Sharing &gt; Question 3</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Divide by a Single Digit Divisor &gt; Fair Sharing &gt; Question 4</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Divide by a Single Digit Divisor &gt; Fair Sharing &gt; Question 5</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Divide by a Single Digit Divisor &gt; Fair Sharing &gt; Question 6</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Divide by Partial Quotients &gt; Partial Quotient - Example 1</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Divide by Partial Quotients &gt; Partial Quotient - Example 2</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Divide by Partial Quotients &gt; Partial Quotient - Example 3</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Divide by Partial Quotients &gt; Partial Quotient - Example 4</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Problems Section &gt; Harvest Time - Metric</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Problems Section &gt; Harvest Time - US Standard</li> </ul>
						<ul style="list-style-type: none"> <li>• Fractions &gt; Percents, Fractions, Decimals &gt; Decimal Strips &gt; Concept 2</li> <li>• Fractions &gt; Percents, Fractions, Decimals &gt; Decimal Strips &gt; Concept 3</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Adding Decimals &gt; Click and Drag</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Adding Decimals &gt; Tenths - The Line &gt; Example 1</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Adding Decimals &gt; Tenths - The Line &gt; Example 2</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Adding Decimals &gt; Tenths - The Line &gt; Example 3</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Adding Decimals &gt; Tenths - The Line &gt; Example 4</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Adding Decimals &gt; Tenths - The Pencil &gt; Example 1</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Adding Decimals &gt; Tenths - The Pencil &gt; Example 2</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Adding Decimals &gt; Tenths - The Pencil &gt; Example 3</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Adding Decimals &gt; Tenths - The Pencil &gt; Example 4</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Adding Decimals &gt; Tenths - The Pencil &gt; Example 5</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Adding Decimals &gt; Hundredths - The Town &gt;</li> </ul>



- Example 1
- Fractions > Addition and Subtraction of Decimals > Adding Decimals > Hundredths - The Town > Example 2
- Fractions > Addition and Subtraction of Decimals > Adding Decimals > Hundredths - The Town > Example 3
- Fractions > Addition and Subtraction of Decimals > Adding Decimals > Hundredths - The Town > Example 4
- Fractions > Addition and Subtraction of Decimals > Adding Decimals > Method 1 - Partial Sums > Example 1 - With Grids
- Fractions > Addition and Subtraction of Decimals > Adding Decimals > Method 1 - Partial Sums > Example 2 - With Grids
- Fractions > Addition and Subtraction of Decimals > Adding Decimals > Method 2 - Columns > Example 1 - With Grids
- Fractions > Addition and Subtraction of Decimals > Adding Decimals > Method 2 - Columns > Example 2 - With Grids
- Fractions > Addition and Subtraction of Decimals > Adding Decimals > Method 2 - Columns > Example 3 - Without Grids
- Fractions > Addition and Subtraction of Decimals > Adding Decimals > Method 2 - Columns > Example 4 - Without Grids
- Fractions > Addition and Subtraction of Decimals > Adding Decimals > Method 2 - Columns > Example 5 - Without Grids
- Fractions > Addition and Subtraction of Decimals > Adding Decimals > Method 2 - Columns > Example 6 - Without Grids
- Fractions > Addition and Subtraction of Decimals > Adding Decimals > Method 3 - Right to Left > Example 1 - With Grids
- Fractions > Addition and Subtraction of Decimals > Adding Decimals > Method 3 - Right to Left > Example 2 - With Grids
- Fractions > Addition and Subtraction of Decimals > Adding Decimals > Method 3 - Right to Left > Example 3 - Without Grids
- Fractions > Addition and Subtraction of Decimals > Adding Decimals > Method 3 - Right to Left > Example 4 - Without Grids
- Fractions > Addition and Subtraction of Decimals > Adding Decimals > Method 3 - Right to Left > Example 5 - Without Grids
- Fractions > Addition and Subtraction of Decimals > Adding Decimals > Method 3 - Right to Left > Example 6 - Without Grids
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Click and Drag
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Tenths - The Pencil > Example 1
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Tenths - The Pencil > Example 2
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Tenths - The Pencil > Example 3
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Tenths - The Pencil > Example 4
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Tenths - The Pencil > Example 5
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Hundredths - The Field > Example 1
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Hundredths - The Field > Example 2
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Hundredths - The Field > Example 3
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Hundredths - The Field > Example 4
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Method 1 - Right to Left > Example 1 - With Grids
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Method 1 - Right to Left > Example 2 - With Grids
- Fractions > Addition and Subtraction of Decimals

63.)

Grade  
5

Number and  
Operations  
in Base Ten

Perform  
operations  
with multi-  
digit whole  
numbers and  
with decimals  
to hundredths.

Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

5.NBT.07

- > Subtracting Decimals > Method 1 - Right to Left > Example 3 - Without Grids
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Method 1 - Right to Left > Example 4 - Without Grids
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Method 1 - Right to Left > Example 5 - Without Grids
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Method 1 - Right to Left > Example 6 - Without Grids
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Method 2 - Trade First > Example 1 - With Grids
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Method 2 - Trade First > Example 2 - With Grids
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Method 2 - Trade First > Example 3 - Without Grids
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Method 2 - Trade First > Example 4 - Without Grids
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Method 2 - Trade First > Example 5 - Without Grids
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Method 2 - Trade First > Example 6 - Without Grids
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Method 3 - Add Up > Example 1 - With Grids
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Method 3 - Add Up > Example 2 - With Grids
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Method 3 - Add Up > Example 3 - With Grids
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Method 3 - Add Up > Example 4 - With Grids
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Method 3 - Add Up > Example 5 - Without Grids
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Method 3 - Add Up > Example 6 - Without Grids
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Method 3 - Add Up > Example 7 - Without Grids
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Method 3 - Add Up > Example 8 - Without Grids
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Method 4 - Add Up to Zero > Example 1
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Method 4 - Add Up to Zero > Example 2
- Fractions > Addition and Subtraction of Decimals > Decimals Around Us > Money > Example 1
- Fractions > Addition and Subtraction of Decimals > Decimals Around Us > Money > Example 2
- Fractions > Addition and Subtraction of Decimals > Decimals Around Us > Money > Example 3
- Fractions > Addition and Subtraction of Decimals > Decimals Around Us > Money > Example 4
- Fractions > Addition and Subtraction of Decimals > Decimals Around Us > Money > Example 5
- Fractions > Addition and Subtraction of Decimals > Decimals Around Us > Pencils > Example 1
- Fractions > Addition and Subtraction of Decimals > Decimals Around Us > Pencils > Example 2
- Fractions > Addition and Subtraction of Decimals > Decimals Around Us > Pencils > Example 3
- Fractions > Addition and Subtraction of Decimals > Decimals Around Us > Pencils > Example 4
- Fractions > Addition and Subtraction of Decimals > Decimals Around Us > Pencils > Example 5
- Fractions > Addition and Subtraction of Decimals > Decimals Around Us > School Supplies
- Fractions > Addition and Subtraction of Decimals > Decimals Around Us > Length in Metric Units > Example 1
- Fractions > Addition and Subtraction of Decimals > Decimals Around Us > Length in Metric Units > Example 2
- Fractions > Addition and Subtraction of Decimals

- > Decimals Around Us > Length in Metric Units
- > Example 3
- Fractions > Addition and Subtraction of Decimals
- > Decimals Around Us > Length in Metric Units
- > Example 4
- Fractions > Addition and Subtraction of Decimals
- > Decimals Around Us > Length in Metric Units
- > Example 5
- Fractions > Multiplication and Division of Decimals > Multiply by Partial Products Area > Example 1 with Blocks
- Fractions > Multiplication and Division of Decimals > Multiply by Partial Products Area > Example 2 with Blocks
- Fractions > Multiplication and Division of Decimals > Multiply by Partial Products Area > Example 3 with Blocks
- Fractions > Multiplication and Division of Decimals > Multiply by Partial Products Area > Example 4 without Blocks
- Fractions > Multiplication and Division of Decimals > Multiply by Partial Products Area > Example 5 without Blocks
- Fractions > Multiplication and Division of Decimals > Multiply by Partial Products Area > Example 6 without Blocks
- Fractions > Multiplication and Division of Decimals > Multiply by Partial Products Area > Question 1
- Fractions > Multiplication and Division of Decimals > Multiply by Partial Products Area > Question 2
- Fractions > Multiplication and Division of Decimals > Multiply by Partial Products Area > Question 3
- Fractions > Multiplication and Division of Decimals > Multiply by Repeated Addition > Example 1
- Fractions > Multiplication and Division of Decimals > Multiply by Repeated Addition > Example 2
- Fractions > Multiplication and Division of Decimals > Preliminaries to Division > Summary for Decimals
- Fractions > Multiplication and Division of Decimals > Fair Sharing Long Division > Example 1
- Fractions > Multiplication and Division of Decimals > Fair Sharing Long Division > Example 2
- Fractions > Multiplication and Division of Decimals > Fair Sharing Long Division > Question 1
- Fractions > Multiplication and Division of Decimals > Fair Sharing Long Division > Question 2
- Fractions > Multiplication and Division of Decimals > Fair Sharing Long Division > Question 3
- Fractions > Multiplication and Division of Decimals > Fair Sharing Long Division > Question 4
- Fractions > Multiplication and Division of Decimals > Standard Method > Example 1
- Fractions > Multiplication and Division of Decimals > Standard Method > Example 2
- Fractions > Multiplication and Division of Decimals > Standard Method > Example 3
- Fractions > Multiplication and Division of Decimals > Standard Method > Question 1
- Fractions > Multiplication and Division of Decimals > Standard Method > Question 2
- Fractions > Multiplication and Division of Decimals > Standard Method > Question 3
- Fractions > Multiplication and Division of Decimals > Distributive Method > Example 1
- Fractions > Multiplication and Division of Decimals > Distributive Method > Example 2
- Fractions > Multiplication and Division of Decimals > Distributive Method > Example 3
- Fractions > Multiplication and Division of Decimals > Distributive Method > Question 1
- Fractions > Multiplication and Division of Decimals > Distributive Method > Question 2
- Fractions > Multiplication and Division of Decimals > Distributive Method > Question 3
- Fractions > Multiplication and Division of Decimals > Partial Quotients > Example 1

- Fractions > Multiplication and Division of Decimals > Partial Quotients > Example 2
- Fractions > Multiplication and Division of Decimals > Partial Quotients > Example 3
- Fractions > Multiplication and Division of Decimals > Partial Quotients > Example 4
- Fractions > Multiplication and Division of Decimals > Pictorial Models for Decimal Division > Tenths > Example 1
- Fractions > Multiplication and Division of Decimals > Pictorial Models for Decimal Division > Tenths > Example 2
- Fractions > Multiplication and Division of Decimals > Pictorial Models for Decimal Division > Hundredths > Example 1
- Fractions > Multiplication and Division of Decimals > Pictorial Models for Decimal Division > Hundredths > Example 2
- Fractions > Multiplication and Division of Decimals > Special Case - Multiply a Decimal by a Whole Number > Example 1 with Blocks
- Fractions > Multiplication and Division of Decimals > Special Case - Multiply a Decimal by a Whole Number > Example 2 with Blocks
- Fractions > Multiplication and Division of Decimals > Decimals Around Us Word Problems > Example 1 - Oranges
- Fractions > Multiplication and Division of Decimals > Decimals Around Us Word Problems > Example 2 - Bananas
- Fractions > Multiplication and Division of Decimals > Decimals Around Us Word Problems > Example 3 - Cycling
- Fractions > Multiplication and Division of Decimals > Decimals Around Us Word Problems > Example 4 - Baseball Cards
- Fractions > Multiplication and Division of Decimals > Decimals Around Us Word Problems > Example 5 - Cookies
- Fractions > Multiplication and Division of Decimals > Decimals Around Us Word Problems > Example 6 - Running
- Fractions > Multiplication and Division of Decimals > Decimals Around Us Word Problems > Example 7 - Apples
- Fractions > Multiplication and Division of Decimals > Decimals Around Us Word Problems > Example 8 - Saving
- Fractions > Multiplication and Division of Decimals > Decimals Around Us Word Problems > Example 9 - Skipping
- Operations > Introduce Addition of Decimals > D > Add Decimals #1
- Operations > Introduce Addition of Decimals > D > Add Decimals #2
- Operations > Introduce Subtraction of Decimals > D > Subtract Decimals #1
- Operations > Introduce Subtraction of Decimals > D > Subtract Decimals #2

- Fractions > The Meaning of Fractions > Fraction Strips > Concept 2
- Fractions > The Meaning of Fractions > Fraction Strips > Concept 3
- Fractions > Adding Fractions > The Lowest Common Denominator > Example 1
- Fractions > Adding Fractions > The Lowest Common Denominator > Example 2
- Fractions > Adding Fractions > Word Problems > Eating Candy
- Fractions > Adding Fractions > Word Problems > Goal Scoring
- Fractions > Adding Fractions > Word Problems > Taking a Walk
- Fractions > Adding Fractions > Magic Square
- Fractions > Subtracting Fractions > The Lowest Common Denominator > Example 1
- Fractions > Subtracting Fractions > The Lowest Common Denominator > Example 2
- Fractions > Subtracting Fractions > Word Problems > Pedro and Alex's Race
- Fractions > Subtracting Fractions > Word Problems > Washing the Cars
- Fractions > Subtracting Fractions > Word Problems > Planting a Garden
- Fractions > Improper Fractions and Mixed Numbers > Adding Mixed Numbers > On a Ruler

64.)	Grade 5	Number and Operations - Fractions	Use equivalent fractions as a strategy to add and subtract fractions.	Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. For example, $\frac{2}{3} + \frac{5}{4} = \frac{8}{12} + \frac{15}{12} = \frac{23}{12}$ . (In general, $\frac{a}{b} + \frac{c}{d} = \frac{ad + bc}{bd}$ .)	5.NF.01	<ul style="list-style-type: none"> <li>• Fractions &gt; Improper Fractions and Mixed Numbers &gt; Adding Mixed Numbers &gt; Method 1</li> <li>• Fractions &gt; Improper Fractions and Mixed Numbers &gt; Adding Mixed Numbers &gt; Method 2</li> <li>• Fractions &gt; Improper Fractions and Mixed Numbers &gt; Subtracting Mixed Numbers &gt; On a Ruler</li> <li>• Fractions &gt; Improper Fractions and Mixed Numbers &gt; Subtracting Mixed Numbers &gt; Method 1</li> <li>• Fractions &gt; Improper Fractions and Mixed Numbers &gt; Subtracting Mixed Numbers &gt; Method 2</li> <li>• Fractions &gt; Improper Fractions and Mixed Numbers &gt; Fraction Card Game</li> <li>• Fractions &gt; Adding Fractions &gt; Pattern Blocks &gt; Hexagon 2</li> <li>• Fractions &gt; Adding Fractions &gt; Pattern Blocks &gt; Hexagon 3</li> <li>• Fractions &gt; Adding Fractions &gt; Pattern Blocks &gt; Summary</li> <li>• Fractions &gt; Adding Fractions &gt; Fraction Strips &gt; Concept 2</li> <li>• Fractions &gt; Adding Fractions &gt; Fraction Strips &gt; Concept 3</li> <li>• Fractions &gt; Adding Fractions &gt; The Clock &gt; Example 1</li> <li>• Fractions &gt; Subtracting Fractions &gt; Pattern Blocks &gt; Hexagon 2</li> <li>• Fractions &gt; Subtracting Fractions &gt; Pattern Blocks &gt; Hexagon 3</li> <li>• Fractions &gt; Subtracting Fractions &gt; Pattern Blocks &gt; Summary</li> <li>• Fractions &gt; Subtracting Fractions &gt; The Clock &gt; Example 1</li> <li>• Fractions &gt; Subtracting Fractions &gt; The Clock &gt; Example 2</li> <li>• Fractions &gt; Subtracting Fractions &gt; The Clock &gt; Example 3</li> <li>• Fractions &gt; Subtracting Fractions &gt; Fraction Strips &gt; Concept 2</li> <li>• Fractions &gt; Order of Operations &gt; Order in Addition &gt; Trial 1</li> <li>• Fractions &gt; Order of Operations &gt; Order in Addition &gt; Trial 2</li> <li>• Fractions &gt; Order of Operations &gt; Order in Addition &gt; Example 1</li> <li>• Fractions &gt; Order of Operations &gt; Order in Addition &gt; Example 2</li> <li>• Fractions &gt; Improper Fractions and Mixed Numbers &gt; Subtracting Mixed Numbers &gt; Borrowing</li> </ul>
65.)	Grade 5	Number and Operations - Fractions	Use equivalent fractions as a strategy to add and subtract fractions.	Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. For example, recognize an incorrect result $\frac{2}{5} + \frac{1}{2} = \frac{3}{7}$ , by observing that $\frac{3}{7} < \frac{1}{2}$ .	5.NF.02	<ul style="list-style-type: none"> <li>• Fractions &gt; Adding Fractions &gt; Word Problems &gt; Alexanders Friend</li> <li>• Fractions &gt; Adding Fractions &gt; Word Problems &gt; Eating Candy</li> <li>• Fractions &gt; Adding Fractions &gt; Word Problems &gt; Goal Scoring</li> <li>• Fractions &gt; Adding Fractions &gt; Word Problems &gt; Taking a Walk</li> <li>• Fractions &gt; Subtracting Fractions &gt; Word Problems &gt; Pedro and Alexs Race</li> <li>• Fractions &gt; Subtracting Fractions &gt; Word Problems &gt; Washing the Cars</li> <li>• Fractions &gt; Subtracting Fractions &gt; Word Problems &gt; Planting a Garden</li> </ul>
				Interpret a fraction as division of the numerator by the denominator ( $\frac{a}{b} = a$ divided by $b$ ). Solve word problems involving division of whole numbers leading to answers in		<ul style="list-style-type: none"> <li>• Fractions &gt; Dividing Fractions &gt; Understanding Division &gt; Introduction</li> <li>• Fractions &gt; Dividing Fractions &gt; Examples Without Diagrams &gt; Central High School</li> <li>• Fractions &gt; Multiplication and Division of Decimals &gt; Fractions to Decimals &gt; Method 1 - Long Division &gt; Example 1</li> <li>• Fractions &gt; Multiplication and Division of Decimals &gt; Fractions to Decimals &gt; Method 1 - Long Division &gt; Example 2</li> <li>• Fractions &gt; Multiplication and Division of Decimals &gt; Fractions to Decimals &gt; Method 1 - Long Division &gt; Example 3</li> <li>• Fractions &gt; Multiplication and Division of</li> </ul>

66.)	Grade 5	Number and Operations - Fractions	Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem. For example, interpret $\frac{3}{4}$ as the result of dividing 3 by 4, noting that $\frac{3}{4}$ multiplied by 4 equals 3, and that when 3 wholes are shared equally among 4 people each person has a share of size $\frac{3}{4}$ . If 9 people want to share a 50-pound sack of rice equally by weight, how many pounds of rice should each person get? Between what two whole numbers does your answer lie?	5.NF.03	<ul style="list-style-type: none"> <li>Decimals &gt; Fractions to Decimals Division Table &gt; 5 divided by 7</li> <li>• Fractions &gt; Multiplication and Division of Decimals &gt; Fractions to Decimals Division Table &gt; 3 divided by 8</li> <li>• Fractions &gt; Multiplication and Division of Decimals &gt; Fractions to Decimals Division Table &gt; 1 divided by 11</li> <li>• Fractions &gt; Multiplication and Division of Decimals &gt; Fractions to Decimals Division Table &gt; 2 divided by 9</li> <li>• Fractions &gt; Multiplication and Division of Decimals &gt; Fractions to Decimals Division Table &gt; 2 divided by 3</li> <li>• Fractions &gt; Multiplication and Division of Decimals &gt; Fractions to Decimals Division Table &gt; 8 divided by 9</li> <li>• Fractions &gt; Multiplication and Division of Decimals &gt; Fractions to Decimals Division Table &gt; 11 divided by 12</li> <li>• Fractions &gt; Multiplication and Division of Decimals &gt; Fractions to Decimals Division Table &gt; 9 divided by 5</li> <li>• Fractions &gt; Dividing Fractions &gt; Understanding Division &gt; Recall from Whole Numbers 1</li> <li>• Fractions &gt; Dividing Fractions &gt; Understanding Division &gt; Recall from Whole Numbers 2</li> <li>• Fractions &gt; Dividing Fractions &gt; Understanding Division &gt; Recall from Whole Numbers 3</li> </ul>
67.)	Grade 5	Number and Operations - Fractions	Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	<p>Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction.</p> <p>a.) Interpret the product <math>(\frac{a}{b}) \times q</math> as a parts of a partition of <math>q</math> into <math>b</math> equal parts; equivalently, as the result of a sequence of operations <math>a \times q</math> divided by <math>b</math>. For example, use a visual fraction model to show <math>(\frac{2}{3}) \times 4 = \frac{8}{3}</math>, and create a story context for this equation. Do the same with <math>(\frac{2}{3}) \times (\frac{4}{5}) = \frac{8}{15}</math>. (In general, <math>(\frac{a}{b}) \times (\frac{c}{d}) = \frac{ac}{bd}</math>.)</p> <p>b.) Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths, and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas.</p>	5.NF.04	<ul style="list-style-type: none"> <li>• a.)</li> <li>• Fractions &gt; Multiplying Fractions &gt; Real World Problems with Pictures &gt; Boris Money</li> <li>• Fractions &gt; Multiplying Fractions &gt; Real World Problems with Pictures &gt; Marias Trip</li> <li>• Fractions &gt; Multiplying Fractions &gt; Developing the Rule &gt; Ex. 1 - Whole Number X Unit Fraction</li> <li>• Fractions &gt; Multiplying Fractions &gt; Developing the Rule &gt; Ex. 2 - Whole Number X Any Fraction</li> <li>• Fractions &gt; Multiplying Fractions &gt; Developing the Rule &gt; Ex. 3 - Proper Fraction X Proper Fraction</li> <li>• Fractions &gt; Multiplying Fractions &gt; Developing the Rule &gt; Ex. 4 - Proper Fraction X Proper Fraction</li> <li>b.)</li> <li>• N/A</li> </ul>
				<p>Interpret multiplication as scaling (resizing), by:</p> <p>a.) Comparing the size of a product to the size of one factor</p>		<ul style="list-style-type: none"> <li>• a.)</li> <li>• Fractions &gt; Multiplying Fractions &gt; Developing the Rule &gt; Ex. 3 - Proper Fraction X Proper Fraction</li> <li>• Fractions &gt; Multiplying Fractions &gt; Developing the Rule &gt; Ex. 4 - Proper Fraction X Proper Fraction</li> <li>• Fractions &gt; Multiplying Fractions &gt; Developing the Rule &gt; Ex. 5 - Whole Number X Mixed Number</li> <li>• Fractions &gt; Multiplying Fractions &gt; Predicting Products &gt; Example 1</li> <li>• Fractions &gt; Multiplying Fractions &gt; Predicting Products &gt; Example 2</li> <li>• Fractions &gt; Improper Fractions and Mixed Numbers &gt; Multiplying Mixed Numbers &gt; Fraction <math>\bar{A}</math>— Mixed Number &gt; Predicting</li> </ul>

68.)	Grade 5	Number and Operations - Fractions	Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	<p>on the basis of the size of the other factor, without performing the indicated multiplication.</p> <p>b.) Explaining why multiplying a given number by a fraction greater than 1 results in a product greater than the given number (recognizing multiplication by whole numbers greater than 1 as a familiar case); explaining why multiplying a given number by a fraction less than 1 results in a product smaller than the given number; and relating the principle of fraction equivalence <math>\frac{a}{b} = \frac{nx a}{nx b}</math> to the effect of multiplying <math>\frac{a}{b}</math> by 1.</p>	5.NF.05	<ul style="list-style-type: none"> <li>Products &gt; Example 1</li> <li>Fractions &gt; Improper Fractions and Mixed Numbers &gt; Multiplying Mixed Numbers &gt; Fraction <math>\dot{A}</math>— Mixed Number &gt; Predicting Products &gt; Example 2</li> <li>b.)</li> <li>Fractions &gt; Improper Fractions and Mixed Numbers &gt; Multiplying Mixed Numbers &gt; Method 2</li> <li>Fractions &gt; Multiplying Fractions &gt; Developing the Rule &gt; Ex. 1 - Whole Number X Unit Fraction</li> <li>Fractions &gt; Multiplying Fractions &gt; Developing the Rule &gt; Ex. 2 - Whole Number X Any Fraction</li> <li>Fractions &gt; Multiplying Fractions &gt; Developing the Rule &gt; Ex. 3 - Proper Fraction X Proper Fraction</li> <li>Fractions &gt; Multiplying Fractions &gt; Developing the Rule &gt; Ex. 4 - Proper Fraction X Proper Fraction</li> <li>Fractions &gt; Multiplying Fractions &gt; Developing the Rule &gt; Ex. 5 - Whole Number X Mixed Number</li> <li>Fractions &gt; Improper Fractions and Mixed Numbers &gt; Multiplying Mixed Numbers &gt; Fraction <math>\dot{A}</math>— Mixed Number &gt; Patterns in Multiplying by Factors Less Than 1</li> <li>Fractions &gt; Improper Fractions and Mixed Numbers &gt; Multiplying Mixed Numbers &gt; Fraction <math>\dot{A}</math>— Mixed Number &gt; Patterns in Multiplying by Factors Greater Than 1</li> <li>Fractions &gt; Equivalent Fractions &gt; Equivalent Fractions... The Pattern</li> </ul>
69.)	Grade 5	Number and Operations - Fractions	Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.	5.NF.06	<ul style="list-style-type: none"> <li>Fractions &gt; Multiplying Fractions &gt; Real World Problems with Pictures &gt; Boris Money</li> <li>Fractions &gt; Multiplying Fractions &gt; Real World Problems with Pictures &gt; Marias Trip</li> <li>Fractions &gt; Multiplying Fractions &gt; Real World Problems with Pictures &gt; The Blanket</li> <li>Fractions &gt; Multiplying Fractions &gt; Real World Problems with Pictures &gt; Harry Meets Sally</li> <li>Fractions &gt; Multiplying Fractions &gt; Predicting Products &gt; Example 1</li> <li>Fractions &gt; Multiplying Fractions &gt; Predicting Products &gt; Example 2</li> <li>Fractions &gt; Improper Fractions and Mixed Numbers &gt; Multiplying Mixed Numbers &gt; Fraction <math>\dot{A}</math>— Mixed Number &gt; Predicting Products &gt; Example 1</li> <li>Fractions &gt; Improper Fractions and Mixed Numbers &gt; Multiplying Mixed Numbers &gt; Fraction <math>\dot{A}</math>— Mixed Number &gt; Predicting Products &gt; Example 2</li> <li>Fractions &gt; Improper Fractions and Mixed Numbers &gt; Multiplying Mixed Numbers &gt; Fraction <math>\dot{A}</math>— Mixed Number &gt; Sharing Candy Bars</li> <li>Fractions &gt; Improper Fractions and Mixed Numbers &gt; Multiplying Mixed Numbers &gt; Fraction <math>\dot{A}</math>— Mixed Number &gt; Half a Recipe</li> </ul>
				<p>Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions.</p> <p>a.) Interpret division of a unit fraction by a non-zero whole number, and compute such quotients. For example, create a story context for <math>\frac{1}{3}</math> divided by 4, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that <math>\frac{1}{3}</math> divided by 4 =</p>		<ul style="list-style-type: none"> <li>a.)</li> <li>Fractions &gt; Dividing Fractions &gt; Real World Problems with Diagrams &gt; The Pie - Divide a Proper Fraction by a Whole Number</li> <li>Fractions &gt; Dividing Fractions &gt; Real World Problems with Number Lines &gt; Sharing Fudge - Unit Fraction / Whole Number</li> </ul>

70.)	Grade 5	Number and Operations - Fractions	Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	<p>1/12 because <math>(1/12) \times 4 = 1/3</math>.</p> <p>b.) Interpret division of a whole number by a unit fraction, and compute such quotients. For example, create a story context for 4 divided by <math>(1/5)</math>, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that 4 divided by <math>(1/5) = 20</math> because <math>20 \times (1/5) = 4</math>.</p> <p>c.) Solve real world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions, e.g., by using visual fraction models and equations to represent the problem. For example, how much chocolate will each person get if 3 people share <math>1/2</math> lb of chocolate equally? How many <math>1/3</math>-cup servings are in 2 cups of raisins?</p>	5.NF.07	<p>b.)</p> <ul style="list-style-type: none"> <li>Fractions &gt; Dividing Fractions &gt; Understanding Division &gt; Introduction</li> <li>Fractions &gt; Dividing Fractions &gt; Examples Without Diagrams &gt; Central High School</li> <li>Fractions &gt; Dividing Fractions &gt; Real World Problems with Diagrams &gt; Piece of Wood - Divide a Whole Number by a Proper Fraction</li> <li>Fractions &gt; Dividing Fractions &gt; Real World Problems with Number Lines &gt; Servings of Yogurt - Whole Number / Unit Fraction</li> </ul> <p>c.)</p> <ul style="list-style-type: none"> <li>Fractions &gt; Dividing Fractions &gt; Understanding Division &gt; Introduction</li> <li>Fractions &gt; Dividing Fractions &gt; Examples Without Diagrams &gt; Central High School</li> <li>Fractions &gt; Dividing Fractions &gt; Examples Without Diagrams &gt; The Cheeseburger</li> <li>Fractions &gt; Dividing Fractions &gt; Examples Without Diagrams &gt; Chicken Noodle Soup</li> </ul>
71.)	Grade 5	Measurement and Data	Convert like measurement units within a given measurement system.	Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems.	5.MD.01	<ul style="list-style-type: none"> <li>Measurement &amp; Geometry &gt; An Introduction to Measurement &gt; US Standard Conversions - Length &gt; Converting</li> <li>Measurement &amp; Geometry &gt; An Introduction to Measurement &gt; Metric Conversions - Length &gt; Understanding Metric Prefixes</li> <li>Measurement &amp; Geometry &gt; An Introduction to Measurement &gt; Metric Conversions - Length &gt; Metric Prefixes at Work</li> <li>Measurement &amp; Geometry &gt; An Introduction to Measurement &gt; Metric Conversions - Length &gt; Metric Match &gt; Introduction</li> <li>Measurement &amp; Geometry &gt; An Introduction to Measurement &gt; Metric Conversions - Length &gt; Metric Match &gt; Examples</li> <li>Measurement &amp; Geometry &gt; An Introduction to Measurement &gt; Metric Conversions - Length &gt; Converting</li> </ul>
72.)	Grade 5	Measurement and Data	Represent and interpret data.	Make a line plot to display a data set of measurements in fractions of a unit ( $1/2, 1/4, 1/8$ ). Use operations on fractions for this grade to solve problems involving information presented in line plots. For example, given different measurements of liquid in identical beakers, find the amount of liquid each beaker would contain if the total amount in all the beakers were redistributed equally.	5.MD.02	<ul style="list-style-type: none"> <li>Graphing &gt; Statistics &gt; Line Plot &gt; Creating a Line Plot &gt; Example 1</li> <li>Graphing &gt; Statistics &gt; Line Plot &gt; Creating a Line Plot &gt; Example 2</li> <li>Graphing &gt; Statistics &gt; Line Plot &gt; Interpreting a Line Plot &gt; Example 1</li> <li>Graphing &gt; Statistics &gt; Line Plot &gt; Interpreting a Line Plot &gt; Example 2</li> <li></li> </ul>
			Geometric measurement: understand concepts of	<p>Recognize volume as an attribute of solid figures and understand concepts of volume measurement.</p> <p>a.) A cube with side length 1 unit, called a "unit cube," is</p>		<ul style="list-style-type: none"> <li>a.)</li> <li>Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Volume of a Solid &gt; Cubic Units</li> <li>Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Volume of a Solid &gt; Volume of Rectangular Prisms &gt; Example 1</li> <li>Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Volume of a Solid &gt; Volume of Rectangular Prisms &gt; Example 2</li> </ul>



73.)	Grade 5	Measurement and Data	volume and relate volume to multiplication and to addition.	<p>said to have \"one cubic unit\" of volume, and can be used to measure volume.</p> <p>b.) A solid figure which can be packed without gaps or overlaps using n unit cubes is said to have a volume of n cubic units.</p>	5.MD.03	<ul style="list-style-type: none"> <li>b.)</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Volume of a Solid &gt; Cubic Units</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Volume of a Solid &gt; Volume of Rectangular Prisms &gt; Example 1</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Volume of a Solid &gt; Volume of Rectangular Prisms &gt; Example 2</li> </ul>
74.)	Grade 5	Measurement and Data	Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.	Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units.	5.MD.04	<ul style="list-style-type: none"> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Volume of a Solid &gt; Concept</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Volume of a Solid &gt; Volume of a Prism: Formula 1</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Volume of a Solid &gt; Cubic Units</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Volume of a Solid &gt; Fill-em Up &gt; Intro</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Volume of a Solid &gt; Fill-em Up &gt; Sugar Cubes</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Volume of a Solid &gt; Fill-em Up &gt; Closet</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Volume of a Solid &gt; Fill-em Up &gt; Moving Van</li> </ul>
75.)	Grade 5	Measurement and Data	Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.	<p>Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume.</p> <p>a.) Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths, equivalently by multiplying the height by the area of the base. Represent threefold whole-number products as volumes, e.g., to represent the associative property of multiplication.</p> <p>b.) Apply the formulas <math>V = l \times w \times h</math> and <math>V = b \times h</math> for rectangular prisms to find volumes of right rectangular prisms with wholenumber edge lengths in the context of solving real world and mathematical problems.</p> <p>c.) Recognize volume as additive. Find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the non-overlapping parts, applying this technique to solve real world problems.</p>	5.MD.05	<ul style="list-style-type: none"> <li>• a.)</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Volume of a Solid &gt; Volume of a Prism: Formula 1</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Volume of a Solid &gt; Volume of a Prism: Formula 2</li> <li>b.)</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Volume of a Solid &gt; Volume of a Prism: Formula 1</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Volume of a Solid &gt; Volume of a Prism: Formula 2</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Real World Problems &gt; Non-Overlapping Rectangular Prisms &gt; The Pool</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Real World Problems &gt; Non-Overlapping Rectangular Prisms &gt; The Patio</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Real World Problems &gt; Non-Overlapping Rectangular Prisms &gt; The Stairs</li> <li>c.)</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Real World Problems &gt; Non-Overlapping Rectangular Prisms &gt; The Pool</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Real World Problems &gt; Non-Overlapping Rectangular Prisms &gt; The Patio</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Real World Problems &gt; Non-Overlapping Rectangular Prisms &gt; The Stairs</li> </ul>

76.)	Grade 5	Geometry	Graph points on the coordinate plane to solve real-world and mathematical problems.	Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., x-axis and x-coordinate, y-axis and y-coordinate).	5.G.01	<ul style="list-style-type: none"> <li>• Graphing &gt; Points on a Grid &gt; Ordered Pairs &gt; Finding a Point</li> <li>• Graphing &gt; Points on a Grid &gt; Ordered Pairs &gt; Axis</li> <li>• Graphing &gt; Points on a Grid &gt; Ordered Pairs &gt; Quadrants and Cartesian Plane</li> <li>• Graphing &gt; Points on a Grid &gt; Ordered Pairs &gt; Examples &gt; Example 2</li> <li>• Graphing &gt; Points on a Grid &gt; Ordered Pairs &gt; Examples &gt; Example 3</li> </ul>
77.)	Grade 5	Geometry	Graph points on the coordinate plane to solve real-world and mathematical problems.	Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.	5.G.02	<ul style="list-style-type: none"> <li>• Graphing &gt; Points on a Grid &gt; Ordered Pairs &gt; Finding a Point</li> <li>• Graphing &gt; Points on a Grid &gt; Ordered Pairs &gt; Examples &gt; Example 2</li> <li>• Graphing &gt; Points on a Grid &gt; Ordered Pairs &gt; Examples &gt; Example 3</li> </ul>
78.)	Grade 5	Geometry	Classify two-dimensional figures into categories based on their properties.	Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category. For example, all rectangles have four right angles and squares are rectangles, so all squares have four right angles.	5.G.03	<ul style="list-style-type: none"> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Polygons &gt; What Are They?</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Polygons &gt; Regular v. Irregular</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Polygons &gt; Triangles &gt; Definition</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Polygons &gt; Triangles &gt; Classifications &gt; By Sides</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Polygons &gt; Triangles &gt; Classifications &gt; By Angles</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Polygons &gt; Quadrilaterals &gt; Definition</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Polygons &gt; Quadrilaterals &gt; Classifications &gt; Trapezoid</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Polygons &gt; Quadrilaterals &gt; Classifications &gt; Parallelogram</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Polygons &gt; Quadrilaterals &gt; Classifications &gt; Rectangle</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Polygons &gt; Quadrilaterals &gt; Classifications &gt; Rhombus</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Polygons &gt; Quadrilaterals &gt; Classifications &gt; Square</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Classify Polygons &gt; Venn Diagrams &gt; Red &amp; Regular</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Classify Polygons &gt; Venn Diagrams &gt; Parallel &amp; Perpendicular Lines</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Classify Polygons &gt; Hierarchy &gt; Polygons</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Classify Polygons &gt; Hierarchy &gt; Quadrilaterals</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Classify Polygons &gt; Hierarchy &gt; Triangles</li> </ul>

• Measurement & Geometry > Perimeter and Area

79.)	Grade 5	Geometry	Classify two-dimensional figures into categories based on their properties.	Classify two-dimensional figures in a hierarchy based on properties.	5.G.04	<ul style="list-style-type: none"> <li>of Polygons &gt; Polygons &gt; What Are They?</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Polygons &gt; Regular v. Irregular</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Polygons &gt; Triangles &gt; Definition</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Polygons &gt; Triangles &gt; Classifications &gt; By Sides</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Polygons &gt; Triangles &gt; Classifications &gt; By Angles</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Polygons &gt; Quadrilaterals &gt; Definition</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Polygons &gt; Quadrilaterals &gt; Classifications &gt; Trapezoid</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Polygons &gt; Quadrilaterals &gt; Classifications &gt; Parallelogram</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Polygons &gt; Quadrilaterals &gt; Classifications &gt; Rectangle</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Polygons &gt; Quadrilaterals &gt; Classifications &gt; Rhombus</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Polygons &gt; Quadrilaterals &gt; Classifications &gt; Square</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Classify Polygons &gt; Venn Diagrams &gt; Red &amp; Regular</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Classify Polygons &gt; Venn Diagrams &gt; Parallel &amp; Perpendicular Lines</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Classify Polygons &gt; Hierarchy &gt; Polygons</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Classify Polygons &gt; Hierarchy &gt; Quadrilaterals</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Classify Polygons &gt; Hierarchy &gt; Triangles</li> </ul>
80.)	Grade 6	Ratios and Proportional Relationships	Understand ratio concepts and use ratio reasoning to solve problems.	Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities. For example, "The ratio of wings to beaks in the bird house at the zoo was 2:1, because for every 2 wings there was 1 beak." "For every vote candidate A received, candidate C received nearly three votes."	6.RP.01	<ul style="list-style-type: none"> <li>• Fractions &gt; Ratios and Proportions &gt; Ratios and Your Body &gt; Measuring Your Body</li> <li>• Fractions &gt; Ratios and Proportions &gt; Writing Ratios Using Graphs &gt; Circle or Pie Graphs &gt; Example 1</li> <li>• Fractions &gt; Ratios and Proportions &gt; Writing Ratios Using Graphs &gt; Circle or Pie Graphs &gt; Example 2</li> <li>• Fractions &gt; Ratios and Proportions &gt; Writing Ratios Using Graphs &gt; Bar Graphs &gt; Example 1</li> <li>• Fractions &gt; Ratios and Proportions &gt; Writing Ratios Using Graphs &gt; Bar Graphs &gt; Example 2</li> <li>• Fractions &gt; Ratios and Proportions &gt; Writing Ratios Using Graphs &gt; Dot Plots &gt; Example 1</li> <li>• Fractions &gt; Ratios and Proportions &gt; Writing Ratios Using Graphs &gt; Dot Plots &gt; Example 2</li> </ul>
81.)	Grade 6	Ratios and Proportional Relationships	Understand ratio concepts and use ratio reasoning to solve problems.	Understand the concept of a unit rate $a/b$ associated with a ratio $a:b$ with $b \neq 0$ , and use rate language in the context of a ratio relationship. For example, "This recipe has a ratio of 3 cups of flour to 4 cups of sugar, so there is $3/4$ cup of flour for each cup of sugar." "We paid \$75 for 15 hamburgers, which is a rate of \$5 per hamburger."	6.RP.02	<ul style="list-style-type: none"> <li>• Fractions &gt; Ratios and Proportions &gt; Rate and Unit Rate &gt; Concept</li> <li>• Fractions &gt; Ratios and Proportions &gt; Rate and Unit Rate &gt; Examples</li> <li>• Fractions &gt; Ratios and Proportions &gt; Rate and Unit Rate &gt; The Best?</li> <li>• Fractions &gt; Ratios and Proportions &gt; Rate and Unit Rate &gt; Distance Traveled</li> </ul>
						<ul style="list-style-type: none"> <li>• a.)</li> <li>• Fractions &gt; Ratios and Proportions &gt; Ratio Table &gt; Introduction</li> <li>• Fractions &gt; Ratios and Proportions &gt; Ratio Table &gt; Example 1</li> <li>• Fractions &gt; Ratios and Proportions &gt; Ratio Table &gt; Example 2</li> <li>• Fractions &gt; Ratios and Proportions &gt; Ratio Table &gt; Example 2 &gt; Graph</li> </ul>

82.)	Grade 6	Ratios and Proportional Relationships	<p>Understand ratio concepts and use ratio reasoning to solve problems.</p>	<p>Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations.</p> <p>a.) Make tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables, and plot the pairs of values on the coordinate plane. Use tables to compare ratios.</p> <p>b.) Solve unit rate problems including those involving unit pricing and constant speed. For example, if it took 7 hours to mow 4 lawns, then at that rate, how many lawns could be mowed in 35 hours? At what rate were lawns being mowed?</p>	6.RP.03	<ul style="list-style-type: none"> <li>Fractions &gt; Ratios and Proportions &gt; Ratio Table &gt; Example 3</li> <li>• Fractions &gt; Ratios and Proportions &gt; Ratio Table &gt; Example 3 &gt; Graph</li> <li>b.)</li> <li>• Fractions &gt; Ratios and Proportions &gt; Proportions &gt; Example 2 - Lemonade</li> <li>• Fractions &gt; Ratios and Proportions &gt; Proportions &gt; Example 3 - Marbles</li> <li>• Fractions &gt; Ratios and Proportions &gt; Proportions &gt; Example 4 - Trout</li> <li>• Fractions &gt; Ratios and Proportions &gt; Ratio Table &gt; Introduction</li> <li>• Fractions &gt; Ratios and Proportions &gt; Ratio Table &gt; Example 1</li> <li>• Fractions &gt; Ratios and Proportions &gt; Ratio Table &gt; Example 2</li> <li>• Fractions &gt; Ratios and Proportions &gt; Ratio Table &gt; Example 2 &gt; Graph</li> <li>• Fractions &gt; Ratios and Proportions &gt; Ratio Table &gt; Example 3</li> <li>• Fractions &gt; Ratios and Proportions &gt; Ratio Table &gt; Example 3 &gt; Graph</li> <li>• Fractions &gt; Ratios and Proportions &gt; Rate and Unit Rate &gt; Examples</li> <li>• Fractions &gt; Ratios and Proportions &gt; Rate and Unit Rate &gt; The Best? &gt; Example 1</li> <li>• Fractions &gt; Ratios and Proportions &gt; Rate and Unit Rate &gt; The Best? &gt; Example 2</li> <li>• Fractions &gt; Ratios and Proportions &gt; Rate and Unit Rate &gt; The Best? &gt; Example 3</li> <li>• Fractions &gt; Ratios and Proportions &gt; Rate and Unit Rate &gt; Distance Traveled</li> <li>• Fractions &gt; Improper Fractions and Mixed Numbers &gt; Introductory Problem &gt; Introduction</li> <li>• Fractions &gt; Improper Fractions and Mixed Numbers &gt; Introductory Problem &gt; Solution 1</li> <li>• Fractions &gt; Improper Fractions and Mixed Numbers &gt; Introductory Problem &gt; Solution 2</li> <li>c.)</li> <li>• Percent &gt; Percent in Business &gt; Discount &gt; Football Sale</li> <li>• Percent &gt; Percent in Business &gt; Discount &gt; What Can I Afford?</li> <li>• Percent &gt; Percent in Business &gt; Discount &gt; What is Cheaper?</li> <li>• Percent &gt; Percent in Business &gt; Discount &gt; Competitors Discount</li> <li>• Percent &gt; Percent of a Number &gt; Successive Percentage Changes &gt; Julie and Amanda</li> <li>• Percent &gt; Percent of a Number &gt; Successive Percentage Changes &gt; Brett and Carli</li> <li>• Fractions &gt; Percent... a Special Fraction &gt; Introduction &gt; Ex. 1 School Example</li> <li>• Fractions &gt; Percent... a Special Fraction &gt; Introduction &gt; Ex. 2 Money Example</li> <li>• Fractions &gt; Percent... a Special Fraction &gt; Percent Strips &gt; Concept 1</li> <li>• Fractions &gt; Percent... a Special Fraction &gt; Percent Strips &gt; Concept 2</li> <li>• Fractions &gt; Percent... a Special Fraction &gt; Percent Strips &gt; Concept 3</li> <li>• Fractions &gt; Percent... a Special Fraction &gt; Examples &gt; 1. Barrel Example</li> <li>• Fractions &gt; Percent... a Special Fraction &gt; Examples &gt; 2. Red Squares</li> <li>• Fractions &gt; Percent... a Special Fraction &gt; Examples &gt; 3. Blue Squares</li> <li>• Fractions &gt; Percent... a Special Fraction &gt; Examples &gt; 4. Green Blocks</li> <li>• Fractions &gt; Percent... a Special Fraction &gt; Examples &gt; 5. Ruler</li> <li>• Fractions &gt; Percent... a Special Fraction &gt; Making Sense of Percent &gt; 1. Weather</li> <li>• Fractions &gt; Percent... a Special Fraction &gt; Making Sense of Percent &gt; 2. Squares</li> <li>• Fractions &gt; Percent... a Special Fraction &gt; Making Sense of Percent &gt; 3. Election</li> <li>• Fractions &gt; Percent... a Special Fraction &gt; Making Sense of Percent &gt; 4. Photocopier</li> <li>• Fractions &gt; Percent... a Special Fraction &gt; Making Sense of Percent &gt; 5. Car Trip</li> <li>• Fractions &gt; Percents, Fractions, Decimals &gt; Expressing a Percent as a Fraction &gt; Introduction Without Graphics</li> <li>• Fractions &gt; Percents, Fractions, Decimals &gt;</li> </ul>
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			<p>c.) Find a percent of a quantity as a rate per 100 (e.g., 30% of a quantity means 30/100 times the quantity); solve problems involving finding the whole, given a part and the percent.</p> <p>d.) Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities.</p>	<p>Expressing a Percent as a Fraction &gt; Introduction With Graphics</p> <ul style="list-style-type: none"> <li>• Percent &gt; Percent of a Number &gt; Examples &gt; 1. Money</li> <li>• Percent &gt; Percent of a Number &gt; Examples &gt; 2. Service Charge</li> <li>• Percent &gt; Percent of a Number &gt; Examples &gt; 3. Birds</li> <li>• Percent &gt; Percent of a Number &gt; Examples &gt; 4. Marathon Race</li> <li>• Percent &gt; Percent of a Number &gt; Examples &gt; 5. Freezing</li> <li>• Percent &gt; Percent of a Number &gt; Examples &gt; 6. Pie Chart</li> <li>• Percent &gt; Problems Involving Percent &gt; Finding the Whole &gt; Recall Proportionals</li> <li>• Percent &gt; Problems Involving Percent &gt; Finding the Whole &gt; School Population: Method 1... Using Proportions</li> <li>• Percent &gt; Problems Involving Percent &gt; Finding the Whole &gt; School Population: Method 2</li> <li>• Percent &gt; Problems Involving Percent &gt; Finding the Whole &gt; Grades Problem: Method 1... Using Proportions</li> <li>• Percent &gt; Problems Involving Percent &gt; Finding the Whole &gt; Grades Problem: Method 2</li> <li>• Percent &gt; Problems Involving Percent &gt; Finding the Whole &gt; Bike Sale: Method 1... Using Proportions</li> <li>• Percent &gt; Problems Involving Percent &gt; Finding the Whole &gt; Bike Sale: Method 2</li> <li>• Percent &gt; Problems Involving Percent &gt; Percent of a Number &gt; Earnings Example</li> <li>• Percent &gt; Problems Involving Percent &gt; Percent of a Number &gt; Nickel Ore Example</li> <li>• Percent &gt; Problems Involving Percent &gt; Percents Greater Than 100 &gt; Number Example</li> <li>• Percent &gt; Problems Involving Percent &gt; Percents Greater Than 100 &gt; Order Example</li> <li>• Percent &gt; Problems Involving Percent &gt; Percents Less Than 1 &gt; Number Example</li> <li>• Percent &gt; Problems Involving Percent &gt; Percents Less Than 1 &gt; Pencil Example</li> <li>• Percent &gt; Problems Involving Percent &gt; Mental Calculation &gt; Number Example</li> <li>• Percent &gt; Problems Involving Percent &gt; Mental Calculation &gt; Tipping Example</li> </ul> <p>d.)</p> <ul style="list-style-type: none"> <li>• Fractions &gt; Ratios and Proportions &gt; Conversions with Ratio Factors (Dimensional Analysis) &gt; Dimensional Analysis - The Concept</li> <li>• Fractions &gt; Ratios and Proportions &gt; Conversions with Ratio Factors (Dimensional Analysis) &gt; A Guided Example</li> <li>• Fractions &gt; Ratios and Proportions &gt; Conversions with Ratio Factors (Dimensional Analysis) &gt; The Conversion Steps</li> <li>• Fractions &gt; Ratios and Proportions &gt; Conversions with Ratio Factors (Dimensional Analysis) &gt; Practice Questions &gt; Question 1</li> <li>• Fractions &gt; Ratios and Proportions &gt; Conversions with Ratio Factors (Dimensional Analysis) &gt; Practice Questions &gt; Question 2</li> <li>• Fractions &gt; Ratios and Proportions &gt; Conversions with Ratio Factors (Dimensional Analysis) &gt; Practice Questions &gt; Question 3</li> <li>• Fractions &gt; Ratios and Proportions &gt; Monetary Exchange Rates &gt; The Concept</li> <li>• Fractions &gt; Ratios and Proportions &gt; Monetary Exchange Rates &gt; Example 1</li> <li>• Fractions &gt; Ratios and Proportions &gt; Monetary Exchange Rates &gt; Example 2</li> <li>• Fractions &gt; Ratios and Proportions &gt; Monetary Exchange Rates &gt; Example 3</li> <li>• Fractions &gt; Ratios and Proportions &gt; Rate and Unit Rate &gt; Distance Traveled</li> </ul>
			<p>Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions, e.g., by using visual fraction models and equations to represent the problem. For example, create a</p>	<ul style="list-style-type: none"> <li>• Fractions &gt; Dividing Fractions &gt; Understanding Division &gt; Introduction</li> <li>• Fractions &gt; Dividing Fractions &gt; Examples with Diagrams &gt; Ice Cream</li> <li>• Fractions &gt; Dividing Fractions &gt; Examples with Diagrams &gt; Shape 1</li> <li>• Fractions &gt; Dividing Fractions &gt; Examples with Diagrams &gt; Shape 2</li> <li>• Fractions &gt; Dividing Fractions &gt; Patterns from Examples</li> </ul>

83.)	Grade 6	The Number System	Apply and extend previous understandings of multiplication and division to divide fractions by fractions.	story context for $(2/3)$ divided by $(3/4)$ and use a visual fraction model to show the quotient; use the relationship between multiplication and division to explain that $(2/3)$ divided by $(3/4) = 8/9$ because $3/4$ of $8/9$ is $2/3$ . (In general, $(a/b)$ divided by $(c/d) = ad/bc$ .) How much chocolate will each person get if 3 people share $1/2$ lb of chocolate equally? How many $3/4$ -cup servings are in $2/3$ of a cup of yogurt? How wide is a rectangular strip of land with length $3/4$ mi and area $1/2$ square mi?	6.NS.01	<ul style="list-style-type: none"> <li>Fractions &gt; Dividing Fractions &gt; Algebraic Explanation &gt; Example 1</li> <li>Fractions &gt; Dividing Fractions &gt; Algebraic Explanation &gt; Example 2</li> <li>Fractions &gt; Dividing Fractions &gt; Examples Without Diagrams &gt; Numerical Example 1</li> <li>Fractions &gt; Dividing Fractions &gt; Examples Without Diagrams &gt; Numerical Example 2</li> <li>Fractions &gt; Dividing Fractions &gt; Examples Without Diagrams &gt; Central High School</li> <li>Fractions &gt; Dividing Fractions &gt; Examples with Diagrams &gt; Soda Pop</li> <li>Fractions &gt; Dividing Fractions &gt; Modeling Examples &gt; Model 1: Pizza</li> <li>Fractions &gt; Dividing Fractions &gt; Modeling Examples &gt; Model 2: Chocolate Bar</li> <li>Fractions &gt; Dividing Fractions &gt; Modeling Examples &gt; Model 3: Water</li> <li>Fractions &gt; Dividing Fractions &gt; Modeling Examples &gt; Model 4: Sports Drink</li> <li>Fractions &gt; Dividing Fractions &gt; Modeling Examples &gt; Model 5: Property</li> <li>Fractions &gt; Dividing Fractions &gt; Modeling Examples &gt; Model 6: The Farm</li> </ul>
84.)	Grade 6	The Number System	Compute fluently with multi-digit numbers and find common factors and multiples.	Fluently divide multi-digit numbers using the standard algorithm.	6.NS.02	<ul style="list-style-type: none"> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Divide by a Single Digit Divisor &gt; Fair Sharing &gt; Example 2 - Without Blocks</li> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Divide by a Single Digit Divisor &gt; Fair Sharing &gt; Question 1</li> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Divide by a Single Digit Divisor &gt; Fair Sharing &gt; Question 2</li> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Divide by a Single Digit Divisor &gt; Fair Sharing &gt; Question 3</li> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Divide by a Single Digit Divisor &gt; Fair Sharing &gt; Question 4</li> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Divide by a Single Digit Divisor &gt; Fair Sharing &gt; Question 5</li> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Divide by a Single Digit Divisor &gt; Fair Sharing &gt; Question 6</li> </ul>
						<ul style="list-style-type: none"> <li>Fractions &gt; Addition and Subtraction of Decimals &gt; Adding Decimals &gt; Click and Drag</li> <li>Fractions &gt; Addition and Subtraction of Decimals &gt; Adding Decimals &gt; Method 1 - Partial Sums &gt; Example 1 - With Grids</li> <li>Fractions &gt; Addition and Subtraction of Decimals &gt; Adding Decimals &gt; Method 1 - Partial Sums &gt; Example 2 - With Grids</li> <li>Fractions &gt; Addition and Subtraction of Decimals &gt; Adding Decimals &gt; Method 1 - Partial Sums &gt; Example 3 - Without Grids</li> <li>Fractions &gt; Addition and Subtraction of Decimals &gt; Adding Decimals &gt; Method 1 - Partial Sums &gt; Example 4 - Without Grids</li> <li>Fractions &gt; Addition and Subtraction of Decimals &gt; Adding Decimals &gt; Method 1 - Partial Sums &gt; Example 5 - Without Grids</li> <li>Fractions &gt; Addition and Subtraction of Decimals &gt; Adding Decimals &gt; Method 1 - Partial Sums &gt; Example 6 - Without Grids</li> <li>Fractions &gt; Addition and Subtraction of Decimals &gt; Adding Decimals &gt; Method 2 - Columns &gt; Example 1 - With Grids</li> <li>Fractions &gt; Addition and Subtraction of Decimals &gt; Adding Decimals &gt; Method 2 - Columns &gt; Example 2 - With Grids</li> <li>Fractions &gt; Addition and Subtraction of Decimals &gt; Adding Decimals &gt; Method 2 - Columns &gt; Example 3 - Without Grids</li> <li>Fractions &gt; Addition and Subtraction of Decimals &gt; Adding Decimals &gt; Method 2 - Columns &gt; Example 4 - Without Grids</li> <li>Fractions &gt; Addition and Subtraction of Decimals &gt; Adding Decimals &gt; Method 2 - Columns &gt; Example 5 - Without Grids</li> <li>Fractions &gt; Addition and Subtraction of Decimals &gt; Adding Decimals &gt; Method 2 - Columns &gt; Example 6 - Without Grids</li> <li>Fractions &gt; Addition and Subtraction of Decimals &gt; Adding Decimals &gt; Method 3 - Right to Left &gt;</li> </ul>

- Example 1 - With Grids
- Fractions > Addition and Subtraction of Decimals > Adding Decimals > Method 3 - Right to Left > Example 2 - With Grids
- Fractions > Addition and Subtraction of Decimals > Adding Decimals > Method 3 - Right to Left > Example 3 - Without Grids
- Fractions > Addition and Subtraction of Decimals > Adding Decimals > Method 3 - Right to Left > Example 4 - Without Grids
- Fractions > Addition and Subtraction of Decimals > Adding Decimals > Method 3 - Right to Left > Example 5 - Without Grids
- Fractions > Addition and Subtraction of Decimals > Adding Decimals > Method 3 - Right to Left > Example 6 - Without Grids
- Fractions > Addition and Subtraction of Decimals > Adding Decimals > Tenths - The Line > Example 1
- Fractions > Addition and Subtraction of Decimals > Adding Decimals > Tenths - The Line > Example 2
- Fractions > Addition and Subtraction of Decimals > Adding Decimals > Tenths - The Line > Example 3
- Fractions > Addition and Subtraction of Decimals > Adding Decimals > Tenths - The Line > Example 4
- Fractions > Addition and Subtraction of Decimals > Adding Decimals > Tenths - The Pencil > Example 1
- Fractions > Addition and Subtraction of Decimals > Adding Decimals > Tenths - The Pencil > Example 2
- Fractions > Addition and Subtraction of Decimals > Adding Decimals > Tenths - The Pencil > Example 3
- Fractions > Addition and Subtraction of Decimals > Adding Decimals > Tenths - The Pencil > Example 4
- Fractions > Addition and Subtraction of Decimals > Adding Decimals > Tenths - The Pencil > Example 5
- Fractions > Addition and Subtraction of Decimals > Adding Decimals > Hundredths - The Town > Example 1
- Fractions > Addition and Subtraction of Decimals > Adding Decimals > Hundredths - The Town > Example 2
- Fractions > Addition and Subtraction of Decimals > Adding Decimals > Hundredths - The Town > Example 3
- Fractions > Addition and Subtraction of Decimals > Adding Decimals > Hundredths - The Town > Example 4
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Click and Drag
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Method 1 - Right to Left > Example 1 - With Grids
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Method 1 - Right to Left > Example 2 - With Grids
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Method 1 - Right to Left > Example 1 - With Grids
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Method 1 - Right to Left > Example 2 - With Grids
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Method 1 - Right to Left > Example 3 - Without Grids
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Method 1 - Right to Left > Example 4 - Without Grids
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Method 1 - Right to Left > Example 5 - Without Grids
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Method 1 - Right to Left > Example 6 - Without Grids
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Method 2 - Trade First > Example 1 - With Grids
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Method 2 - Trade First > Example 2 - With Grids
- Fractions > Addition and Subtraction of Decimals

85.)

Grade  
6

The Number  
System

Compute  
fluently with  
multi-digit  
numbers and  
find common  
factors and  
multiples.

Fluently add, subtract, multiply,  
and divide multi-digit decimals  
using the standard algorithm for  
each operation.

6.NS.03

- > Subtracting Decimals > Method 2 - Trade First > Example 3 - Without Grids
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Method 2 - Trade First > Example 4 - Without Grids
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Method 2 - Trade First > Example 5 - Without Grids
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Method 2 - Trade First > Example 6 - Without Grids
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Method 3 - Add Up > Example 1 - With Grids
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Method 3 - Add Up > Example 2 - With Grids
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Method 3 - Add Up > Example 3 - With Grids
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Method 3 - Add Up > Example 4 - With Grids
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Method 3 - Add Up > Example 5 - Without Grids
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Method 3 - Add Up > Example 6 - Without Grids
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Method 3 - Add Up > Example 7 - Without Grids
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Method 3 - Add Up > Example 8 - Without Grids
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Method 4 - Add Up to Zero > Example 1
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Method 4 - Add Up to Zero > Example 2
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Tenths - The Pencil > Example 1
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Tenths - The Pencil > Example 2
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Tenths - The Pencil > Example 3
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Tenths - The Pencil > Example 4
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Tenths - The Pencil > Example 5
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Hundredths - The Field > Example 1
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Hundredths - The Field > Example 2
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Hundredths - The Field > Example 3
- Fractions > Addition and Subtraction of Decimals > Subtracting Decimals > Hundredths - The Field > Example 4
- Fractions > Multiplication and Division of Decimals > Standard Method > Example 1
- Fractions > Multiplication and Division of Decimals > Standard Method > Example 2
- Fractions > Multiplication and Division of Decimals > Standard Method > Example 3
- Fractions > Multiplication and Division of Decimals > Standard Method > Question 1
- Fractions > Multiplication and Division of Decimals > Standard Method > Question 2
- Fractions > Multiplication and Division of Decimals > Standard Method > Question 3
- Fractions > Multiplication and Division of Decimals > Distributive Method > Example 1
- Fractions > Multiplication and Division of Decimals > Distributive Method > Example 2
- Fractions > Multiplication and Division of Decimals > Distributive Method > Example 3
- Fractions > Multiplication and Division of Decimals > Distributive Method > Question 1



- Fractions > Multiplication and Division of Decimals > Distributive Method > Question 2
- Fractions > Multiplication and Division of Decimals > Distributive Method > Question 3
- Fractions > Multiplication and Division of Decimals > Multiply by Partial Products Area > Example 1 with Blocks
- Fractions > Multiplication and Division of Decimals > Multiply by Partial Products Area > Example 2 with Blocks
- Fractions > Multiplication and Division of Decimals > Multiply by Partial Products Area > Example 3 with Blocks
- Fractions > Multiplication and Division of Decimals > Multiply by Partial Products Area > Example 4 without Blocks
- Fractions > Multiplication and Division of Decimals > Multiply by Partial Products Area > Example 5 without Blocks
- Fractions > Multiplication and Division of Decimals > Multiply by Partial Products Area > Example 6 without Blocks
- Fractions > Multiplication and Division of Decimals > Multiply by Partial Products Area > Question 1
- Fractions > Multiplication and Division of Decimals > Multiply by Partial Products Area > Question 2
- Fractions > Multiplication and Division of Decimals > Multiply by Partial Products Area > Question 3
- Fractions > Multiplication and Division of Decimals > Multiply by Repeated Addition > Example 1
- Fractions > Multiplication and Division of Decimals > Multiply by Repeated Addition > Example 2
- Fractions > Multiplication and Division of Decimals > Special Case - Multiply a Decimal by a Whole Number > Example 1 with Blocks
- Fractions > Multiplication and Division of Decimals > Special Case - Multiply a Decimal by a Whole Number > Example 2 with Blocks
- Fractions > Multiplication and Division of Decimals > Preliminaries to Division > Summary for Decimals
- Fractions > Multiplication and Division of Decimals > Fair Sharing Long Division > Example 1
- Fractions > Multiplication and Division of Decimals > Fair Sharing Long Division > Example 2
- Fractions > Multiplication and Division of Decimals > Fair Sharing Long Division > Question 1
- Fractions > Multiplication and Division of Decimals > Fair Sharing Long Division > Question 2
- Fractions > Multiplication and Division of Decimals > Fair Sharing Long Division > Question 3
- Fractions > Multiplication and Division of Decimals > Fair Sharing Long Division > Question 4
- Fractions > Multiplication and Division of Decimals > Pictorial Models for Decimal Division > Tenths > Example 1
- Fractions > Multiplication and Division of Decimals > Pictorial Models for Decimal Division > Tenths > Example 2
- Fractions > Multiplication and Division of Decimals > Pictorial Models for Decimal Division > Hundredths > Example 1
- Fractions > Multiplication and Division of Decimals > Pictorial Models for Decimal Division > Hundredths > Example 2
- Fractions > Addition and Subtraction of Decimals > Decimals Around Us > Length in Metric Units > Example 1
- Fractions > Addition and Subtraction of Decimals > Decimals Around Us > Length in Metric Units > Example 2
- Fractions > Addition and Subtraction of Decimals > Decimals Around Us > Length in Metric Units > Example 3
- Fractions > Addition and Subtraction of Decimals > Decimals Around Us > Length in Metric Units > Example 4

- Fractions > Addition and Subtraction of Decimals > Decimals Around Us > Length in Metric Units > Example 5
- Fractions > Addition and Subtraction of Decimals > Decimals Around Us > Pencils > Example 1
- Fractions > Addition and Subtraction of Decimals > Decimals Around Us > Pencils > Example 2
- Fractions > Addition and Subtraction of Decimals > Decimals Around Us > Pencils > Example 3
- Fractions > Addition and Subtraction of Decimals > Decimals Around Us > Pencils > Example 4
- Fractions > Addition and Subtraction of Decimals > Decimals Around Us > Pencils > Example 5
- Fractions > Addition and Subtraction of Decimals > Decimals Around Us > Money > Example 1
- Fractions > Addition and Subtraction of Decimals > Decimals Around Us > Money > Example 2
- Fractions > Addition and Subtraction of Decimals > Decimals Around Us > Money > Example 3
- Fractions > Addition and Subtraction of Decimals > Decimals Around Us > Money > Example 4
- Fractions > Addition and Subtraction of Decimals > Decimals Around Us > Money > Example 5
- Fractions > Addition and Subtraction of Decimals > Decimals Around Us > Track Meet > Example 1
- Fractions > Addition and Subtraction of Decimals > Decimals Around Us > Track Meet > Example 2
- Fractions > Addition and Subtraction of Decimals > Decimals Around Us > Track Meet > Example 3
- Fractions > Addition and Subtraction of Decimals > Decimals Around Us > Track Meet > Example 4
- Fractions > Addition and Subtraction of Decimals > Decimals Around Us > Track Meet > Example 5
- Fractions > Addition and Subtraction of Decimals > Decimals Around Us > School Supplies
- Fractions > Multiplication and Division of Decimals > Decimals Around Us Word Problems > Example 1 - Oranges
- Fractions > Multiplication and Division of Decimals > Decimals Around Us Word Problems > Example 2 - Bananas
- Fractions > Multiplication and Division of Decimals > Decimals Around Us Word Problems > Example 3 - Cycling
- Fractions > Multiplication and Division of Decimals > Decimals Around Us Word Problems > Example 4 - Baseball Cards
- Fractions > Multiplication and Division of Decimals > Decimals Around Us Word Problems > Example 5 - Cookies
- Fractions > Multiplication and Division of Decimals > Decimals Around Us Word Problems > Example 6 - Running
- Fractions > Multiplication and Division of Decimals > Decimals Around Us Word Problems > Example 7 - Apples
- Fractions > Multiplication and Division of Decimals > Decimals Around Us Word Problems > Example 8 - Saving
- Fractions > Multiplication and Division of Decimals > Decimals Around Us Word Problems > Example 9 - Skipping

- Fractions > Products, Multiples, Factors > Greatest Common Factor > Introduction
- Fractions > Products, Multiples, Factors > Greatest Common Factor > 12 and 18
- Fractions > Products, Multiples, Factors > Greatest Common Factor > 30 and 40
- Fractions > Products, Multiples, Factors > Greatest Common Factor > 70 and 42
- Fractions > Products, Multiples, Factors > Greatest Common Factor > Problem 1: Goody Bag
- Fractions > Products, Multiples, Factors > Greatest Common Factor > Problem 2: Fall Fair
- Fractions > Products, Multiples, Factors > Least Common Multiple > The Concept
- Fractions > Products, Multiples, Factors > Least Common Multiple > Example 1
- Fractions > Products, Multiples, Factors > Least Common Multiple > Example 2
- Fractions > Products, Multiples, Factors > Least

86.)

Grade  
6

The Number  
System

Compute fluently with multi-digit numbers and find common factors and multiples.

Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12. Use the distributive property to express a sum of two whole numbers 1-100 with a common factor as a multiple of a sum of two whole numbers with no common factor. For example, express  $36 + 8$  as  $4(9 + 2)$ .

6.NS.04

- Common Multiple > Example 3
- Fractions > Products, Multiples, Factors > Least Common Multiple > Example 4
- Fractions > Products, Multiples, Factors > Divisibility > Rule
- Fractions > Products, Multiples, Factors > Divisibility > Example 1
- Fractions > Products, Multiples, Factors > Divisibility > Example 2
- Fractions > Products, Multiples, Factors > Divisibility > Example 3
- Fractions > Products, Multiples, Factors > Divisibility > Example 4
- Fractions > Products, Multiples, Factors > Divisibility > Example 5
- Fractions > Products, Multiples, Factors > Divisibility > Example 6
- Fractions > Products, Multiples, Factors > Divisibility > Example 7
- Fractions > Products, Multiples, Factors > Divisibility > Example 8
- Fractions > Products, Multiples, Factors > Venn Diagrams... Factors > Example 1
- Fractions > Products, Multiples, Factors > Venn Diagrams... Factors > Example 2
- Fractions > Products, Multiples, Factors > Venn Diagrams... Factors > Example 3
- Algebra > Patterns, Patterns, Patterns > Common Factors / GCF > Example 1
- Algebra > Patterns, Patterns, Patterns > Common Factors / GCF > Example 2
- Percent > Percent to Fraction/Decimal > Expressing a Percent as a Fraction > Fraction in Simplest Form > Greatest Common Factor > Example 1
- Percent > Percent to Fraction/Decimal > Expressing a Percent as a Fraction > Fraction in Simplest Form > Greatest Common Factor > Example 2
- Percent > Percent to Fraction/Decimal > Expressing a Percent as a Fraction > Fraction in Simplest Form > Simplifying Fractions > Method 1
- Percent > Percent to Fraction/Decimal > Expressing a Percent as a Fraction > Fraction in Simplest Form > Simplifying Fractions > Method 2
- Percent > Percent to Fraction/Decimal > Expressing a Percent as a Fraction > Examples > Example 1
- Percent > Percent to Fraction/Decimal > Expressing a Percent as a Fraction > Examples > Example 2
- Percent > Percent to Fraction/Decimal > Expressing a Percent as a Fraction > Examples > Example 3
- Percent > Percent to Fraction/Decimal > Expressing a Percent as a Fraction > Examples > Example 4
- Whole Numbers & Integers > Multiplication and Division of Whole Numbers > Multiply by a Single Digit Multiplier > Distributive Law Revisited > Ex. 2 - Rectangle Area
- Whole Numbers & Integers > Multiplication and Division of Whole Numbers > Multiply by a Single Digit Multiplier > Distributive Law Revisited > Ex. 3 - Rectangle Area
- Whole Numbers & Integers > Multiplication and Division of Whole Numbers > Multiply by a Single Digit Multiplier > Distributive Law Revisited > Ex. 4 - Mental Math
- Whole Numbers & Integers > Multiplication and Division of Whole Numbers > Multiply by a Single Digit Multiplier > Distributive Law Revisited > Ex. 5 - Mental Math
- Whole Numbers & Integers > Multiplication and Division of Whole Numbers > Multiply by a Single Digit Multiplier > Distributive Law Revisited > Ex. 6 - Area Algebraically

Apply and extend previous

Understand that positive and negative numbers are used together to describe quantities having opposite directions or values (e.g., temperature

- Whole Numbers & Integers > The Meaning of Integers > Integers Around Us > Temperature
- Whole Numbers & Integers > The Meaning of Integers > Integers Around Us > Helicopter
- Whole Numbers & Integers > The Meaning of Integers > Integers Around Us > Submarine

87.)	Grade 6	The Number System	understandings of numbers to the system of rational numbers.	above/below zero, elevation above/below sea level, credits/debits, positive/negative electric charge); use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation.	6.NS.05	<ul style="list-style-type: none"> <li>• Whole Numbers &amp; Integers &gt; The Meaning of Integers &gt; Integers Around Us &gt; Elevator</li> <li>• Whole Numbers &amp; Integers &gt; The Meaning of Integers &gt; The Integer Line</li> <li>• Whole Numbers &amp; Integers &gt; The Meaning of Integers &gt; Opposite Integers &gt; Example 1</li> <li>• Whole Numbers &amp; Integers &gt; The Meaning of Integers &gt; Opposite Integers &gt; Example 2</li> </ul>
88.)	Grade 6	The Number System	Apply and extend previous understandings of numbers to the system of rational numbers.	<p>Understand a rational number as a point on the number line. Extend number line diagrams and coordinate axes familiar from previous grades to represent points on the line and in the plane with negative number coordinates.</p> <p>a.) Recognize opposite signs of numbers as indicating locations on opposite sides of 0 on the number line; recognize that the opposite of the opposite of a number is the number itself, e.g., <math>-(-3) = 3</math>, and that 0 is its own opposite.</p> <p>b.) Understand signs of numbers in ordered pairs as indicating locations in quadrants of the coordinate plane; recognize that when two ordered pairs differ only by signs, the locations of the points are related by reflections across one or both axes.</p> <p>c.) Find and position integers and other rational numbers on a horizontal or vertical number line diagram; find and position pairs of integers and other rational numbers on a coordinate plane.</p>	6.NS.06	<ul style="list-style-type: none"> <li>• a.)</li> <li>• Whole Numbers &amp; Integers &gt; The Meaning of Integers &gt; Opposite Integers &gt; Example 1</li> <li>• Whole Numbers &amp; Integers &gt; The Meaning of Integers &gt; Opposite Integers &gt; Example 2</li> <li>• b.)</li> <li>• Graphing &gt; Transformations &gt; Reflections An Introduction &gt; Reflect a Point in the Axis</li> <li>• Graphing &gt; Transformations &gt; Reflections An Introduction &gt; Reflect a Point in the Axis &gt; Example 1</li> <li>• Graphing &gt; Transformations &gt; Reflections An Introduction &gt; Reflect a Point in the Axis &gt; Example 2</li> <li>• c.)</li> <li>• Graphing &gt; Points on a Grid &gt; Ordered Pairs &gt; Axis</li> <li>• Graphing &gt; Points on a Grid &gt; Ordered Pairs &gt; Quadrants and Cartesian Plane</li> <li>• Graphing &gt; Points on a Grid &gt; Ordered Pairs &gt; Finding a Point</li> <li>• Graphing &gt; Points on a Grid &gt; Ordered Pairs &gt; Order is Important</li> <li>• Graphing &gt; Points on a Grid &gt; Ordered Pairs &gt; Examples &gt; Example 1</li> <li>• Graphing &gt; Points on a Grid &gt; Ordered Pairs &gt; Examples &gt; Example 2</li> <li>• Graphing &gt; Points on a Grid &gt; Ordered Pairs &gt; Examples &gt; Example 3</li> <li>• Whole Numbers &amp; Integers &gt; The Meaning of Whole Numbers &gt; Place Value to 999,999 &gt; The Numberline &gt; Example 1</li> <li>• Whole Numbers &amp; Integers &gt; The Meaning of Whole Numbers &gt; Place Value to 999,999 &gt; The Numberline &gt; Example 2</li> <li>• Whole Numbers &amp; Integers &gt; The Meaning of Whole Numbers &gt; Place Value to 999,999 &gt; The Numberline &gt; Example 3</li> <li>• Whole Numbers &amp; Integers &gt; The Meaning of Whole Numbers &gt; Expanded Notation &gt; The Numberline</li> <li>• Whole Numbers &amp; Integers &gt; The Meaning of Whole Numbers &gt; Millions &gt; The Numberline</li> <li>• Whole Numbers &amp; Integers &gt; The Meaning of Integers &gt; Example Questions &gt; Example 1</li> <li>• Whole Numbers &amp; Integers &gt; The Meaning of Integers &gt; Example Questions &gt; Example 2</li> <li>• Whole Numbers &amp; Integers &gt; The Meaning of Integers &gt; Example Questions &gt; Example 3</li> <li>• Whole Numbers &amp; Integers &gt; The Meaning of Integers &gt; Example Questions &gt; Example 4</li> <li>• Whole Numbers &amp; Integers &gt; The Meaning of Integers &gt; Example Questions &gt; Example 5</li> <li>• Whole Numbers &amp; Integers &gt; The Meaning of Integers &gt; Example Questions &gt; Example 6</li> <li>• Whole Numbers &amp; Integers &gt; The Meaning of Integers &gt; Ordering Integers &gt; Example 1</li> <li>• Whole Numbers &amp; Integers &gt; The Meaning of Integers &gt; Ordering Integers &gt; Example 2</li> <li>• Fractions &gt; Ordering Rational Numbers &gt; Example 1</li> <li>• Fractions &gt; Ordering Rational Numbers &gt; Example 2</li> </ul>
						<ul style="list-style-type: none"> <li>• a.)</li> <li>• Whole Numbers &amp; Integers &gt; The Meaning of Integers &gt; Comparing Integers &gt; Example 1</li> <li>• Whole Numbers &amp; Integers &gt; The Meaning of Integers &gt; Comparing Integers &gt; Example 2</li> <li>• Whole Numbers &amp; Integers &gt; The Meaning of Integers &gt; Comparing Integers &gt; Explanation</li> <li>• Whole Numbers &amp; Integers &gt; The Meaning of Integers &gt; Comparing Integers &gt; Example 3</li> <li>• Whole Numbers &amp; Integers &gt; The Meaning of</li> </ul>

89.)	Grade 6	The Number System	Apply and extend previous understandings of numbers to the system of rational numbers.	<p>Understand ordering and absolute value of rational numbers.</p> <p>a.) Interpret statements of inequality as statements about the relative position of two numbers on a number line diagram. For example, interpret <math>-3 &gt; -7</math> as a statement that <math>-3</math> is located to the right of <math>-7</math> on a number line oriented from left to right.</p> <p>b.) Write, interpret, and explain statements of order for rational numbers in real-world contexts. For example, write <math>-3^{\circ}\text{C} &gt; -7^{\circ}\text{C}</math> to express the fact that <math>-3^{\circ}\text{C}</math> is warmer than <math>-7^{\circ}\text{C}</math>.</p> <p>c.) Understand the absolute value of a rational number as its distance from 0 on the number line; interpret absolute value as magnitude for a positive or negative quantity in a real-world situation. For example, for an account balance of <math>-30</math> dollars, write <math> -30  = 30</math> to describe the size of the debt in dollars.</p> <p>d.) Distinguish comparisons of absolute value from statements about order. For example, recognize that an account balance less than <math>-30</math> dollars represents a debt greater than 30 dollars.</p>	6.NS.07	<ul style="list-style-type: none"> <li>Integers &gt; Comparing Integers &gt; Example 4</li> <li>Equations &gt; Solving Inequalities &gt; Comparing Integers &gt; The Integer Line</li> <li>Equations &gt; Solving Inequalities &gt; Comparing Integers &gt; Example 1... Greater Than</li> <li>Equations &gt; Solving Inequalities &gt; Comparing Integers &gt; Example 2... Less Than</li> <li>Equations &gt; Solving Inequalities &gt; Comparing Integers &gt; Explanation</li> <li>Equations &gt; Solving Inequalities &gt; Comparing Integers &gt; Example 3... Greater Than</li> <li>Equations &gt; Solving Inequalities &gt; Comparing Integers &gt; Example 4... Less Than</li> <li>Equations &gt; Solving Inequalities &gt; Comparing Integers &gt; Greater Than or Less Than</li> </ul> <p>b.)</p> <ul style="list-style-type: none"> <li>Whole Numbers &amp; Integers &gt; The Meaning of Integers &gt; Comparing Integers &gt; Example 1</li> <li>Whole Numbers &amp; Integers &gt; The Meaning of Integers &gt; Comparing Integers &gt; Example 2</li> <li>Whole Numbers &amp; Integers &gt; The Meaning of Integers &gt; Comparing Integers &gt; Explanation</li> <li>Whole Numbers &amp; Integers &gt; The Meaning of Integers &gt; Comparing Integers &gt; Example 3</li> <li>Whole Numbers &amp; Integers &gt; The Meaning of Integers &gt; Comparing Integers &gt; Example 4</li> <li>Whole Numbers &amp; Integers &gt; The Meaning of Integers &gt; Example Questions &gt; Example 1</li> <li>Whole Numbers &amp; Integers &gt; The Meaning of Integers &gt; Example Questions &gt; Example 2</li> <li>Whole Numbers &amp; Integers &gt; The Meaning of Integers &gt; Example Questions &gt; Example 3</li> <li>Equations &gt; Solving Inequalities &gt; Comparing Integers &gt; The Integer Line</li> <li>Equations &gt; Solving Inequalities &gt; Comparing Integers &gt; Example 1... Greater Than</li> <li>Equations &gt; Solving Inequalities &gt; Comparing Integers &gt; Example 2... Less Than</li> <li>Equations &gt; Solving Inequalities &gt; Comparing Integers &gt; Explanation</li> <li>Equations &gt; Solving Inequalities &gt; Comparing Integers &gt; Example 3... Greater Than</li> <li>Equations &gt; Solving Inequalities &gt; Comparing Integers &gt; Example 4... Less Than</li> <li>Equations &gt; Solving Inequalities &gt; Comparing Integers &gt; Greater Than or Less Than</li> <li>Fractions &gt; Multiplication and Division of Decimals &gt; Compare Fractions &gt; Compare Fractions... Method 1</li> <li>Fractions &gt; Multiplication and Division of Decimals &gt; Compare Fractions &gt; Compare Fractions... Method 2</li> <li>Fractions &gt; Ordering Rational Numbers &gt; Example 1</li> <li>Fractions &gt; Ordering Rational Numbers &gt; Example 2</li> </ul> <p>c.)</p> <ul style="list-style-type: none"> <li>Whole Numbers &amp; Integers &gt; The Meaning of Integers &gt; Absolute Values &gt; Example 1</li> <li>Whole Numbers &amp; Integers &gt; The Meaning of Integers &gt; Absolute Values &gt; Example 2</li> <li>Equations &gt; Solving Absolute Value Equations &gt; Absolute Value... What is it &gt; Concept</li> <li>Equations &gt; Solving Absolute Value Equations &gt; Absolute Value... What is it &gt; Example 1</li> <li>Equations &gt; Solving Absolute Value Equations &gt; Absolute Value... What is it &gt; Example 2</li> </ul> <p>d.)</p> <ul style="list-style-type: none"> <li>Whole Numbers &amp; Integers &gt; The Meaning of Integers &gt; Interpreting Word Problems &gt; Example 1 - The Elevator</li> <li>Whole Numbers &amp; Integers &gt; The Meaning of Integers &gt; Interpreting Word Problems &gt; Example 2 - The Submarine</li> <li>Whole Numbers &amp; Integers &gt; The Meaning of Integers &gt; Interpreting Word Problems &gt; Example 3 - Diving</li> <li>Whole Numbers &amp; Integers &gt; The Meaning of Integers &gt; Interpreting Word Problems &gt; Example 4 - Debit and Credit</li> </ul> <hr style="border-top: 1px dashed black;"/> <ul style="list-style-type: none"> <li>Whole Numbers &amp; Integers &gt; The Meaning of Integers &gt; Absolute Values &gt; Example 1</li> <li>Whole Numbers &amp; Integers &gt; The Meaning of Integers &gt; Absolute Values &gt; Example 2</li> </ul>
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90.)	Grade 6	The Number System	Apply and extend previous understandings of numbers to the system of rational numbers.	Solve real-world and mathematical problems by graphing points in all four quadrants of the coordinate plane. Include use of coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate.	6.NS.08	<ul style="list-style-type: none"> <li>Graphing &gt; Points on a Grid &gt; Ordered Pairs &gt; Axis</li> <li>Graphing &gt; Points on a Grid &gt; Ordered Pairs &gt; Quadrants and Cartesian Plane</li> <li>Graphing &gt; Points on a Grid &gt; Ordered Pairs &gt; Finding a Point</li> <li>Graphing &gt; Points on a Grid &gt; Ordered Pairs &gt; Order is Important</li> <li>Graphing &gt; Points on a Grid &gt; Ordered Pairs &gt; Examples &gt; Example 1</li> <li>Graphing &gt; Points on a Grid &gt; Ordered Pairs &gt; Examples &gt; Example 2</li> <li>Graphing &gt; Points on a Grid &gt; Ordered Pairs &gt; Examples &gt; Example 3</li> </ul>
91.)	Grade 6	Expressions and Equations	Apply and extend previous understandings of arithmetic to algebraic expressions.	Write and evaluate numerical expressions involving whole-number exponents.	6.EE.01	<ul style="list-style-type: none"> <li>Exponents &gt; The Meaning of Exponents &gt; Examples - Order of Operation &gt; Example 1</li> <li>Exponents &gt; The Meaning of Exponents &gt; Examples - Order of Operation &gt; Example 2</li> <li>Exponents &gt; The Meaning of Exponents &gt; Examples - Order of Operation &gt; Example 3</li> <li>Exponents &gt; The Meaning of Exponents &gt; Exponents, Powers, Bases</li> <li>Exponents &gt; The Meaning of Exponents &gt; Introductory Examples &gt; Example 2</li> <li>Exponents &gt; The Meaning of Exponents &gt; Introduction... The Money Game &gt; Money Grab Game Show</li> <li>Exponents &gt; The Meaning of Exponents &gt; Introduction... The Money Game &gt; Graphs... Game Show Results</li> <li>Exponents &gt; The Meaning of Exponents &gt; Introduction... The Money Game &gt; Graphs... Compare The Two Results</li> <li>Exponents &gt; The Meaning of Exponents &gt; Introduction... Paper Folding &gt; Experiment</li> <li>Exponents &gt; The Meaning of Exponents &gt; Introduction... Paper Folding &gt; Pattern</li> <li>Exponents &gt; The Meaning of Exponents &gt; Introductory Examples &gt; Example 1</li> <li>Exponents &gt; The Meaning of Exponents &gt; Introductory Examples &gt; Example 3</li> <li>Exponents &gt; The Meaning of Exponents &gt; Introductory Examples &gt; Example 4</li> <li>Exponents &gt; The Meaning of Exponents &gt; Introductory Examples &gt; Example 5</li> </ul>
				<p>Write, read, and evaluate expressions in which letters stand for numbers.</p> <p>a.) Write expressions that record operations with numbers and with letters standing for numbers. For example, express the calculation "Subtract <math>y</math> from <math>5</math>" as <math>5 - y</math>.</p> <p>b.) Identify parts of an expression using mathematical terms (sum, term, product, factor, quotient, coefficient); view one or more parts of an expression as</p>		<ul style="list-style-type: none"> <li>a.)</li> <li>Equations &gt; Problem Solving &gt; The Translation Machine &gt; Numerical Expressions &gt; Example 1</li> <li>Equations &gt; Problem Solving &gt; The Translation Machine &gt; Numerical Expressions &gt; Example 2</li> <li>Equations &gt; Problem Solving &gt; The Translation Machine &gt; Algebraic Expressions &gt; Example 1</li> <li>Equations &gt; Problem Solving &gt; The Translation Machine &gt; Algebraic Expressions &gt; Example 2</li> <li>Equations &gt; Problem Solving &gt; The Trick Machine &gt; Instructions</li> <li>Equations &gt; Problem Solving &gt; The Trick Machine &gt; The Machine</li> <li>Equations &gt; Problem Solving &gt; The Trick Machine &gt; Explanations with Picture</li> <li>Equations &gt; Problem Solving &gt; The Trick Machine &gt; Explanation with Symbols</li> <li>Equations &gt; Problem Solving &gt; Expressions The Language of Algebra &gt; Example 1</li> <li>Equations &gt; Problem Solving &gt; Expressions The Language of Algebra &gt; Example 2</li> <li>Equations &gt; Problem Solving &gt; Expressions The Language of Algebra &gt; Example 3</li> <li>Algebra &gt; Tiles And Algebra &gt; Pictures To Words To Algebraic Expressions &gt; Example 1</li> <li>Algebra &gt; Tiles And Algebra &gt; Pictures To Words To Algebraic Expressions &gt; Example 2</li> <li>b.)</li> <li>Algebra &gt; Patterns, Formulas, Substitution &gt; Expressions, Terms, Variables &gt; Definitions</li> <li>Algebra &gt; Patterns, Formulas, Substitution &gt; Expressions, Terms, Variables &gt; Summary</li> <li>Equations &gt; Tiles, Balances, and Equations &gt; Definitions &gt; Introduction</li> <li>Equations &gt; Tiles, Balances, and Equations &gt; Definitions &gt; Summary 1</li> <li>Equations &gt; Tiles, Balances, and Equations &gt; Definitions &gt; Summary 2</li> </ul>

92.)	Grade 6	Expressions and Equations	Apply and extend previous understandings of arithmetic to algebraic expressions.	<p>a single entity. For example, describe the expression <math>2(8 + 7)</math> as a product of two factors; view <math>(8 + 7)</math> as both a single entity and a sum of two terms.</p> <p>c.) Evaluate expressions at specific values of their variables. Include expressions that arise from formulas used in real-world problems. Perform arithmetic operations, including those involving whole-number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations). For example, use the formulas <math>V = s^3</math> and <math>A = 6s^2</math> to find the volume and surface area of a cube with sides of length <math>s = 1/2</math>.</p>	6.EE.02	<ul style="list-style-type: none"> <li>c.)</li> <li>• Algebra &gt; Patterns, Formulas, Substitution &gt; Substitution Examples &gt; Example 1: Evaluation</li> <li>• Algebra &gt; Patterns, Formulas, Substitution &gt; Substitution Examples &gt; Example 2: Area Formulas</li> <li>• Algebra &gt; Patterns, Formulas, Substitution &gt; Substitution Examples &gt; Example 3: Volume Formulas</li> <li>• Algebra &gt; Patterns, Formulas, Substitution &gt; Substitution Examples &gt; Example 4: Hit The Ball</li> <li>• Algebra &gt; Patterns, Formulas, Substitution &gt; Substitution - Math Scrabble &gt; Scrabble 1</li> <li>• Algebra &gt; Patterns, Formulas, Substitution &gt; Substitution - Math Scrabble &gt; Scrabble 2</li> <li>• Algebra &gt; Patterns, Formulas, Substitution &gt; Substitution - Math Scrabble &gt; Scrabble 3</li> <li>• Algebra &gt; Patterns, Formulas, Substitution &gt; Substitution - Math Scrabble &gt; Challenge</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Areas of Polygons &gt; Area of a Rectangle &gt; Example 3</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Areas of Polygons &gt; Area of a Rectangle &gt; Example 4</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Areas of Polygons &gt; Area of a Parallelogram &gt; Example 1</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Areas of Polygons &gt; Area of a Parallelogram &gt; Example 2</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Areas of Polygons &gt; Area of a Triangle &gt; Example 1</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Areas of Polygons &gt; Area of a Triangle &gt; Example 2</li> <li>• Measurement &amp; Geometry &gt; Circles &gt; Circumference of a Circle &gt; Ex. 1 - Ogg</li> <li>• Measurement &amp; Geometry &gt; Circles &gt; Circumference of a Circle &gt; Ex. 2 - The Well</li> <li>• Measurement &amp; Geometry &gt; Circles &gt; Circumference of a Circle &gt; Ex. 3 - The Rolling Coin</li> <li>• Measurement &amp; Geometry &gt; Circles &gt; AREA of a Circle &gt; Ex. 1 - Wheel</li> <li>•</li> </ul>
		Expressions	Apply and extend previous	<p>Apply the properties of operations to generate equivalent expressions. For example, apply the distributive property to the expression <math>3(2 + x)</math> to produce the equivalent expression <math>6 + 3x</math>;</p>		<ul style="list-style-type: none"> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply by a Single Digit Multiplier &gt; The Distributive Method &gt; Example 1</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply by a Single Digit Multiplier &gt; The Distributive Method &gt; Example 2</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply by a Single Digit Multiplier &gt; The Distributive Method &gt; Example 3</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply by a Single Digit Multiplier &gt; The Distributive Method &gt; Question 1</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply by a Single Digit Multiplier &gt; The Distributive Method &gt; Question 2</li> <li>• Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply by a Single Digit Multiplier &gt; The Distributive Method &gt; Question 3</li> <li>• Algebra &gt; Adding Expressions &gt; Adding Expressions With X and Y Tiles &gt; Example 1</li> <li>• Algebra &gt; Adding Expressions &gt; Adding Expressions With X and Y Tiles &gt; Example 2</li> <li>• Algebra &gt; Adding Expressions &gt; Adding Expressions With X and Y Tiles &gt; Example 3</li> <li>• Algebra &gt; Adding Expressions &gt; Adding Expressions Without Tiles &gt; Example 1</li> <li>• Algebra &gt; Adding Expressions &gt; Adding Expressions Without Tiles &gt; Example 2</li> <li>• Algebra &gt; Multiplying Expressions &gt; Multiplying Monomials and Binomials &gt; With Tiles &gt; Example 1</li> <li>• Algebra &gt; Multiplying Expressions &gt; Multiplying Monomials and Binomials &gt; With Tiles &gt;</li> </ul>

93.)	Grade 6	and Equations	understandings of arithmetic to algebraic expressions.	apply the distributive property to the expression $24x + 18y$ to produce the equivalent expression $6(4x + 3y)$ ; apply properties of operations to $y + y + y$ to produce the equivalent expression $3y$ .	6.EE.03	<p>Example 2</p> <ul style="list-style-type: none"> <li>Algebra &gt; Multiplying Expressions &gt; Multiplying Monomials and Binomials &gt; With Tiles &gt; Example 3</li> <li>Algebra &gt; Multiplying Expressions &gt; Multiplying Monomials and Binomials &gt; With Tiles &gt; Example 4</li> <li>Algebra &gt; Multiplying Expressions &gt; Multiplying Monomials and Binomials &gt; Without Tiles</li> <li>Algebra &gt; Tiles And Algebra &gt; Introduction To Tiles &gt; Tile Representation</li> <li>Algebra &gt; Tiles And Algebra &gt; Introduction To Tiles &gt; Like Terms</li> <li>Algebra &gt; Tiles And Algebra &gt; Introduction To Tiles &gt; Combinations</li> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply by a Single Digit Multiplier &gt; Distributive Law Revisited &gt; Ex. 1 - Rectangle Area</li> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply by a Single Digit Multiplier &gt; Distributive Law Revisited &gt; Ex. 2 - Rectangle Area</li> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply by a Single Digit Multiplier &gt; Distributive Law Revisited &gt; Ex. 3 - Rectangle Area</li> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply by a Single Digit Multiplier &gt; Distributive Law Revisited &gt; Ex. 4 - Mental Math</li> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply by a Single Digit Multiplier &gt; Distributive Law Revisited &gt; Ex. 5 - Mental Math</li> <li>Whole Numbers &amp; Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply by a Single Digit Multiplier &gt; Distributive Law Revisited &gt; Ex. 6 - Area Algebraically</li> </ul>
94.)	Grade 6	Expressions and Equations	Apply and extend previous understandings of arithmetic to algebraic expressions.	Identify when two expressions are equivalent (i.e., when the two expressions name the same number regardless of which value is substituted into them). For example, the expressions $y + y + y$ and $3y$ are equivalent because they name the same number regardless of which number $y$ stands for.	6.EE.04	<ul style="list-style-type: none"> <li>Algebra &gt; Tiles and Algebra &gt; Equivalent Algebraic Expressions &gt; Definition</li> <li>Algebra &gt; Tiles and Algebra &gt; Equivalent Algebraic Expressions &gt; Equivalent or Not? &gt; Example 1</li> <li>Algebra &gt; Tiles and Algebra &gt; Equivalent Algebraic Expressions &gt; Equivalent or Not? &gt; Example 2</li> <li>Algebra &gt; Tiles and Algebra &gt; Equivalent Algebraic Expressions &gt; Generating Equivalent Expressions &gt; Introduction</li> <li>Algebra &gt; Tiles and Algebra &gt; Equivalent Algebraic Expressions &gt; Generating Equivalent Expressions &gt; Practice 1</li> <li>Algebra &gt; Tiles and Algebra &gt; Equivalent Algebraic Expressions &gt; Generating Equivalent Expressions &gt; Practice 2</li> </ul>
95.)	Grade 6	Expressions and Equations	Reason about and solve one-variable equations and inequalities.	Understand solving an equation or inequality as a process of answering a question: which values from a specified set, if any, make the equation or inequality true? Use substitution to determine whether a given number in a specified set makes an equation or inequality true.	6.EE.05	<ul style="list-style-type: none"> <li>Equations &gt; Tiles, Balances, and Equations &gt; The Meaning of "Solving an Equation"</li> <li>Algebra &gt; Patterns, Formulas, Substitution &gt; Substitution Examples &gt; Example 1: Evaluation</li> <li>Equations &gt; Solving Inequalities &gt; Inequalities &gt; What Are They?</li> <li>Equations &gt; Solving Inequalities &gt; Inequalities &gt; Inequalities vs. Equations</li> <li>Equations &gt; Solving Inequalities &gt; Inequalities &gt; Summary of Relationships</li> </ul>
96.)	Grade 6	Expressions and Equations	Reason about and solve one-variable equations and inequalities.	Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set.	6.EE.06	<ul style="list-style-type: none"> <li>Equations &gt; Problem Solving &gt; The Translation Machine &gt; Numerical Expressions &gt; Example 1</li> <li>Equations &gt; Problem Solving &gt; The Translation Machine &gt; Numerical Expressions &gt; Example 2</li> <li>Equations &gt; Problem Solving &gt; The Translation Machine &gt; Algebraic Expressions &gt; Example 1</li> <li>Equations &gt; Problem Solving &gt; The Translation Machine &gt; Algebraic Expressions &gt; Example 2</li> <li>Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Walk Around a Polygon &gt; Find the Perimeter</li> </ul>
						<ul style="list-style-type: none"> <li>Equations &gt; Solving One-Step Equations &gt; Examples With Tiles &gt; Example 1</li> </ul>



97.)	Grade 6	Expressions and Equations	Reason about and solve one-variable equations and inequalities.	Solve real-world and mathematical problems by writing and solving equations of the form $x + p = q$ and $px = q$ for cases in which $p$ , $q$ and $x$ are all nonnegative rational numbers.	6.EE.07	<ul style="list-style-type: none"> <li>Equations &gt; Solving One-Step Equations &gt; Examples With Tiles &gt; Example 2</li> <li>Equations &gt; Solving One-Step Equations &gt; Examples With Tiles &gt; Example 3</li> <li>Equations &gt; Solving One-Step Equations &gt; Examples With Tiles &gt; Example 4</li> <li>Equations &gt; Solving One-Step Equations &gt; Examples With Tiles &gt; Example 5</li> <li>Equations &gt; Solving One-Step Equations &gt; Examples Without Tiles &gt; Example 1</li> <li>Equations &gt; Solving One-Step Equations &gt; Examples Without Tiles &gt; Example 2</li> <li>Equations &gt; Solving One-Step Equations &gt; Examples Without Tiles &gt; Example 3</li> <li>Equations &gt; Solving One-Step Equations &gt; Examples Without Tiles &gt; Example 4</li> <li>Equations &gt; Solving One-Step Equations &gt; Examples Without Tiles &gt; Example 5</li> <li>Equations &gt; Solving One-Step Equations &gt; Real-Life Applications &gt; Example 1</li> <li>Equations &gt; Solving One-Step Equations &gt; Real-Life Applications &gt; Example 2</li> </ul>
98.)	Grade 6	Expressions and Equations	Reason about and solve one-variable equations and inequalities.	Write an inequality of the form $x > c$ or $x < c$ to represent a constraint or condition in a real-world or mathematical problem. Recognize that inequalities of the form $x > c$ or $x < c$ have infinitely many solutions; represent solutions of such inequalities on number line diagrams.	6.EE.08	<ul style="list-style-type: none"> <li>Equations &gt; Solving Inequalities &gt; Inequalities on the Number Line &gt; Example 3</li> <li>Equations &gt; Solving Inequalities &gt; Inequalities on the Number Line &gt; Example 4</li> <li>Equations &gt; Solving Inequalities &gt; Real-Life Applications &gt; Example 1</li> <li>Equations &gt; Solving Inequalities &gt; Real-Life Applications &gt; Example 2</li> </ul>
99.)	Grade 6	Expressions and Equations	Represent and analyze quantitative relationships between dependent and independent variables.	Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation. For example, in a problem involving motion at constant speed, list and graph ordered pairs of distances and times, and write the equation $d = 65t$ to represent the relationship between distance and time.	6.EE.09	<ul style="list-style-type: none"> <li>Graphing &gt; Linear Relations &gt; The Elastic Example &gt; Setup Equations</li> <li>Graphing &gt; Linear Relations &gt; The Elastic Example &gt; Graph</li> <li>Graphing &gt; Linear Relations &gt; Lightning Example &gt; Setup Equations</li> <li>Graphing &gt; Linear Relations &gt; Lightning Example &gt; Graph</li> <li>Graphing &gt; Linear Relations &gt; Exploration of <math>y = mx</math> &gt; Equation</li> <li>Graphing &gt; Linear Relations &gt; Exploration of <math>y = mx</math> &gt; Table</li> <li>Graphing &gt; Linear Relations &gt; Exploration of <math>y = mx</math> &gt; Graph</li> <li>Graphing &gt; Relations, Equations &amp; Functions &gt; Independent &amp; Dependent Variables &gt; Definitions</li> <li>Graphing &gt; Relations, Equations &amp; Functions &gt; Independent &amp; Dependent Variables &gt; In Tables &gt; Example 1</li> <li>Graphing &gt; Relations, Equations &amp; Functions &gt; Independent &amp; Dependent Variables &gt; In Tables &gt; Example 2</li> <li>Graphing &gt; Relations, Equations &amp; Functions &gt; Independent &amp; Dependent Variables &gt; In Graphs &gt; Example 1</li> <li>Graphing &gt; Relations, Equations &amp; Functions &gt; Independent &amp; Dependent Variables &gt; In Graphs &gt; Example 2</li> <li></li> </ul>
						<ul style="list-style-type: none"> <li>Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Areas of Polygons &gt; Area of a Rectangle &gt; Concept</li> <li>Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Areas of Polygons &gt; Area of a Rectangle &gt; Example 1</li> <li>Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Areas of Polygons &gt; Area of a Rectangle &gt; Example 2</li> <li>Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Areas of Polygons &gt; Area of a Rectangle &gt; Example 3</li> <li>Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Areas of Polygons &gt; Area of a Rectangle &gt; Example 4</li> <li>Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Areas of Polygons &gt; Area of a Parallelogram &gt; Concept</li> <li>Measurement &amp; Geometry &gt; Perimeter and Area</li> </ul>

100.)	Grade 6	Geometry	Solve real-world and mathematical problems involving area, surface area, and volume.	Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.	6.G.01	<ul style="list-style-type: none"> <li>of Polygons &gt; Areas of Polygons &gt; Area of a Parallelogram &gt; Example 1</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Areas of Polygons &gt; Area of a Parallelogram &gt; Example 2</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Areas of Polygons &gt; Area of a Triangle &gt; Concept 1</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Areas of Polygons &gt; Area of a Triangle &gt; Concept 2</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Areas of Polygons &gt; Area of a Triangle &gt; Example 1</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Areas of Polygons &gt; Area of a Triangle &gt; Example 2</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Areas of Polygons &gt; Area of a Trapezoid &gt; Introduction</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Areas of Polygons &gt; Area of a Trapezoid &gt; Method 1</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Areas of Polygons &gt; Area of a Trapezoid &gt; Method 2</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Areas of Polygons &gt; Area of a Trapezoid &gt; Method 3</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Areas of Polygons &gt; Area of a Trapezoid &gt; Method 4</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Problems Section &gt; Length of Fence</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Problems Section &gt; Area of Wall</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Problems Section &gt; The Tablecloth</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Problems Section &gt; Harvest Time - Metric</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Problems Section &gt; Harvest Time - US Standard</li> <li>• Exponents &gt; Exponents in Formulas &gt; Examples with Area Formulas &gt; Example 1</li> <li>• Exponents &gt; Exponents in Formulas &gt; Examples with Area Formulas &gt; Example 2</li> <li>• Exponents &gt; Pythagorean Theorem &gt; Squares on a Grid &gt; Example 2</li> <li>• Exponents &gt; Pythagorean Theorem &gt; Squares on a Grid &gt; Example 3</li> <li>• Exponents &gt; Pythagorean Theorem &gt; Squares on a Grid &gt; Example 4</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Real World Problems &gt; Composite 3D Figures &gt; Doghouse</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Real World Problems &gt; Composite 3D Figures &gt; Birdhouse</li> </ul>
101.)	Grade 6	Geometry	Solve real-world and mathematical problems involving area, surface area, and volume.	Find the volume of a right rectangular prism with fractional edge lengths by packing it with unit cubes of the appropriate unit fraction edge lengths, and show that the volume is the same as would be found by multiplying the edge lengths of the prism. Apply the formulas $V = l w h$ and $V = b h$ to find volumes of right rectangular prisms with fractional edge lengths in the context of solving real-world and mathematical problems.	6.G.02	<ul style="list-style-type: none"> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Volume of a Solid &gt; Cubic Units</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Volume of a Solid &gt; Fill-Em Up &gt; Intro</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Volume of a Solid &gt; Fill-Em Up &gt; Sugar Cubes</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Volume of a Solid &gt; Fill-Em Up &gt; Closet</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Volume of a Solid &gt; Fill-Em Up &gt; Moving Van</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Volume of a Solid &gt; Volume of a Prism: Formula 1</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Volume of a Solid &gt; Volume of a Prism: Formula 2</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Volume of a Solid &gt; Volume of Rectangular Prisms &gt; Example 1</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes</li> </ul>

						and Surface Area > Volume of a Solid > Volume of Rectangular Prisms > Example 2
102.)	Grade 6	Geometry	Solve real-world and mathematical problems involving area, surface area, and volume.	Draw polygons in the coordinate plane given coordinates for the vertices; use coordinates to find the length of a side joining points with the same first coordinate or the same second coordinate. Apply these techniques in the context of solving real-world and mathematical problems.	6.G.03	<ul style="list-style-type: none"> <li>Graphing &gt; Points on a Grid &gt; Ordered Pairs &gt; Find Points and Lengths</li> <li>Graphing &gt; Points on a Grid &gt; Ordered Pairs &gt; Examples &gt; Example 4</li> </ul>
103.)	Grade 6	Geometry	Solve real-world and mathematical problems involving area, surface area, and volume.	Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems.	6.G.04	<ul style="list-style-type: none"> <li>Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Surface Area of a Solid &gt; Total Surface Area</li> <li>Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Surface Area of a Solid &gt; Lateral Surface Area</li> <li>Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Surface Area of a Solid &gt; Surface Area of Cubes &gt; Example 1</li> <li>Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Surface Area of a Solid &gt; Surface Area of Cubes &gt; Example 2</li> <li>Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Surface Area of a Solid &gt; Surface Area of Rectangular Prisms &gt; Example 1</li> <li>Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Surface Area of a Solid &gt; Surface Area of Rectangular Prisms &gt; Example 2</li> <li>Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Surface Area of a Solid &gt; Surface Area of Rectangular Prisms &gt; Example 3</li> <li>Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Surface Area of a Solid &gt; Surface Area of Rectangular Prisms &gt; Example 4</li> <li>Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Surface Area of a Solid &gt; Surface Area of Triangular Prisms &gt; Example 1</li> <li>Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Surface Area of a Solid &gt; Surface Area of Triangular Prisms &gt; Example 2</li> <li>Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Surface Area of a Solid &gt; Surface Area of Triangular Prisms &gt; Example 3</li> <li>Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Surface Area of a Solid &gt; Surface Area of Triangular Prisms &gt; Example 4</li> <li>Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Surface Area of a Solid &gt; Surface Area of a Pyramid &gt; Example 1</li> <li>Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Surface Area of a Solid &gt; Surface Area of a Pyramid &gt; Example 2</li> <li>Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Surface Area of a Solid &gt; Surface Area of a Pyramid &gt; Example 3</li> <li>Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Surface Area of a Solid &gt; Surface Area of a Pyramid &gt; Example 4</li> <li>Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Surface Area of a Solid &gt; Surface Area of a Pyramid &gt; Example 5</li> <li>Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Surface Area of a Solid &gt; Surface Area of a Pyramid &gt; Example 6</li> <li>Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Surface Area of a Solid &gt; Surface Area of a Pyramid &gt; Example 7</li> <li>Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Surface Area of a Solid &gt; Surface Area of a Pyramid &gt; Example 8</li> <li>Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Real World Problems &gt; Rectangular Prisms &gt; Painting</li> <li>Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Real World Problems &gt; Triangular Prisms &gt; The Cage</li> <li>Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Real World Problems &gt; Triangular Prisms &gt; Tri-Fold Sign</li> <li>Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Real World Problems &gt;</li> </ul>

						<ul style="list-style-type: none"> <li>Triangular Prisms &gt; Play Tent</li> <li>Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Real World Problems &gt; Cubes &gt; Fish Tank</li> <li>Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Real World Problems &gt; Cubes &gt; Gift Wrap</li> <li>Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Real World Problems &gt; Rectangular Pyramids &gt; Robotic Window Washer</li> <li>Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Real World Problems &gt; Rectangular Pyramids &gt; Tale of Two Teepees</li> <li>Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Real World Problems &gt; Triangular Pyramids &gt; Wet Floor Signs</li> <li>Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Real World Problems &gt; Composite 3D Figures &gt; Doghouse</li> <li>Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Real World Problems &gt; Composite 3D Figures &gt; Birdhouse</li> </ul>
104.)	Grade 6	Statistics and Probability	Develop understanding of statistical variability.	Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers. For example, "How old am I?" is not a statistical question, but "How old are the students in my school?" is a statistical question because one anticipates variability in students' ages.	6.SP.01	<ul style="list-style-type: none"> <li>Graphing &gt; Statistics &gt; Statistical Questions &gt; Definition</li> <li>Graphing &gt; Statistics &gt; Statistical Questions &gt; Statistical or Not?</li> <li>Graphing &gt; Statistics &gt; Statistical Questions &gt; Categorical Data vs. Numerical Data &gt; Definitions</li> <li>Graphing &gt; Statistics &gt; Statistical Questions &gt; Categorical Data vs. Numerical Data &gt; Question Classification</li> </ul>
105.)	Grade 6	Statistics and Probability	Develop understanding of statistical variability.	Understand that a set of data collected to answer a statistical question has a distribution which can be described by its center, spread, and overall shape.	6.SP.02	<ul style="list-style-type: none"> <li>Graphing &gt; Statistics &gt; Measures of Central Tendency &gt; The Mean</li> <li>Graphing &gt; Statistics &gt; Measures of Central Tendency &gt; The Median Average</li> <li>Graphing &gt; Statistics &gt; Measures of Central Tendency &gt; The Mode</li> <li>Graphing &gt; Statistics &gt; Examples of Data &gt; Example 1... Fast Food Earnings</li> <li>Graphing &gt; Statistics &gt; Examples of Data &gt; Example 2... Infants Walk</li> <li>Graphing &gt; Statistics &gt; Line Plot &gt; Introduction</li> <li>Graphing &gt; Statistics &gt; Line Plot &gt; Creating a Line Plot &gt; Example 1</li> <li>Graphing &gt; Statistics &gt; Line Plot &gt; Creating a Line Plot &gt; Example 2</li> <li>Graphing &gt; Statistics &gt; Dot Plot &gt; Introduction</li> <li>Graphing &gt; Statistics &gt; Dot Plot &gt; Interpreting a Dot Plot</li> <li>Graphing &gt; Statistics &gt; Measures of Variation &gt; Inter-Quartile Range &gt; Introduction</li> <li>Graphing &gt; Statistics &gt; Measures of Variation &gt; Inter-Quartile Range &gt; Another Example</li> <li>Graphing &gt; Statistics &gt; Measures of Variation &gt; Mean Absolute Deviation &gt; Introduction - Definition &amp; Steps</li> <li>Graphing &gt; Statistics &gt; Measures of Variation &gt; Mean Absolute Deviation &gt; Example 1</li> <li>Graphing &gt; Statistics &gt; Measures of Variation &gt; Mean Absolute Deviation &gt; Example 2</li> </ul>
106.)	Grade 6	Statistics and Probability	Develop understanding of statistical variability.	Recognize that a measure of center for a numerical data set summarizes all of its values with a single number, while a measure of variation describes how its values vary with a single number.	6.SP.03	<ul style="list-style-type: none"> <li>Graphing &gt; Statistics &gt; Measures of Variation &gt; Introduction: Measure of Central Tendency vs. Measures of Variation</li> <li>Graphing &gt; Statistics &gt; Measures of Variation &gt; Inter-Quartile Range &gt; Introduction</li> <li>Graphing &gt; Statistics &gt; Measures of Variation &gt; Inter-Quartile Range &gt; Another Example</li> <li>Graphing &gt; Statistics &gt; Measures of Central Tendency &gt; Adding Data Points</li> <li>Graphing &gt; Statistics &gt; Measures of Variation &gt; Mean Absolute Deviation &gt; Introduction - Definition &amp; Steps</li> <li>Graphing &gt; Statistics &gt; Measures of Variation &gt; Mean Absolute Deviation &gt; Example 1</li> <li>Graphing &gt; Statistics &gt; Measures of Variation &gt; Mean Absolute Deviation &gt; Example 2</li> </ul>

107.)	Grade 6	Statistics and Probability	Summarize and describe distributions.	Display numerical data in plots on a number line, including dot plots, histograms, and box plots.	6.SP.04	<ul style="list-style-type: none"> <li>• Graphing &gt; Statistics &gt; Presenting Data &gt; Histogram &gt; Example 1... Height of Students</li> <li>• Graphing &gt; Statistics &gt; Presenting Data &gt; Histogram &gt; Example 2... Roll of Die</li> <li>• Graphing &gt; Statistics &gt; Box and Whisker Plot &gt; Concepts</li> <li>• Graphing &gt; Statistics &gt; Box and Whisker Plot &gt; Example 1: Math Marks</li> <li>• Graphing &gt; Statistics &gt; Box and Whisker Plot &gt; Example 2: Income in 1998</li> <li>• Graphing &gt; Statistics &gt; Dot Plot &gt; Creating a Dot Plot</li> <li>• Graphing &gt; Statistics &gt; Dot Plot &gt; Interpreting a Dot Plot</li> </ul>
108.)	Grade 6	Statistics and Probability	Summarize and describe distributions.	<p>Summarize numerical data sets in relation to their context, such as by:</p> <p>a.) Reporting the number of observations.</p> <p>b.) Describing the nature of the attribute under investigation, including how it was measured and its units of measurement.</p> <p>c.) Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered.</p> <p>d.) Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered.</p>	6.SP.05	<ul style="list-style-type: none"> <li>• a.) <ul style="list-style-type: none"> <li>• Graphing &gt; Statistics &gt; Presenting Data &gt; Histogram &gt; Example 1... Height of Students</li> <li>• Graphing &gt; Statistics &gt; Presenting Data &gt; Histogram &gt; Example 2... Roll of Die</li> </ul> </li> <li>• b.) <ul style="list-style-type: none"> <li>• Graphing &gt; Statistics &gt; Line Plot &gt; Creating a Line Plot &gt; Example 1</li> <li>• Graphing &gt; Statistics &gt; Line Plot &gt; Creating a Line Plot &gt; Example 2</li> <li>• Graphing &gt; Statistics &gt; Dot Plot &gt; Creating a Dot Plot</li> <li>• Graphing &gt; Statistics &gt; Dot Plot &gt; Interpreting a Dot Plot</li> </ul> </li> <li>• c.) <ul style="list-style-type: none"> <li>• Graphing &gt; Statistics &gt; Line Plot &gt; Creating a Line Plot &gt; Example 1</li> <li>• Graphing &gt; Statistics &gt; Line Plot &gt; Creating a Line Plot &gt; Example 2</li> <li>• Graphing &gt; Statistics &gt; Dot Plot &gt; Introduction</li> <li>• Graphing &gt; Statistics &gt; Dot Plot &gt; Creating a Dot Plot</li> <li>• Graphing &gt; Statistics &gt; Dot Plot &gt; Interpreting a Dot Plot</li> <li>• Graphing &gt; Statistics &gt; Measures of Variation &gt; Introduction: Measure of Central Tendency vs. Measures of Variation</li> <li>• Graphing &gt; Statistics &gt; Measures of Variation &gt; Inter-Quartile Range &gt; Introduction</li> <li>• Graphing &gt; Statistics &gt; Measures of Variation &gt; Inter-Quartile Range &gt; Another Example</li> <li>• Graphing &gt; Statistics &gt; Measures of Variation &gt; Mean Absolute Deviation &gt; Introduction - Definition &amp; Steps</li> <li>• Graphing &gt; Statistics &gt; Measures of Variation &gt; Mean Absolute Deviation &gt; Example 1</li> <li>• Graphing &gt; Statistics &gt; Measures of Variation &gt; Mean Absolute Deviation &gt; Example 2</li> <li>• Graphing &gt; Statistics &gt; Measures of Variation &gt; Comparing Data Distributions &gt; Introduction</li> <li>• Graphing &gt; Statistics &gt; Measures of Variation &gt; Comparing Data Distributions &gt; Example 1</li> <li>• Graphing &gt; Statistics &gt; Measures of Variation &gt; Comparing Data Distributions &gt; Example 2</li> <li>• Graphing &gt; Statistics &gt; Measures of Variation &gt; Comparing Data Distributions &gt; Informal Inferences</li> <li>• Graphing &gt; Statistics &gt; Measures of Central Tendency &gt; The Mean</li> <li>• Graphing &gt; Statistics &gt; Measures of Central Tendency &gt; The Median Average</li> <li>• Graphing &gt; Statistics &gt; Measures of Central Tendency &gt; Another Example</li> <li>• Graphing &gt; Statistics &gt; Measures of Central Tendency &gt; Adding Data Points</li> </ul> </li> <li>• d.) <ul style="list-style-type: none"> <li>• Graphing &gt; Statistics &gt; Line Plot &gt; Introduction</li> <li>• Graphing &gt; Statistics &gt; Line Plot &gt; Creating a Line Plot &gt; Example 1</li> <li>• Graphing &gt; Statistics &gt; Line Plot &gt; Creating a Line Plot &gt; Example 2</li> <li>• Graphing &gt; Statistics &gt; Dot Plot &gt; Introduction</li> <li>• Graphing &gt; Statistics &gt; Dot Plot &gt; Creating a Dot Plot</li> <li>• Graphing &gt; Statistics &gt; Dot Plot &gt; Interpreting a Dot Plot</li> <li>• Graphing &gt; Statistics &gt; Measures of Variation &gt; Introduction: Measure of Central Tendency vs. Measures of Variation</li> <li>• Graphing &gt; Statistics &gt; Measures of Variation &gt;</li> </ul> </li> </ul>

						<ul style="list-style-type: none"> <li>Comparing Data Distributions &gt; Introduction</li> <li>Graphing &gt; Statistics &gt; Measures of Variation &gt; Comparing Data Distributions &gt; Example 1</li> <li>Graphing &gt; Statistics &gt; Measures of Variation &gt; Comparing Data Distributions &gt; Example 2</li> <li>Graphing &gt; Statistics &gt; Measures of Variation &gt; Comparing Data Distributions &gt; Informal Inferences</li> </ul>
109.)	Grade 7	Ratios and Proportional Relationships	Analyze proportional relationships and use them to solve real-world and mathematical problems.	<p>Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units. For example, if a person walks <math>\frac{1}{2}</math> mile in each <math>\frac{1}{4}</math> hour, compute the unit rate as the complex fraction <math>\frac{1/2}{1/4}</math> miles per hour, equivalently 2 miles per hour.</p>	7.RP.01	<ul style="list-style-type: none"> <li>Fractions &gt; Ratios and Proportions &gt; Rate and Unit Rate &gt; Concept</li> <li>Fractions &gt; Ratios and Proportions &gt; Rate and Unit Rate &gt; Examples</li> <li>Fractions &gt; Ratios and Proportions &gt; Rate and Unit Rate &gt; The Best? &gt; Example 1</li> <li>Fractions &gt; Ratios and Proportions &gt; Rate and Unit Rate &gt; The Best? &gt; Example 2</li> <li>Fractions &gt; Ratios and Proportions &gt; Rate and Unit Rate &gt; The Best? &gt; Example 3</li> </ul>
110.)	Grade 7	Ratios and Proportional Relationships	Analyze proportional relationships and use them to solve real-world and mathematical problems.	<p>Recognize and represent proportional relationships between quantities.</p> <p>a.) Decide whether two quantities are in a proportional relationship, e.g., by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the origin.</p> <p>b.) Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships.</p> <p>c.) Represent proportional relationships by equations. For example, if total cost <math>t</math> is proportional to the number <math>n</math> of items purchased at a constant price <math>p</math>, the relationship between the total cost and the number of items can be expressed as <math>t = pn</math>.</p> <p>d.) Explain what a point <math>(x, y)</math> on the graph of a proportional relationship means in terms of the situation, with special attention to the points <math>(0, 0)</math> and <math>(1, r)</math> where <math>r</math> is the unit rate.</p>	7.RP.02	<ul style="list-style-type: none"> <li>a.) <ul style="list-style-type: none"> <li>Graphing &gt; Linear Relations &gt; Exploration of <math>y = mx</math> &gt; Equation</li> <li>Graphing &gt; Linear Relations &gt; Exploration of <math>y = mx</math> &gt; Table</li> </ul> </li> <li>b.) <ul style="list-style-type: none"> <li>Graphing &gt; Linear Relations &gt; Exploration of <math>y = mx</math> &gt; Equation</li> <li>Graphing &gt; Linear Relations &gt; Exploration of <math>y = mx</math> &gt; Table</li> <li>Graphing &gt; Linear Relations &gt; Exploration of <math>y = mx</math> &gt; Graph</li> <li>Graphing &gt; Linear Relations &gt; Exploration of <math>y = mx</math> &gt; Summary - Constant of Proportionality</li> </ul> </li> <li>c.) <ul style="list-style-type: none"> <li>Fractions &gt; Ratios and Proportions &gt; Double Number Lines &gt; Introduction 1</li> <li>Fractions &gt; Ratios and Proportions &gt; Double Number Lines &gt; Introduction 2</li> <li>Fractions &gt; Ratios and Proportions &gt; Ratio Table &gt; Introduction 1</li> <li>Fractions &gt; Ratios and Proportions &gt; Ratio Table &gt; Introduction 2</li> <li>Fractions &gt; Ratios and Proportions &gt; Ratio Table &gt; Example 4</li> <li>Fractions &gt; Ratios and Proportions &gt; The Most Tangy Drink &gt; Solution 1</li> <li>Fractions &gt; Ratios and Proportions &gt; The Most Tangy Drink &gt; Solution 2</li> <li>Fractions &gt; Ratios and Proportions &gt; Double Number Lines &gt; Example 3</li> <li>Graphing &gt; Linear Relations &gt; Exploration of <math>y = mx</math> &gt; Equation</li> </ul> </li> <li>d.) <ul style="list-style-type: none"> <li>Graphing &gt; Linear Relations &gt; Exploration of <math>y = mx</math> &gt; Graph</li> </ul> </li> </ul>
						<ul style="list-style-type: none"> <li>Percent &gt; Percent in Business &gt; Sales Tax &gt; The Bike</li> <li>Percent &gt; Percent in Business &gt; Sales Tax &gt; The Coat</li> <li>Percent &gt; Percent in Business &gt; Sales Tax &gt; Restaurant Tipping</li> <li>Percent &gt; Percent in Business &gt; Discount &gt; Football Sale</li> <li>Percent &gt; Percent in Business &gt; Discount &gt; What Can I Afford?</li> <li>Percent &gt; Percent in Business &gt; Discount &gt; What is Cheaper?</li> <li>Percent &gt; Percent in Business &gt; Discount &gt; Competitors Discount</li> </ul>

111.)

Grade  
7

Ratios and  
Proportional  
Relationships

Analyze proportional relationships and use them to solve real-world and mathematical problems.

Use proportional relationships to solve multistep ratio and percent problems. Examples: simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, percent error.

7.RP.03

- Percent > Percent in Business > Commission > Car Salesman
- Percent > Percent in Business > Commission > Real Estate
- Percent > Percent in Business > Commission > Car Dealerships
- Percent > Percent in Business > Simple Interest > What is it?
- Percent > Percent in Business > Simple Interest > Complete the Table
- Percent > Percent in Business > Simple Interest > Bank Interest
- Percent > Percent in Business > Simple Interest > Credit Card Bill
- Percent > Fraction/Decimal to Percent > Percent Change > Percent Increase
- Percent > Fraction/Decimal to Percent > Percent Change > Percent Decrease
- Percent > Fraction/Decimal to Percent > Percent Change > Percent Increase or Decrease
- Fractions > Ratios and Proportions > Proportions > Example 2 - Lemonade
- Fractions > Ratios and Proportions > Proportions > Example 3 - Marbles
- Fractions > Ratios and Proportions > Proportions > Example 4 - Trout
- Fractions > Ratios and Proportions > Proportions > Example 5 - Tree Height
- Fractions > Ratios and Proportions > Proportions > Example 6 - Map
- Fractions > Ratios and Proportions > Proportions > Example 7 - Scale Drawing
- Fractions > Ratios and Proportions > Ratios and Your Body > Golden Ratio > Introduction
- Fractions > Ratios and Proportions > Ratios and Your Body > Golden Ratio > Part 1
- Fractions > Ratios and Proportions > Ratios and Your Body > Golden Ratio > Part 2
- Percent > Problems Involving Percent > Percent Change > Percent Markup Example
- Percent > Problems Involving Percent > Percent Change > Tree Example
- Percent > Problems Involving Percent > Percent Change > Interest Example
- Percent > Problems Involving Percent > Mental Calculation > Tipping Example
- Percent > Problems Involving Percent > Mental Calculation > Number Example
- Percent > Problems Involving Percent > Percents Less Than 1 > Pencil Example
- Percent > Problems Involving Percent > Percents Less Than 1 > Number Example
- Percent > Problems Involving Percent > Percents Greater Than 100 > Order Example
- Percent > Problems Involving Percent > Percents Greater Than 100 > Number Example
- Percent > Problems Involving Percent > Percent of a Number > Nickel Ore Example
- Percent > Problems Involving Percent > Percent of a Number > Earnings Example
- Percent > Problems Involving Percent > Finding the Percent > Car Example
- Percent > Problems Involving Percent > Finding the Percent > Theatre Example
- Percent > Problems Involving Percent > Finding the Whole > Recall Proportionals
- Percent > Problems Involving Percent > Finding the Whole > Bike Sale: Method 1... Using Proportions
- Percent > Problems Involving Percent > Finding the Whole > Bike Sale: Method 2
- Percent > Problems Involving Percent > Finding the Whole > Grades Problem: Method 1... Using Proportions
- Percent > Problems Involving Percent > Finding the Whole > Grades Problem: Method 2
- Percent > Problems Involving Percent > Finding the Whole > School Population: Method 1... Using Proportions
- Percent > Problems Involving Percent > Finding the Whole > School Population: Method 2
- Percent > Percent of a Number > Successive Percentage Changes > Brett and Carli
- Percent > Percent of a Number > Successive Percentage Changes > Julie and Amanda
- Percent > Percent of a Number > Grades > What if?
- Percent > Percent of a Number > Grades >

- Calculate
- Percent > Percent of a Number > Grades > Pass or Fail?
- Measurement & Geometry > Solids... Volumes and Surface Area > Real World Problems > Cylinders > Pool Liner

- a.)
- Whole Numbers & Integers > Adding Integers > Markers... An Introduction to Addition > An Introduction to Addition
- Whole Numbers & Integers > Adding Integers > Markers... An Introduction to Addition > Opposites
- Whole Numbers & Integers > Subtracting Integers > Markers... An Introduction to Subtraction > Review Opposites

- b.)
- Whole Numbers & Integers > Adding Integers > Elevators... An Introduction to Addition > Example 1
- Whole Numbers & Integers > Adding Integers > Elevators... An Introduction to Addition > Example 2
- Whole Numbers & Integers > Adding Integers > Elevators... An Introduction to Addition > Example 3
- Whole Numbers & Integers > Adding Integers > Elevators... An Introduction to Addition > Example 4
- Whole Numbers & Integers > Adding Integers > Elevators... An Introduction to Addition > Summary... Using Elevators
- Whole Numbers & Integers > Adding Integers > Markers... An Introduction to Addition > An Introduction to Addition
- Whole Numbers & Integers > Adding Integers > Markers... An Introduction to Addition > Opposites
- Whole Numbers & Integers > Adding Integers > Markers... An Introduction to Addition > Example 1
- Whole Numbers & Integers > Adding Integers > Markers... An Introduction to Addition > Example 2
- Whole Numbers & Integers > Adding Integers > Markers... An Introduction to Addition > Example 3
- Whole Numbers & Integers > Adding Integers > Markers... An Introduction to Addition > Example 4
- Whole Numbers & Integers > Adding Integers > Going for a Walk... An Introduction to Addition > Example 1
- Whole Numbers & Integers > Adding Integers > Going for a Walk... An Introduction to Addition > Example 2
- Whole Numbers & Integers > Adding Integers > Going for a Walk... An Introduction to Addition > Example 3
- Whole Numbers & Integers > Adding Integers > Number Lines... An Introduction to Addition > Example 1
- Whole Numbers & Integers > Adding Integers > Number Lines... An Introduction to Addition > Example 2
- Whole Numbers & Integers > Adding Integers > Number Lines... An Introduction to Addition > Example 3
- Whole Numbers & Integers > Adding Integers > Number Lines... An Introduction to Addition > Summary... Using a Number Line
- Whole Numbers & Integers > Adding Integers > Word Problems > Temperature
- Whole Numbers & Integers > Adding Integers > Word Problems > Money
- Whole Numbers & Integers > Adding Integers > Word Problems > Car
- Fractions > Adding Fractions > Word Problems > Alexanders Friend
- Fractions > Adding Fractions > Word Problems > Eating Candy
- Fractions > Adding Fractions > Word Problems > Goal Scoring
- Fractions > Adding Fractions > Word Problems > Taking a Walk
- Fractions > Improper Fraction and Mixed



- Numbers > Adding Mixed Numbers > On a Ruler
- Fractions > Improper Fraction and Mixed Numbers > Adding Mixed Numbers > Method 1 > Example 1
- Fractions > Improper Fraction and Mixed Numbers > Adding Mixed Numbers > Method 1 > Example 2
- Fractions > Improper Fraction and Mixed Numbers > Adding Mixed Numbers > Method 2 > Example 1
- Fractions > Improper Fraction and Mixed Numbers > Adding Mixed Numbers > Method 2 > Example 2
- Fractions > Addition and Subtraction of Decimals > Decimals Around Us > Length in Metric Units > Example 2
- Fractions > Addition and Subtraction of Decimals > Decimals Around Us > Length in Metric Units > Example 3
- Fractions > Addition and Subtraction of Decimals > Decimals Around Us > Length in Metric Units > Example 4
- Fractions > Addition and Subtraction of Decimals > Decimals Around Us > Length in Metric Units > Example 5
- Fractions > Addition and Subtraction of Decimals > Decimals Around Us > Pencils > Example 3
- Fractions > Addition and Subtraction of Decimals > Decimals Around Us > Money > Example 2
- Fractions > Addition and Subtraction of Decimals > Decimals Around Us > Money > Example 4
- Fractions > Addition and Subtraction of Decimals > Decimals Around Us > Track Meet > Example 2
- Fractions > Addition and Subtraction of Decimals > Decimals Around Us > Track Meet > Example 5
- Fractions > Addition and Subtraction of Decimals > Decimals Around Us > School Supplies

c.)

- Whole Numbers & Integers > Subtracting Integers > Markers... An Introduction to Subtraction > Markers...Help Us Understand
- Whole Numbers & Integers > Subtracting Integers > Markers... An Introduction to Subtraction > Review Opposites
- Whole Numbers & Integers > Subtracting Integers > Markers... An Introduction to Subtraction > Example 1
- Whole Numbers & Integers > Subtracting Integers > Markers... An Introduction to Subtraction > Example 2
- Whole Numbers & Integers > Subtracting Integers > Markers... An Introduction to Subtraction > Example 3
- Whole Numbers & Integers > Subtracting Integers > Markers... An Introduction to Subtraction > Example 4
- Whole Numbers & Integers > Subtracting Integers > Markers... An Introduction to Subtraction > Example 5
- Whole Numbers & Integers > Subtracting Integers > Markers... An Introduction to Subtraction > Example 6
- Whole Numbers & Integers > Subtracting Integers > Markers... An Introduction to Subtraction > Example 7
- Whole Numbers & Integers > Subtracting Integers > Markers... An Introduction to Subtraction > Example 8
- Whole Numbers & Integers > Subtracting Integers > Markers... An Introduction to Subtraction > Pattern
- Whole Numbers & Integers > Subtracting Integers > Elevators... An Introduction to Subtraction > Example 1
- Whole Numbers & Integers > Subtracting Integers > Elevators... An Introduction to Subtraction > Example 2
- Whole Numbers & Integers > Subtracting Integers > Elevators... An Introduction to Subtraction > Example 3
- Whole Numbers & Integers > Subtracting Integers > Elevators... An Introduction to Subtraction > Example 4
- Whole Numbers & Integers > Subtracting

112.)	Grade 7	The Number System	<p>Apply and extend previous understandings of operations with fractions</p>	<p>Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram.</p> <p>a.) Describe situations in which opposite quantities combine to make 0. For example, a hydrogen atom has 0 charge because its two constituents are oppositely charged.</p> <p>b.) Understand <math>p + q</math> as the number located a distance <math> q </math> from <math>p</math>, in the positive or negative direction depending on whether <math>q</math> is positive or negative.</p>	7.NS.01	<ul style="list-style-type: none"> <li>Integers &gt; Elevators...An Introduction to Subtraction &gt; Summary...Using Elevators</li> <li>• Whole Numbers &amp; Integers &gt; Subtracting Integers &gt; Summary...Add the Opposite</li> <li>• Whole Numbers &amp; Integers &gt; Subtracting Integers &gt; Example Questions &gt; Example 1...With Brackets</li> <li>• Whole Numbers &amp; Integers &gt; Subtracting Integers &gt; Example Questions &gt; Example 2...With Brackets</li> <li>• Whole Numbers &amp; Integers &gt; Subtracting Integers &gt; Example Questions &gt; Example 3...Without Brackets</li> <li>• Whole Numbers &amp; Integers &gt; Subtracting Integers &gt; Example Questions &gt; Example 4...Without Brackets</li> <li>• Whole Numbers &amp; Integers &gt; Subtracting Integers &gt; Example Questions &gt; Example 5...Without Brackets</li> <li>• Whole Numbers &amp; Integers &gt; Subtracting Integers &gt; Example Questions &gt; Example 6...Without Brackets</li> <li>• Whole Numbers &amp; Integers &gt; Subtracting Integers &gt; Example Questions &gt; Summary From Example 3 to 6</li> <li>• Whole Numbers &amp; Integers &gt; Subtracting Integers &gt; Going for a Walk &gt; Preliminary</li> <li>• Whole Numbers &amp; Integers &gt; Subtracting Integers &gt; Going for a Walk &gt; The Walk</li> <li>• Whole Numbers &amp; Integers &gt; Subtracting Integers &gt; Going for a Walk &gt; Davids Trip Part 1</li> <li>• Whole Numbers &amp; Integers &gt; Subtracting Integers &gt; Going for a Walk &gt; Davids Trip Part 2</li> <li>• Whole Numbers &amp; Integers &gt; Subtracting Integers &gt; Going for a Walk &gt; Summary</li> <li>• Whole Numbers &amp; Integers &gt; Subtracting Integers &gt; Word Problems &gt; The Sailboat</li> <li>• Whole Numbers &amp; Integers &gt; Subtracting Integers &gt; Word Problems &gt; The Bank</li> <li>• Fractions &gt; Subtracting Fractions &gt; Subtracting Fractions on a Number Line &gt; Example 1</li> <li>• Fractions &gt; Subtracting Fractions &gt; Subtracting Fractions on a Number Line &gt; Example 2</li> <li>• Fractions &gt; Subtracting Fractions &gt; Subtracting Fractions on a Number Line &gt; Example 3</li> <li>• Fractions &gt; Subtracting Fractions &gt; Word Problems &gt; Pedro and Alexs Race</li> <li>• Fractions &gt; Subtracting Fractions &gt; Word Problems &gt; Washing the Cars</li> <li>• Fractions &gt; Subtracting Fractions &gt; Word Problems &gt; Planting the Garden</li> <li>• Fractions &gt; Improper Fractions and Mixed Numbers &gt; Subtracting Mixed Numbers &gt; On a Ruler</li> <li>• Fractions &gt; Improper Fractions and Mixed Numbers &gt; Subtracting Mixed Numbers &gt; Method 1</li> <li>• Fractions &gt; Improper Fractions and Mixed Numbers &gt; Subtracting Mixed Numbers &gt; Method 2</li> <li>• Fractions &gt; Improper Fractions and Mixed Numbers &gt; Subtracting Mixed Numbers &gt; Borrowing</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Decimals Around Us &gt; Pencils &gt; Example 1</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Decimals Around Us &gt; Pencils &gt; Example 2</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Decimals Around Us &gt; Pencils &gt; Example 4</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Decimals Around Us &gt; Pencils &gt; Example 5</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Decimals Around Us &gt; Money &gt; Example 1</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Decimals Around Us &gt; Money &gt; Example 3</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Decimals Around Us &gt; Money &gt; Example 5</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Decimals Around Us &gt; Track Meet &gt; Example 1</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Decimals Around Us &gt; Track Meet &gt; Example 3</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Decimals Around Us &gt; Track Meet &gt; Example 4</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Decimals Around Us &gt; School Supplies</li> </ul>
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to add, subtract, multiply, and divide rational numbers.

Show that a number and its opposite have a sum of 0 (are additive inverses). Interpret sums of rational numbers by describing real-world contexts.

c.) Understand subtraction of rational numbers as adding the additive inverse,  $p - q = p + (-q)$ . Show that the distance between two rational numbers on the number line is the absolute value of their difference, and apply this principle in real-world contexts.

d.) Apply properties of operations as strategies to add and subtract rational numbers.

- d.)
- Whole Numbers & Integers > Adding Integers > Elevators... An Introduction to Addition > Example 1
- Whole Numbers & Integers > Adding Integers > Elevators... An Introduction to Addition > Example 2
- Whole Numbers & Integers > Adding Integers > Elevators... An Introduction to Addition > Example 3
- Whole Numbers & Integers > Adding Integers > Elevators... An Introduction to Addition > Example 4
- Whole Numbers & Integers > Adding Integers > Elevators... An Introduction to Addition > Summary... Using Elevators
- Whole Numbers & Integers > Adding Integers > Markers... An Introduction to Addition > An Introduction to Addition
- Whole Numbers & Integers > Adding Integers > Markers... An Introduction to Addition > Opposites
- Whole Numbers & Integers > Adding Integers > Markers... An Introduction to Addition > Example 1
- Whole Numbers & Integers > Adding Integers > Markers... An Introduction to Addition > Example 2
- Whole Numbers & Integers > Adding Integers > Markers... An Introduction to Addition > Example 3
- Whole Numbers & Integers > Adding Integers > Markers... An Introduction to Addition > Example 4
- Whole Numbers & Integers > Adding Integers > Going for a Walk... An Introduction to Addition > Example 1
- Whole Numbers & Integers > Adding Integers > Going for a Walk... An Introduction to Addition > Example 2
- Whole Numbers & Integers > Adding Integers > Going for a Walk... An Introduction to Addition > Example 3
- Whole Numbers & Integers > Adding Integers > Number Lines... An Introduction to Addition > Example 1
- Whole Numbers & Integers > Adding Integers > Number Lines... An Introduction to Addition > Example 2
- Whole Numbers & Integers > Adding Integers > Number Lines... An Introduction to Addition > Example 3
- Whole Numbers & Integers > Adding Integers > Number Lines... An Introduction to Addition > Summary... Using a Number Line
- Whole Numbers & Integers > Adding Integers > Word Problems > Temperature
- Whole Numbers & Integers > Adding Integers > Word Problems > Money
- Whole Numbers & Integers > Adding Integers > Word Problems > Car
- Whole Numbers & Integers > Subtracting Integers > Markers... An Introduction to Subtraction > Markers... Help Us Understand
- Whole Numbers & Integers > Subtracting Integers > Markers... An Introduction to Subtraction > Review Opposites
- Whole Numbers & Integers > Subtracting Integers > Markers... An Introduction to Subtraction > Example 1
- Whole Numbers & Integers > Subtracting Integers > Markers... An Introduction to Subtraction > Example 2
- Whole Numbers & Integers > Subtracting Integers > Markers... An Introduction to Subtraction > Example 3
- Whole Numbers & Integers > Subtracting Integers > Markers... An Introduction to Subtraction > Example 4
- Whole Numbers & Integers > Subtracting Integers > Markers... An Introduction to Subtraction > Example 5
- Whole Numbers & Integers > Subtracting Integers > Markers... An Introduction to Subtraction > Example 6
- Whole Numbers & Integers > Subtracting

- Integers > Markers... An Introduction to Subtraction > Example 7
- Whole Numbers & Integers > Subtracting Integers > Markers... An Introduction to Subtraction > Example 8
- Whole Numbers & Integers > Subtracting Integers > Markers... An Introduction to Subtraction > Pattern
- Whole Numbers & Integers > Subtracting Integers > Elevators... An Introduction to Subtraction > Example 1
- Whole Numbers & Integers > Subtracting Integers > Elevators... An Introduction to Subtraction > Example 2
- Whole Numbers & Integers > Subtracting Integers > Elevators... An Introduction to Subtraction > Example 3
- Whole Numbers & Integers > Subtracting Integers > Elevators... An Introduction to Subtraction > Example 4
- Whole Numbers & Integers > Subtracting Integers > Elevators...An Introduction to Subtraction > Summary...Using Elevators
- Whole Numbers & Integers > Subtracting Integers > Summary...Add the Opposite
- Whole Numbers & Integers > Subtracting Integers > Example Questions > Example 1...With Brackets
- Whole Numbers & Integers > Subtracting Integers > Example Questions > Example 2...With Brackets
- Whole Numbers & Integers > Subtracting Integers > Example Questions > Example 3...Without Brackets
- Whole Numbers & Integers > Subtracting Integers > Example Questions > Example 4...Without Brackets
- Whole Numbers & Integers > Subtracting Integers > Example Questions > Example 5...Without Brackets
- Whole Numbers & Integers > Subtracting Integers > Example Questions > Example 6...Without Brackets
- Whole Numbers & Integers > Subtracting Integers > Example Questions > Summary From Example 3 to 6
- Whole Numbers & Integers > Subtracting Integers > Going for a Walk > Preliminary
- Whole Numbers & Integers > Subtracting Integers > Going for a Walk > The Walk
- Whole Numbers & Integers > Subtracting Integers > Going for a Walk > Davids Trip Part 1
- Whole Numbers & Integers > Subtracting Integers > Going for a Walk > Davids Trip Part 2
- Whole Numbers & Integers > Subtracting Integers > Going for a Walk > Summary
- Whole Numbers & Integers > Subtracting Integers > Word Problems > The Sailboat
- Whole Numbers & Integers > Subtracting Integers > Word Problems > The Bank
- Whole Numbers & Integers > Order of Operations > Order in Addition Integers > Trial 1
- Whole Numbers & Integers > Order of Operations > Order in Addition Integers > Trial 2
- Whole Numbers & Integers > Order of Operations > Order in Addition Integers > Conclusion
- Whole Numbers & Integers > Order of Operations > Order in Addition Integers > Example 1
- Whole Numbers & Integers > Order of Operations > Order in Addition Integers > Example 2
- Fractions > Adding Fractions > Word Problems > Alexanders Friend
- Fractions > Adding Fractions > Word Problems > Eating Candy
- Fractions > Adding Fractions > Word Problems > Goal Scoring
- Fractions > Adding Fractions > Word Problems > Taking a Walk
- Fractions > Improper Fraction and Mixed Numbers > Adding Mixed Numbers > On a Ruler
- Fractions > Improper Fraction and Mixed Numbers > Adding Mixed Numbers > Method 1 > Example 1
- Fractions > Improper Fraction and Mixed Numbers > Adding Mixed Numbers > Method 1 > Example 2
- Fractions > Improper Fraction and Mixed

						<ul style="list-style-type: none"> <li>Numbers &gt; Adding Mixed Numbers &gt; Method 2 &gt; Example 1</li> <li>• Fractions &gt; Improper Fraction and Mixed Numbers &gt; Adding Mixed Numbers &gt; Method 2 &gt; Example 2</li> <li>• Fractions &gt; Subtracting Fractions &gt; Subtracting Fractions on a Number Line &gt; Example 1</li> <li>• Fractions &gt; Subtracting Fractions &gt; Subtracting Fractions on a Number Line &gt; Example 2</li> <li>• Fractions &gt; Subtracting Fractions &gt; Subtracting Fractions on a Number Line &gt; Example 3</li> <li>• Fractions &gt; Subtracting Fractions &gt; Word Problems &gt; Pedro and Alexs Race</li> <li>• Fractions &gt; Subtracting Fractions &gt; Word Problems &gt; Washing the Cars</li> <li>• Fractions &gt; Subtracting Fractions &gt; Word Problems &gt; Planting the Garden</li> <li>• Fractions &gt; Improper Fractions and Mixed Numbers &gt; Subtracting Mixed Numbers &gt; On a Ruler</li> <li>• Fractions &gt; Improper Fractions and Mixed Numbers &gt; Subtracting Mixed Numbers &gt; Method 1</li> <li>• Fractions &gt; Improper Fractions and Mixed Numbers &gt; Subtracting Mixed Numbers &gt; Method 2</li> <li>• Fractions &gt; Improper Fractions and Mixed Numbers &gt; Subtracting Mixed Numbers &gt; Borrowing</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Decimals Around Us &gt; Length in Metric Units &gt; Example 2</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Decimals Around Us &gt; Length in Metric Units &gt; Example 3</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Decimals Around Us &gt; Length in Metric Units &gt; Example 4</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Decimals Around Us &gt; Length in Metric Units &gt; Example 5</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Decimals Around Us &gt; Pencils &gt; Example 1</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Decimals Around Us &gt; Pencils &gt; Example 2</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Decimals Around Us &gt; Pencils &gt; Example 3</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Decimals Around Us &gt; Pencils &gt; Example 4</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Decimals Around Us &gt; Pencils &gt; Example 5</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Decimals Around Us &gt; Money &gt; Example 1</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Decimals Around Us &gt; Money &gt; Example 2</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Decimals Around Us &gt; Money &gt; Example 3</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Decimals Around Us &gt; Money &gt; Example 4</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Decimals Around Us &gt; Money &gt; Example 5</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Decimals Around Us &gt; Track Meet &gt; Example 1</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Decimals Around Us &gt; Track Meet &gt; Example 2</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Decimals Around Us &gt; Track Meet &gt; Example 3</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Decimals Around Us &gt; Track Meet &gt; Example 4</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Decimals Around Us &gt; Track Meet &gt; Example 5</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Decimals Around Us &gt; School Supplies</li> </ul>
						<ul style="list-style-type: none"> <li>• a.)</li> <li>• Fractions &gt; Multiplying Fractions &gt; Developing the Rule &gt; Ex. 1 - Whole Number X Unit Fraction</li> <li>• Fractions &gt; Multiplying Fractions &gt; Developing the Rule &gt; Ex. 2 - Whole Number X Any Fraction</li> <li>• Fractions &gt; Multiplying Fractions &gt; Developing the Rule &gt; Ex. 3 - Proper Fraction X Proper</li> </ul>

- Fraction
- Fractions > Multiplying Fractions > Developing the Rule > Ex. 4 - Proper Fraction X Proper Fraction
- Fractions > Multiplying Fractions > Developing the Rule > A Summary
- Fractions > Multiplying Fractions > Predicting Products > Example 1
- Fractions > Multiplying Fractions > Predicting Products > Example 1
- Fractions > Multiplying Fractions > Predicting Products > Example 2
- Fractions > Multiplying Fractions > Order in Multiplying > Example 1
- Fractions > Multiplying Fractions > Order in Multiplying > Example 2
- Fractions > Multiplying Fractions > Multiplying Fractions with Large Numbers > Example 1
- Fractions > Multiplying Fractions > Multiplying Fractions with Large Numbers > Example 2
- Fractions > Multiplying Fractions > Multiplying Many Fractions > Example 2
- Fractions > Multiplying Fractions > Real World Problems with Pictures > Boris Money
- Fractions > Multiplying Fractions > Real World Problems with Pictures > Marias Trip
- Fractions > Multiplying Fractions > Real World Problems with Pictures > Harry Meets Sally
- Fractions > Multiplying Fractions > Real World Problems with Pictures > The Blanket
- Fractions > Multiplying Fractions > Multiplying Many Fractions > Example 1
- Fractions > Multiplying Fractions > Multiplying Many Fractions > Example 2
- Fractions > Order of Operations > Order in Multiplication > Trial 1
- Fractions > Order of Operations > Order in Multiplication > Trial 2
- Fractions > Order of Operations > Order in Multiplication > Conclusion
- Fractions > Order of Operations > Order in Multiplication > Example 1
- Fractions > Order of Operations > Order in Multiplication > Example 2
- Fractions > Improper Fractions and Mixed Numbers > Multiplying Mixed Numbers > Fraction x Mixed Number > Sharing Candy Bars
- Fractions > Improper Fractions and Mixed Numbers > Multiplying Mixed Numbers > Fraction x Mixed Number > Half a Recipe
- Fractions > Improper Fractions and Mixed Numbers > Multiplying Mixed Numbers > Whole Number x Mixed Number > Example 1
- Fractions > Improper Fractions and Mixed Numbers > Multiplying Mixed Numbers > Method 1
- Fractions > Improper Fractions and Mixed Numbers > Multiplying Mixed Numbers > Method 2
- Fractions > Improper Fractions and Mixed Numbers > Multiplying Mixed Numbers > Fraction  $\bar{A}$ — Mixed Number > Patterns in Multiplying by Factors Greater Than 1
- Fractions > Improper Fractions and Mixed Numbers > Multiplying Mixed Numbers > Fraction x Mixed Number > Patterns in Multiplying by Factors Less Than 1
- Fractions > Improper Fractions and Mixed Numbers > Multiplying Mixed Numbers > Fraction  $\bar{A}$ — Mixed Number > Predicting Products > Example 1
- Fractions > Improper Fractions and Mixed Numbers > Multiplying Mixed Numbers > Fraction  $\bar{A}$ — Mixed Number > Predicting Products > Example 2
- Fractions > Multiplication and Division of Decimals > Decimals Around Us Word Problems > Example 1 - Oranges
- Fractions > Multiplication and Division of Decimals > Decimals Around Us Word Problems > Example 2 - Bananas
- Fractions > Multiplication and Division of Decimals > Decimals Around Us Word Problems > Example 3 - Cycling
- Fractions > Multiplication and Division of Decimals > Decimals Around Us Word Problems > Example 7 - Apples
- Fractions > Multiplication and Division of

- Decimals > Decimals Around Us Word Problems > Example 8 - Saving
- Whole Numbers & Integers > Multiplying Integers > Word Problems > Washing the Cars
- Whole Numbers & Integers > Multiplying Integers > Word Problems > The Helicopter
- Whole Numbers & Integers > Multiplying Integers > Word Problems > Construction
- Whole Numbers & Integers > Order of Operations > Word Problems > Shipping
- Whole Numbers & Integers > Order of Operations > Word Problems > Babysitting
- Whole Numbers & Integers > Order of Operations > Word Problems > Garbage

b.)

- Fractions > Dividing Fractions > Understanding Division > Recall From Whole Numbers 1
- Fractions > Dividing Fractions > Understanding Division > Recall From Whole Numbers 2
- Fractions > Dividing Fractions > Understanding Division > Recall From Whole Numbers 3
- Fractions > Dividing Fractions > Understanding Division > Introduction
- Fractions > Dividing Fractions > Examples with Diagrams > Soda Pop
- Fractions > Dividing Fractions > Examples with Diagrams > Ice Cream
- Fractions > Dividing Fractions > Examples with Diagrams > Shape 1
- Fractions > Dividing Fractions > Examples with Diagrams > Shape 2
- Fractions > Dividing Fractions > Patterns from Examples
- Fractions > Dividing Fractions > Modeling Examples > Model 1: Pizza
- Fractions > Dividing Fractions > Modeling Examples > Model 2: Chocolate Bar
- Fractions > Dividing Fractions > Modeling Examples > Model 3: Water
- Fractions > Dividing Fractions > Modeling Examples > Model 4: Sports Drink
- Fractions > Dividing Fractions > Modeling Examples > Model 5: Property
- Fractions > Dividing Fractions > Modeling Examples > Model 6: The Farm
- Fractions > Dividing Fractions > Algebraic Explanation > Example 1
- Fractions > Dividing Fractions > Algebraic Explanation > Example 2
- Fractions > Dividing Fractions > Real World Problems with Diagrams > The Pie - Divide a Proper Fraction by a Whole Number
- Fractions > Dividing Fractions > Real World Problems with Diagrams > Piece of Wood - Divide a Whole Number by a Proper Fraction
- Fractions > Dividing Fractions > Real World Problems with Number Lines > Servings of Yogurt - Whole Number/Unit Fraction
- Fractions > Dividing Fractions > Real World Problems with Number Lines > Sharing Fudge - Unit Fraction/Whole Number
- Fractions > Dividing Fractions > Real World Problems without Diagrams > Numerical Example 1
- Fractions > Dividing Fractions > Real World Problems without Diagrams > Numerical Example 2
- Fractions > Dividing Fractions > Real World Problems without Diagrams > Central High School
- Fractions > Dividing Fractions > Real World Problems without Diagrams > The Cheeseburger
- Fractions > Dividing Fractions > Real World Problems without Diagrams > Chicken Noodle Soup
- Fractions > Improper Fractions and Mixed Numbers > Dividing Mixed Numbers
- Whole Numbers & Integers > Dividing Integers > The Inverse of Multiplication > Example 1
- Whole Numbers & Integers > Dividing Integers > The Inverse of Multiplication > Example 2
- Whole Numbers & Integers > Dividing Integers > Example Questions > Example 1
- Whole Numbers & Integers > Dividing Integers > Example Questions > Example 2
- Whole Numbers & Integers > Dividing Integers > Example Questions > Example 3

113.)	Grade 7	The Number System	<p>Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.</p>	<p>Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers.</p> <p>a.) Understand that multiplication is extended from fractions to rational numbers by requiring that operations continue to satisfy the properties of operations, particularly the distributive property, leading to products such as <math>(-1)(-1) = 1</math> and the rules for multiplying signed numbers. Interpret products of rational numbers by describing real-world contexts.</p> <p>b.) Understand that integers can be divided, provided that the divisor is not zero, and every quotient of integers (with non-zero divisor) is a rational number. If <math>p</math> and <math>q</math> are integers, then <math>-(p/q) = (-p)/q = p/(-q)</math>. Interpret quotients of rational numbers by describing realworld contexts.</p>	7.NS.02	<ul style="list-style-type: none"> <li>• Whole Numbers &amp; Integers &gt; Dividing Integers &gt; Example Questions &gt; Example 4</li> <li>• Whole Numbers &amp; Integers &gt; Dividing Integers &gt; Word Problems &gt; Casino</li> <li>• Whole Numbers &amp; Integers &gt; Dividing Integers &gt; Word Problems &gt; Plant</li> <li>• Whole Numbers &amp; Integers &gt; Dividing Integers &gt; Word Problems &gt; Grahams Walk</li> <li>• Fractions &gt; Multiplication and Division of Decimals &gt; Decimals Around Us Word Problems &gt; Example 4 - Baseball Cards</li> <li>• Fractions &gt; Multiplication and Division of Decimals &gt; Decimals Around Us Word Problems &gt; Example 5 - Cookies</li> <li>• Fractions &gt; Multiplication and Division of Decimals &gt; Decimals Around Us Word Problems &gt; Example 6 - Running</li> <li>• Fractions &gt; Multiplication and Division of Decimals &gt; Decimals Around Us Word Problems &gt; Example 9 - Skipping</li>   <li>c.)</li> <li>• Fractions &gt; Multiplying Fractions &gt; Developing the Rule &gt; Ex. 1 - Whole Number X Unit Fraction</li> <li>• Fractions &gt; Multiplying Fractions &gt; Developing the Rule &gt; Ex. 2 - Whole Number X Any Fraction</li> <li>• Fractions &gt; Multiplying Fractions &gt; Developing the Rule &gt; Ex. 3 - Proper Fraction X Proper Fraction</li> <li>• Fractions &gt; Multiplying Fractions &gt; Developing the Rule &gt; Ex. 4 - Proper Fraction X Proper Fraction</li> <li>• Fractions &gt; Multiplying Fractions &gt; Developing the Rule &gt; A Summary</li> <li>• Fractions &gt; Multiplying Fractions &gt; Predicting Products &gt; Example 1</li> <li>• Fractions &gt; Multiplying Fractions &gt; Predicting Products &gt; Example 1</li> <li>• Fractions &gt; Multiplying Fractions &gt; Predicting Products &gt; Example 2</li> <li>• Fractions &gt; Multiplying Fractions &gt; Order in Multipliying &gt; Example 1</li> <li>• Fractions &gt; Multiplying Fractions &gt; Order in Multiplying &gt; Example 2</li> <li>• Fractions &gt; Multiplying Fractions &gt; Multiplying Fractions with Large Numbers &gt; Example 1</li> <li>• Fractions &gt; Multiplying Fractions &gt; Multiplying Fractions with Large Numbers &gt; Example 2</li> <li>• Fractions &gt; Multiplying Fractions &gt; Multiplying Many Fractions &gt; Example 2</li> <li>• Fractions &gt; Multiplying Fractions &gt; Real World Problems with Pictures &gt; Boris Money</li> <li>• Fractions &gt; Multiplying Fractions &gt; Real World Problems with Pictures &gt; Marias Trip</li> <li>• Fractions &gt; Multiplying Fractions &gt; Real World Problems with Pictures &gt; Harry Meets Sally</li> <li>• Fractions &gt; Multiplying Fractions &gt; Real World Problems with Pictures &gt; The Blanket</li> <li>• Fractions &gt; Multiplying Fractions &gt; Multiplying Many Fractions &gt; Example 1</li> <li>• Fractions &gt; Multiplying Fractions &gt; Multiplying Many Fractions &gt; Example 2</li> <li>• Fractions &gt; Dividing Fractions &gt; Understanding Division &gt; Recall From Whole Numbers 1</li> <li>• Fractions &gt; Dividing Fractions &gt; Understanding Division &gt; Recall From Whole Numbers 2</li> <li>• Fractions &gt; Dividing Fractions &gt; Understanding Division &gt; Recall From Whole Numbers 3</li> <li>• Fractions &gt; Dividing Fractions &gt; Understanding Division &gt; Introduction</li> <li>• Fractions &gt; Dividing Fractions &gt; Examples with Diagrams &gt; Soda Pop</li> <li>• Fractions &gt; Dividing Fractions &gt; Examples with Diagrams &gt; Ice Cream</li> <li>• Fractions &gt; Dividing Fractions &gt; Examples with Diagrams &gt; Shape 1</li> <li>• Fractions &gt; Dividing Fractions &gt; Examples with Diagrams &gt; Shape 2</li> <li>• Fractions &gt; Dividing Fractions &gt; Patterns from Examples</li> <li>• Fractions &gt; Dividing Fractions &gt; Modeling Examples &gt; Model 1: Pizza</li> <li>• Fractions &gt; Dividing Fractions &gt; Modeling Examples &gt; Model 2: Chocolate Bar</li> <li>• Fractions &gt; Dividing Fractions &gt; Modeling Examples &gt; Model 3: Water</li> </ul>
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c.) Apply properties of operations as strategies to multiply and divide rational numbers.

d.) Convert a rational number to a decimal using long division; know that the decimal form of a rational number terminates in 0s or eventually repeats.

- Fractions > Dividing Fractions > Modeling Examples > Model 4: Sports Drink
- Fractions > Dividing Fractions > Modeling Examples > Model 5: Property
- Fractions > Dividing Fractions > Modeling Examples > Model 6: The Farm
- Fractions > Dividing Fractions > Algebraic Explanation > Example 1
- Fractions > Dividing Fractions > Algebraic Explanation > Example 2
- Fractions > Dividing Fractions > Real World Problems with Diagrams > The Pie - Divide a Proper Fraction by a Whole Number
- Fractions > Dividing Fractions > Real World Problems with Diagrams > Piece of Wood - Divide a Whole Number by a Proper Fraction
- Fractions > Dividing Fractions > Real World Problems with Number Lines > Servings of Yogurt - Whole Number/Unit Fraction
- Fractions > Dividing Fractions > Real World Problems with Number Lines > Sharing Fudge - Unit Fraction/Whole Number
- Fractions > Dividing Fractions > Real World Problems without Diagrams > Numerical Example 1
- Fractions > Dividing Fractions > Real World Problems without Diagrams > Numerical Example 2
- Fractions > Dividing Fractions > Real World Problems without Diagrams > Central High School
- Fractions > Dividing Fractions > Real World Problems without Diagrams > The Cheeseburger
- Fractions > Dividing Fractions > Real World Problems without Diagrams > Chicken Noodle Soup
- Fractions > Order of Operations > Order in Multiplication > Trial 1
- Fractions > Order of Operations > Order in Multiplication > Trial 2
- Fractions > Order of Operations > Order in Multiplication > Conclusion
- Fractions > Order of Operations > Order in Multiplication > Example 1
- Fractions > Order of Operations > Order in Multiplication > Example 2
- Fractions > Improper Fractions and Mixed Numbers > Multiplying Mixed Numbers > Fraction x Mixed Number > Sharing Candy Bars
- Fractions > Improper Fractions and Mixed Numbers > Multiplying Mixed Numbers > Fraction x Mixed Number > Half a Recipe
- Fractions > Improper Fractions and Mixed Numbers > Multiplying Mixed Numbers > Whole Number x Mixed Number > Example 1
- Fractions > Improper Fractions and Mixed Numbers > Multiplying Mixed Numbers > Method 1
- Fractions > Improper Fractions and Mixed Numbers > Multiplying Mixed Numbers > Method 2
- Fractions > Improper Fractions and Mixed Numbers > Multiplying Mixed Numbers > Fraction  $\dot{A}$ — Mixed Number > Patterns in Multiplying by Factors Greater Than 1
- Fractions > Improper Fractions and Mixed Numbers > Multiplying Mixed Numbers > Fraction x Mixed Number > Patterns in Multiplying by Factors Less Than 1
- Fractions > Improper Fractions and Mixed Numbers > Multiplying Mixed Numbers > Fraction  $\dot{A}$ — Mixed Number > Predicting Products > Example 1
- Fractions > Improper Fractions and Mixed Numbers > Multiplying Mixed Numbers > Fraction  $\dot{A}$ — Mixed Number > Predicting Products > Example 2
- Fractions > Improper Fractions and Mixed Numbers > Dividing Fractions
- Fractions > Multiplication and Division of Decimals > Decimals Around Us Word Problems > Example 1 - Oranges
- Fractions > Multiplication and Division of Decimals > Decimals Around Us Word Problems > Example 2 - Bananas
- Fractions > Multiplication and Division of Decimals > Decimals Around Us Word Problems > Example 3 - Cycling

- Fractions > Multiplication and Division of Decimals > Decimals Around Us Word Problems > Example 4 - Baseball Cards
- Fractions > Multiplication and Division of Decimals > Decimals Around Us Word Problems > Example 5 - Cookies
- Fractions > Multiplication and Division of Decimals > Decimals Around Us Word Problems > Example 6 - Running
- Fractions > Multiplication and Division of Decimals > Decimals Around Us Word Problems > Example 7 - Apples
- Fractions > Multiplication and Division of Decimals > Decimals Around Us Word Problems > Example 8 - Saving
- Fractions > Multiplication and Division of Decimals > Decimals Around Us Word Problems > Example 9 - Skipping
- Whole Numbers & Integers > Multiplying Integers > Multiplication is > Example 1
- Whole Numbers & Integers > Multiplying Integers > Multiplication is > Example 2
- Whole Numbers & Integers > Multiplying Integers > Multiplication is > Example 3
- Whole Numbers & Integers > Multiplying Integers > Positive Integers X Negative Integers > Example 1
- Whole Numbers & Integers > Multiplying Integers > Positive Integers X Negative Integers > Example 2
- Whole Numbers & Integers > Multiplying Integers > Negative Integers X Positive Integers > Method 1
- Whole Numbers & Integers > Multiplying Integers > Negative Integers X Positive Integers > Method 2
- Whole Numbers & Integers > Multiplying Integers > Negative Integers X Negative Integers > Example 1
- Whole Numbers & Integers > Multiplying Integers > Negative Integers X Negative Integers > Example 2
- Whole Numbers & Integers > Multiplying Integers > Negative Integers X Negative Integers > Pattern 1
- Whole Numbers & Integers > Multiplying Integers > Negative Integers X Negative Integers > Pattern 2
- Whole Numbers & Integers > Multiplying Integers > Summary 1...Signs
- Whole Numbers & Integers > Multiplying Integers > Summary 2...Signs
- Whole Numbers & Integers > Multiplying Integers > Example Questions > Example 1
- Whole Numbers & Integers > Multiplying Integers > Example Questions > Example 2
- Whole Numbers & Integers > Multiplying Integers > Example Questions > Example 3
- Whole Numbers & Integers > Multiplying Integers > Example Questions > Example 4
- Whole Numbers & Integers > Multiplying Integers > Example Questions > Example 5
- Whole Numbers & Integers > Multiplying Integers > Word Problems > Washing Cars
- Whole Numbers & Integers > Multiplying Integers > Word Problems > The Helicopter
- Whole Numbers & Integers > Multiplying Integers > Word Problems > Construction
- Whole Numbers & Integers > Dividing Integers > The Inverse of Multiplication > Example 1
- Whole Numbers & Integers > Dividing Integers > The Inverse of Multiplication > Example 2
- Whole Numbers & Integers > Dividing Integers > Summary 1...Signs
- Whole Numbers & Integers > Dividing Integers > Summary 2...Signs
- Whole Numbers & Integers > Dividing Integers > Example Questions > Example 1
- Whole Numbers & Integers > Dividing Integers > Example Questions > Example 2
- Whole Numbers & Integers > Dividing Integers > Example Questions > Example 3
- Whole Numbers & Integers > Dividing Integers > Example Questions > Example 4
- Whole Numbers & Integers > Dividing Integers > Word Problems > Casino
- Whole Numbers & Integers > Dividing Integers > Word Problems > Plant

					<ul style="list-style-type: none"> <li>• Whole Numbers &amp; Integers &gt; Dividing Integers &gt; Word Problems &gt; Grahams Walk</li> <li>d.)</li> <li>• Fractions &gt; Percents, Fractions, Decimals &gt; Expressing a Percent as a Decimal &gt; Introduction</li> <li>• Fractions &gt; Percents, Fractions, Decimals &gt; Expressing a Percent as a Decimal &gt; Example 1</li> <li>• Fractions &gt; Percents, Fractions, Decimals &gt; Expressing a Percent as a Decimal &gt; Example 2</li> <li>• Fractions &gt; Percents, Fractions, Decimals &gt; Expressing a Percent as a Decimal &gt; Example 3</li> <li>• Fractions &gt; Percents, Fractions, Decimals &gt; Expressing a Fraction as a Percent &gt; Method 2 &gt; Example 1</li> <li>• Fractions &gt; Percents, Fractions, Decimals &gt; Expressing a Fraction as a Percent &gt; Method 2 &gt; Example 2</li> <li>• Fractions &gt; Percents, Fractions, Decimals &gt; Expressing a Fraction as a Percent &gt; Lightning Example</li> <li>• Fractions &gt; Multiplication and Division of Decimals &gt; Fractions to Decimals &gt; Method 1 - Long Division &gt; Example 1</li> <li>• Fractions &gt; Multiplication and Division of Decimals &gt; Fractions to Decimals &gt; Method 1 - Long Division &gt; Example 2</li> <li>• Fractions &gt; Multiplication and Division of Decimals &gt; Fractions to Decimals &gt; Method 1 - Long Division &gt; Example 3</li> <li>• Fractions &gt; Multiplication and Division of Decimals &gt; Repeating Decimals &gt; An Example</li> <li>• Fractions &gt; Multiplication and Division of Decimals &gt; Repeating Decimals &gt; How to Write Them</li> <li>• Fractions &gt; Multiplication and Division of Decimals &gt; Fractions to Decimals Division Table &gt; 5 divided by 7</li> <li>• Fractions &gt; Multiplication and Division of Decimals &gt; Fractions to Decimals Division Table &gt; 3 divided by 8</li> <li>• Fractions &gt; Multiplication and Division of Decimals &gt; Fractions to Decimals Division Table &gt; 1 divided by 11</li> <li>• Fractions &gt; Multiplication and Division of Decimals &gt; Fractions to Decimals Division Table &gt; 2 divided by 9</li> <li>• Fractions &gt; Multiplication and Division of Decimals &gt; Fractions to Decimals Division Table &gt; 2 divided by 3</li> <li>• Fractions &gt; Multiplication and Division of Decimals &gt; Fractions to Decimals Division Table &gt; 8 divided by 9</li> <li>• Fractions &gt; Multiplication and Division of Decimals &gt; Fractions to Decimals Division Table &gt; 11 divided by 12</li> <li>• Fractions &gt; Multiplication and Division of Decimals &gt; Fractions to Decimals Division Table &gt; 9 divided by 5</li> <li>• Percent &gt; Terminating and Repeating Decimals &gt; A Rational Number as a Decimal &gt; Example 1</li> <li>• Percent &gt; Terminating and Repeating Decimals &gt; A Rational Number as a Decimal &gt; Example 2</li> <li>• Percent &gt; Terminating and Repeating Decimals &gt; A Repeating Decimal as a Rational Number &gt; Example 1</li> <li>• Percent &gt; Terminating and Repeating Decimals &gt; A Repeating Decimal as a Rational Number &gt; Example 2</li> </ul>
					<ul style="list-style-type: none"> <li>• Fractions &gt; Adding Fractions &gt; Word Problems &gt; Alexanders Friend</li> <li>• Fractions &gt; Adding Fractions &gt; Word Problems &gt; Eating Candy</li> <li>• Fractions &gt; Adding Fractions &gt; Word Problems &gt; Goal Scoring</li> <li>• Fractions &gt; Adding Fractions &gt; Word Problems &gt; Taking a Walk</li> <li>• Fractions &gt; Subtracting Fractions &gt; Subtracting Fractions on a Number Line &gt; Example 1</li> <li>• Fractions &gt; Subtracting Fractions &gt; Subtracting Fractions on a Number Line &gt; Example 2</li> <li>• Fractions &gt; Subtracting Fractions &gt; Subtracting Fractions on a Number Line &gt; Example 3</li> <li>• Fractions &gt; Subtracting Fractions &gt; Word Problems &gt; Pedro and Alexs Race</li> <li>• Fractions &gt; Subtracting Fractions &gt; Word Problems &gt; Washing the Cars</li> </ul>

- Fractions > Subtracting Fractions > Word Problems > Planting the Garden
- Fractions > Multiplying Fractions > Developing the Rule > Ex. 1 - Whole Number X Unit Fraction
- Fractions > Multiplying Fractions > Developing the Rule > Ex. 2 - Whole Number X Any Fraction
- Fractions > Multiplying Fractions > Developing the Rule > Ex. 3 - Proper Fraction X Proper Fraction
- Fractions > Multiplying Fractions > Developing the Rule > Ex. 4 - Proper Fraction X Proper Fraction
- Fractions > Multiplying Fractions > Developing the Rule > A Summary
- Fractions > Multiplying Fractions > Predicting Products > Example 1
- Fractions > Multiplying Fractions > Predicting Products > Example 1
- Fractions > Multiplying Fractions > Predicting Products > Example 2
- Fractions > Multiplying Fractions > Order in Multiplying > Example 1
- Fractions > Multiplying Fractions > Order in Multiplying > Example 2
- Fractions > Multiplying Fractions > Multiplying Fractions with Large Numbers > Example 1
- Fractions > Multiplying Fractions > Multiplying Fractions with Large Numbers > Example 2
- Fractions > Multiplying Fractions > Multiplying Many Fractions > Example 2
- Fractions > Multiplying Fractions > Real World Problems with Pictures > Boris Money
- Fractions > Multiplying Fractions > Real World Problems with Pictures > Marias Trip
- Fractions > Multiplying Fractions > Real World Problems with Pictures > Harry Meets Sally
- Fractions > Multiplying Fractions > Real World Problems with Pictures > The Blanket
- Fractions > Multiplying Fractions > Multiplying Many Fractions > Example 1
- Fractions > Multiplying Fractions > Multiplying Many Fractions > Example 2
- Fractions > Dividing Fractions > Understanding Division > Recall From Whole Numbers 1
- Fractions > Dividing Fractions > Understanding Division > Recall From Whole Numbers 2
- Fractions > Dividing Fractions > Understanding Division > Recall From Whole Numbers 3
- Fractions > Dividing Fractions > Understanding Division > Introduction
- Fractions > Dividing Fractions > Examples with Diagrams > Soda Pop
- Fractions > Dividing Fractions > Examples with Diagrams > Ice Cream
- Fractions > Dividing Fractions > Examples with Diagrams > Shape 1
- Fractions > Dividing Fractions > Examples with Diagrams > Shape 2
- Fractions > Dividing Fractions > Patterns from Examples
- Fractions > Dividing Fractions > Modeling Examples > Model 1: Pizza
- Fractions > Dividing Fractions > Modeling Examples > Model 2: Chocolate Bar
- Fractions > Dividing Fractions > Modeling Examples > Model 3: Water
- Fractions > Dividing Fractions > Modeling Examples > Model 4: Sports Drink
- Fractions > Dividing Fractions > Modeling Examples > Model 5: Property
- Fractions > Dividing Fractions > Modeling Examples > Model 6: The Farm
- Fractions > Dividing Fractions > Algebraic Explanation > Example 1
- Fractions > Dividing Fractions > Algebraic Explanation > Example 2
- Fractions > Dividing Fractions > Real World Problems with Diagrams > The Pie - Divide a Proper Fraction by a Whole Number
- Fractions > Dividing Fractions > Real World Problems with Diagrams > Piece of Wood - Divide a Whole Number by a Proper Fraction
- Fractions > Dividing Fractions > Real World Problems with Number Lines > Servings of Yogurt - Whole Number/Unit Fraction
- Fractions > Dividing Fractions > Real World

- Problems with Number Lines > Sharing Fudge - Unit Fraction/Whole Number
- Fractions > Dividing Fractions > Real World Problems without Diagrams > Numerical Example 1
- Fractions > Dividing Fractions > Real World Problems without Diagrams > Numerical Example 2
- Fractions > Dividing Fractions > Real World Problems without Diagrams > Central High School
- Fractions > Dividing Fractions > Real World Problems without Diagrams > The Cheeseburger
- Fractions > Dividing Fractions > Real World Problems without Diagrams > Chicken Noodle Soup
- Fractions > Order of Operations > Order in Multiplication > Trial 1
- Fractions > Order of Operations > Order in Multiplication > Trial 2
- Fractions > Order of Operations > Order in Multiplication > Conclusion
- Fractions > Order of Operations > Order in Multiplication > Example 1
- Fractions > Order of Operations > Order in Multiplication > Example 2
- Fractions > Improper Fraction and Mixed Numbers > Adding Mixed Numbers > On a Ruler
- Fractions > Improper Fraction and Mixed Numbers > Adding Mixed Numbers > Method 1 > Example 1
- Fractions > Improper Fraction and Mixed Numbers > Adding Mixed Numbers > Method 1 > Example 2
- Fractions > Improper Fraction and Mixed Numbers > Adding Mixed Numbers > Method 2 > Example 1
- Fractions > Improper Fraction and Mixed Numbers > Adding Mixed Numbers > Method 2 > Example 2
- Fractions > Improper Fractions and Mixed Numbers > Subtracting Mixed Numbers > On a Ruler
- Fractions > Improper Fractions and Mixed Numbers > Subtracting Mixed Numbers > Method 1
- Fractions > Improper Fractions and Mixed Numbers > Subtracting Mixed Numbers > Method 2
- Fractions > Improper Fractions and Mixed Numbers > Subtracting Mixed Numbers > Borrowing
- Fractions > Improper Fractions and Mixed Numbers > Multiplying Mixed Numbers > Fraction x Mixed Number > Sharing Candy Bars
- Fractions > Improper Fractions and Mixed Numbers > Multiplying Mixed Numbers > Fraction x Mixed Number > Half a Recipe
- Fractions > Improper Fractions and Mixed Numbers > Multiplying Mixed Numbers > Whole Number x Mixed Number > Example 1
- Fractions > Improper Fractions and Mixed Numbers > Multiplying Mixed Numbers > Method 1
- Fractions > Improper Fractions and Mixed Numbers > Multiplying Mixed Numbers > Method 2
- Fractions > Improper Fractions and Mixed Numbers > Multiplying Mixed Numbers > Patterns in Multiplying by Factors Greater Than 1
- Fractions > Improper Fractions and Mixed Numbers > Multiplying Mixed Numbers > Patterns in Multiplying by Factors Less Than 1
- Fractions > Improper Fractions and Mixed Numbers > Multiplying Mixed Numbers > Predicting Products > Example 1
- Fractions > Improper Fractions and Mixed Numbers > Multiplying Mixed Numbers > Predicting Products > Example 2
- Fractions > Improper Fractions and Mixed Numbers > Dividing Mixed Numbers
- Fractions > Addition and Subtraction of Decimals > Decimals Around Us > Length in Metric Units > Example 2
- Fractions > Addition and Subtraction of Decimals > Decimals Around Us > Length in Metric Units

114.)	Grade 7	The Number System	Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.	Solve real-world and mathematical problems involving the four operations with rational numbers.	7.NS.03	<ul style="list-style-type: none"> <li>&gt; Example 3</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Decimals Around Us &gt; Length in Metric Units &gt; Example 4</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Decimals Around Us &gt; Length in Metric Units &gt; Example 5</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Decimals Around Us &gt; Pencils &gt; Example 1</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Decimals Around Us &gt; Pencils &gt; Example 2</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Decimals Around Us &gt; Pencils &gt; Example 3</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Decimals Around Us &gt; Pencils &gt; Example 4</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Decimals Around Us &gt; Pencils &gt; Example 5</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Decimals Around Us &gt; Money &gt; Example 1</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Decimals Around Us &gt; Money &gt; Example 2</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Decimals Around Us &gt; Money &gt; Example 3</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Decimals Around Us &gt; Money &gt; Example 4</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Decimals Around Us &gt; Money &gt; Example 5</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Decimals Around Us &gt; Track Meet &gt; Example 1</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Decimals Around Us &gt; Track Meet &gt; Example 2</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Decimals Around Us &gt; Track Meet &gt; Example 3</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Decimals Around Us &gt; Track Meet &gt; Example 4</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Decimals Around Us &gt; Track Meet &gt; Example 5</li> <li>• Fractions &gt; Addition and Subtraction of Decimals &gt; Decimals Around Us &gt; School Supplies</li> <li>• Fractions &gt; Multiplication and Division of Decimals &gt; Decimals Around Us Word Problems &gt; Example 1 - Oranges</li> <li>• Fractions &gt; Multiplication and Division of Decimals &gt; Decimals Around Us Word Problems &gt; Example 2 - Bananas</li> <li>• Fractions &gt; Multiplication and Division of Decimals &gt; Decimals Around Us Word Problems &gt; Example 3 - Cycling</li> <li>• Fractions &gt; Multiplication and Division of Decimals &gt; Decimals Around Us Word Problems &gt; Example 4 - Baseball Cards</li> <li>• Fractions &gt; Multiplication and Division of Decimals &gt; Decimals Around Us Word Problems &gt; Example 5 - Cookies</li> <li>• Fractions &gt; Multiplication and Division of Decimals &gt; Decimals Around Us Word Problems &gt; Example 6 - Running</li> <li>• Fractions &gt; Multiplication and Division of Decimals &gt; Decimals Around Us Word Problems &gt; Example 7 - Apples</li> <li>• Fractions &gt; Multiplication and Division of Decimals &gt; Decimals Around Us Word Problems &gt; Example 8 - Saving</li> <li>• Fractions &gt; Multiplication and Division of Decimals &gt; Decimals Around Us Word Problems &gt; Example 9 - Skipping</li> <li>• Whole Numbers &amp; Integers &gt; Adding Integers &gt; Elevators... An Introduction to Addition &gt; Example 1</li> <li>• Whole Numbers &amp; Integers &gt; Adding Integers &gt; Elevators... An Introduction to Addition &gt; Example 2</li> <li>• Whole Numbers &amp; Integers &gt; Adding Integers &gt; Elevators... An Introduction to Addition &gt; Example 3</li> <li>• Whole Numbers &amp; Integers &gt; Adding Integers &gt; Elevators... An Introduction to Addition &gt; Example 4</li> <li>• Whole Numbers &amp; Integers &gt; Adding Integers &gt; Elevators... An Introduction to Addition &gt; Summary... Using Elevators</li> <li>• Whole Numbers &amp; Integers &gt; Adding Integers &gt; Markers... An Introduction to Addition &gt; An</li> </ul>
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- Introduction to Addition
- Whole Numbers & Integers > Adding Integers > Markers... An Introduction to Addition > Opposites
- Whole Numbers & Integers > Adding Integers > Markers... An Introduction to Addition > Example 1
- Whole Numbers & Integers > Adding Integers > Markers... An Introduction to Addition > Example 2
- Whole Numbers & Integers > Adding Integers > Markers... An Introduction to Addition > Example 3
- Whole Numbers & Integers > Adding Integers > Markers... An Introduction to Addition > Example 4
- Whole Numbers & Integers > Adding Integers > Going for a Walk... An Introduction to Addition > Example 1
- Whole Numbers & Integers > Adding Integers > Going for a Walk... An Introduction to Addition > Example 2
- Whole Numbers & Integers > Adding Integers > Going for a Walk... An Introduction to Addition > Example 3
- Whole Numbers & Integers > Adding Integers > Number Lines... An Introduction to Addition > Example 1
- Whole Numbers & Integers > Adding Integers > Number Lines... An Introduction to Addition > Example 2
- Whole Numbers & Integers > Adding Integers > Number Lines... An Introduction to Addition > Example 3
- Whole Numbers & Integers > Adding Integers > Number Lines... An Introduction to Addition > Summary... Using a Number Line
- Whole Numbers & Integers > Adding Integers > Word Problems > Temperature
- Whole Numbers & Integers > Adding Integers > Word Problems > Money
- Whole Numbers & Integers > Adding Integers > Word Problems > Car
- Whole Numbers & Integers > Subtracting Integers > Markers... An Introduction to Subtraction > Markers...Help Us Understand
- Whole Numbers & Integers > Subtracting Integers > Markers... An Introduction to Subtraction > Review Opposites
- Whole Numbers & Integers > Subtracting Integers > Markers... An Introduction to Subtraction > Example 1
- Whole Numbers & Integers > Subtracting Integers > Markers... An Introduction to Subtraction > Example 2
- Whole Numbers & Integers > Subtracting Integers > Markers... An Introduction to Subtraction > Example 3
- Whole Numbers & Integers > Subtracting Integers > Markers... An Introduction to Subtraction > Example 4
- Whole Numbers & Integers > Subtracting Integers > Markers... An Introduction to Subtraction > Example 5
- Whole Numbers & Integers > Subtracting Integers > Markers... An Introduction to Subtraction > Example 6
- Whole Numbers & Integers > Subtracting Integers > Markers... An Introduction to Subtraction > Example 7
- Whole Numbers & Integers > Subtracting Integers > Markers... An Introduction to Subtraction > Example 8
- Whole Numbers & Integers > Subtracting Integers > Markers... An Introduction to Subtraction > Pattern
- Whole Numbers & Integers > Subtracting Integers > Elevators... An Introduction to Subtraction > Example 1
- Whole Numbers & Integers > Subtracting Integers > Elevators... An Introduction to Subtraction > Example 2
- Whole Numbers & Integers > Subtracting Integers > Elevators... An Introduction to Subtraction > Example 3
- Whole Numbers & Integers > Subtracting Integers > Elevators... An Introduction to Subtraction > Example 4

- Whole Numbers & Integers > Subtracting Integers > Elevators...An Introduction to Subtraction > Summary...Using Elevators
- Whole Numbers & Integers > Subtracting Integers > Summary...Add the Opposite
- Whole Numbers & Integers > Subtracting Integers > Example Questions > Example 1...With Brackets
- Whole Numbers & Integers > Subtracting Integers > Example Questions > Example 2...With Brackets
- Whole Numbers & Integers > Subtracting Integers > Example Questions > Example 3...Without Brackets
- Whole Numbers & Integers > Subtracting Integers > Example Questions > Example 4...Without Brackets
- Whole Numbers & Integers > Subtracting Integers > Example Questions > Example 5...Without Brackets
- Whole Numbers & Integers > Subtracting Integers > Example Questions > Example 6...Without Brackets
- Whole Numbers & Integers > Subtracting Integers > Example Questions > Summary From Example 3 to 6
- Whole Numbers & Integers > Subtracting Integers > Going for a Walk > Preliminary
- Whole Numbers & Integers > Subtracting Integers > Going for a Walk > The Walk
- Whole Numbers & Integers > Subtracting Integers > Going for a Walk > Davids Trip Part 1
- Whole Numbers & Integers > Subtracting Integers > Going for a Walk > Davids Trip Part 2
- Whole Numbers & Integers > Subtracting Integers > Going for a Walk > Summary
- Whole Numbers & Integers > Subtracting Integers > Word Problems > The Sailboat
- Whole Numbers & Integers > Subtracting Integers > Word Problems > The Bank
- Whole Numbers & Integers > Order of Operations > Order in Addition Integers > Trial 1
- Whole Numbers & Integers > Order of Operations > Order in Addition Integers > Trial 2
- Whole Numbers & Integers > Order of Operations > Order in Addition Integers > Conclusion
- Whole Numbers & Integers > Order of Operations > Order in Addition Integers > Example 1
- Whole Numbers & Integers > Order of Operations > Order in Addition Integers > Example 2
- Whole Numbers & Integers > Multiplying Integers > Multiplication is > Example 1
- Whole Numbers & Integers > Multiplying Integers > Multiplication is > Example 2
- Whole Numbers & Integers > Multiplying Integers > Multiplication is > Example 3
- Whole Numbers & Integers > Multiplying Integers > Positive Integers X Negative Integers > Example 1
- Whole Numbers & Integers > Multiplying Integers > Positive Integers X Negative Integers > Example 2
- Whole Numbers & Integers > Multiplying Integers > Negative Integers X Positive Integers > Method 1
- Whole Numbers & Integers > Multiplying Integers > Negative Integers X Positive Integers > Method 2
- Whole Numbers & Integers > Multiplying Integers > Negative Integers X Negative Integers > Example 1
- Whole Numbers & Integers > Multiplying Integers > Negative Integers X Negative Integers > Example 2
- Whole Numbers & Integers > Multiplying Integers > Negative Integers X Negative Integers > Pattern 1
- Whole Numbers & Integers > Multiplying Integers > Negative Integers X Negative Integers > Pattern 2
- Whole Numbers & Integers > Multiplying Integers > Summary 1...Signs
- Whole Numbers & Integers > Multiplying Integers > Summary 2...Signs
- Whole Numbers & Integers > Multiplying Integers > Example Questions > Example 1
- Whole Numbers & Integers > Multiplying Integers > Example Questions > Example 2



					<ul style="list-style-type: none"> <li>• Whole Numbers &amp; Integers &gt; Multiplying Integers &gt; Example Questions &gt; Example 3</li> <li>• Whole Numbers &amp; Integers &gt; Multiplying Integers &gt; Example Questions &gt; Example 4</li> <li>• Whole Numbers &amp; Integers &gt; Multiplying Integers &gt; Example Questions &gt; Example 5</li> <li>• Whole Numbers &amp; Integers &gt; Multiplying Integers &gt; Word Problems &gt; Washing Cars</li> <li>• Whole Numbers &amp; Integers &gt; Multiplying Integers &gt; Word Problems &gt; The Helicopter</li> <li>• Whole Numbers &amp; Integers &gt; Multiplying Integers &gt; Word Problems &gt; Construction</li> <li>• Whole Numbers &amp; Integers &gt; Dividing Integers &gt; The Inverse of Multiplication &gt; Example 1</li> <li>• Whole Numbers &amp; Integers &gt; Dividing Integers &gt; The Inverse of Multiplication &gt; Example 2</li> <li>• Whole Numbers &amp; Integers &gt; Dividing Integers &gt; Summary 1...Signs</li> <li>• Whole Numbers &amp; Integers &gt; Dividing Integers &gt; Summary 2...Signs</li> <li>• Whole Numbers &amp; Integers &gt; Dividing Integers &gt; Example Questions &gt; Example 1</li> <li>• Whole Numbers &amp; Integers &gt; Dividing Integers &gt; Example Questions &gt; Example 2</li> <li>• Whole Numbers &amp; Integers &gt; Dividing Integers &gt; Example Questions &gt; Example 3</li> <li>• Whole Numbers &amp; Integers &gt; Dividing Integers &gt; Example Questions &gt; Example 4</li> <li>• Whole Numbers &amp; Integers &gt; Dividing Integers &gt; Word Problems &gt; Casino</li> <li>• Whole Numbers &amp; Integers &gt; Dividing Integers &gt; Word Problems &gt; Plant</li> <li>• Whole Numbers &amp; Integers &gt; Dividing Integers &gt; Word Problems &gt; Grahams Walk</li> </ul>
115.)	Grade 7	Expressions and Equations	Use properties of operations to generate equivalent expressions.	Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients.	7.EE.01 <ul style="list-style-type: none"> <li>• Algebra &gt; Adding Expressions &gt; Adding Expressions with X and Y Tiles &gt; Example 1</li> <li>• Algebra &gt; Adding Expressions &gt; Adding Expressions with X and Y Tiles &gt; Example 2</li> <li>• Algebra &gt; Adding Expressions &gt; Adding Expressions with X and Y Tiles &gt; Example 3</li> <li>• Algebra &gt; Adding Expressions &gt; Adding Expressions without Tiles &gt; Example 1</li> <li>• Algebra &gt; Adding Expressions &gt; Adding Expressions without Tiles &gt; Example 2</li> <li>• Algebra &gt; Multiplying Expressions &gt; Multiplying Monomials and Binomials &gt; With Tiles &gt; Example 1</li> <li>• Algebra &gt; Multiplying Expressions &gt; Multiplying Monomials and Binomials &gt; With Tiles &gt; Example 2</li> <li>• Algebra &gt; Multiplying Expressions &gt; Multiplying Monomials and Binomials &gt; With Tiles &gt; Example 3</li> <li>• Algebra &gt; Multiplying Expressions &gt; Multiplying Monomials and Binomials &gt; With Tiles &gt; Example 4</li> <li>• Algebra &gt; Multiplying Expressions &gt; Multiplying Monomials and Binomials &gt; Without Tiles</li> <li>• Whole Numbers and Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply by a Single Digit Multiplier &gt; Distributive Method &gt; Example 1</li> <li>• Whole Numbers and Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply by a Single Digit Multiplier &gt; Distributive Method &gt; Example 2</li> <li>• Whole Numbers and Integers &gt; Multiplication and Division of Whole Numbers &gt; Multiply by a Single Digit Multiplier &gt; Distributive Method &gt; Example 3</li> <li>• Algebra &gt; Factoring Expressions &gt; Common Factoring &gt; Without Tiles &gt; Example 2</li> <li>• Algebra &gt; Tiles And Algebra &gt; Introduction To Tiles &gt; Tile Representation</li> <li>• Algebra &gt; Tiles And Algebra &gt; Introduction To Tiles &gt; Like Terms</li> <li>• Algebra &gt; Tiles And Algebra &gt; Introduction To Tiles &gt; Combinations</li> <li>• Algebra &gt; Multiplying Expressions &gt; Multiplying Monomials And Binomials &gt; Extensions &gt; Example 1</li> <li>• Algebra &gt; Multiplying Expressions &gt; Multiplying Monomials And Binomials &gt; Extensions &gt; Example 2</li> <li>• Algebra &gt; Multiplying Expressions &gt; Multiplying Monomials And Binomials &gt; Extensions &gt; Example 3</li> </ul>

						<ul style="list-style-type: none"> <li>Algebra &gt; Multiplying Expressions &gt; Multiplying Monomials And Binomials &gt; Extensions &gt; Example 4</li> <li>Exponents &gt; The Meaning of Exponents &gt; Examples - Order of Operation &gt; Example 3</li> <li>Exponents &gt; The Meaning of Exponents &gt; Examples - Substitution &gt; Example 1</li> <li>Exponents &gt; The Meaning of Exponents &gt; Examples - Substitution &gt; Example 2</li> <li>Exponents &gt; The Meaning of Exponents &gt; Examples - Substitution &gt; Example 3</li> <li>Exponents &gt; The Meaning of Exponents &gt; Examples - Substitution &gt; Example 4</li> <li>Exponents &gt; The Meaning of Exponents &gt; Examples - Order of Operation &gt; Example 1</li> <li>Exponents &gt; The Meaning of Exponents &gt; Examples - Order of Operation &gt; Example 2</li> </ul>
116.)	Grade 7	Expressions and Equations	Use properties of operations to generate equivalent expressions.	Understand that rewriting an expression in different forms in a problem context can shed light on the problem and how the quantities in it are related. For example, $a + 0.05a = 1.05a$ means that "increase by 5%" is the same as "multiply by 1.05."	7.EE.02	<ul style="list-style-type: none"> <li>Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Areas of Polygons &gt; Area of a Rectangle &gt; Concept</li> <li>Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Areas of Polygons &gt; Area of a Rectangle &gt; Example 1</li> <li>Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Areas of Polygons &gt; Area of a Rectangle &gt; Example 2</li> <li>Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Areas of Polygons &gt; Area of a Rectangle &gt; Example 3</li> <li>Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Areas of Polygons &gt; Area of a Rectangle &gt; Example 4</li> <li>Percent &gt; Percent in Business &gt; Sales Tax &gt; The Bike</li> <li>Percent &gt; Percent in Business &gt; Sales Tax &gt; The Coat</li> <li>Percent &gt; Percent in Business &gt; Sales Tax &gt; Restaurant Tipping</li> <li>Percent &gt; Percent in Business &gt; Discount &gt; Football Sale</li> <li>Percent &gt; Percent in Business &gt; Discount &gt; What Can I Afford?</li> <li>Percent &gt; Percent in Business &gt; Discount &gt; What is Cheaper?</li> <li>Percent &gt; Percent in Business &gt; Discount &gt; Competitors Discount</li> <li>Percent &gt; Problems Involving Percent &gt; Percents Greater Than 100 &gt; Number Example</li> <li>Percent &gt; Problems Involving Percent &gt; Percents Greater Than 100 &gt; Order Example</li> </ul>
	Grade	Expressions	Solve real-life and mathematical problems	Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation		<ul style="list-style-type: none"> <li>Percent &gt; Problems Involving Percent &gt; Percent of a Number &gt; Earnings Example</li> <li>Percent &gt; Problems Involving Percent &gt; Percent of a Number &gt; Nickel Ore Example</li> <li>Percent &gt; Problems Involving Percent &gt; Percents Greater Than 100 &gt; Number Example</li> <li>Percent &gt; Problems Involving Percent &gt; Percents Greater Than 100 &gt; Order Example</li> <li>Percent &gt; Problems Involving Percent &gt; Mental Calculation &gt; Number Example</li> <li>Percent &gt; Problems Involving Percent &gt; Mental Calculation &gt; Tipping Example</li> <li>Algebra &gt; Patterns, Formulas, Substitution &gt; Substitution Examples &gt; Example 2: Area Formulas</li> <li>Percent &gt; Percent to Fraction/Decimal &gt; Expressing a Percent as a Fraction &gt; The Watering Can</li> <li>Percent &gt; Percent to Fraction/Decimal &gt; Expressing a Percent as a Decimal &gt; Introduction</li> <li>Percent &gt; Percent to Fraction/Decimal &gt; Expressing a Percent as a Decimal &gt; Example 1</li> <li>Percent &gt; Percent to Fraction/Decimal &gt; Expressing a Percent as a Decimal &gt; Example 2</li> <li>Percent &gt; Percent to Fraction/Decimal &gt; Expressing a Percent as a Decimal &gt; Example 3</li> <li>Percent &gt; Fraction/Decimal to Percent &gt; Expressing a Decimal as a Percent &gt; Example 1</li> <li>Percent &gt; Fraction/Decimal to Percent &gt; Expressing a Decimal as a Percent &gt; Example 2</li> <li>Percent &gt; Fraction/Decimal to Percent &gt; Expressing a Decimal as a Percent &gt; Example 3</li> <li>Percent &gt; Fraction/Decimal to Percent &gt; Expressing a Decimal as a Percent &gt; Summary and Pattern</li> <li>Percent &gt; Fraction/Decimal to Percent &gt;</li> </ul>

117.)	7	and Equations	using numerical and algebraic expressions and equations.	strategies. For example: If a woman making \$25 an hour gets a 10% raise, she will make an additional $\frac{1}{10}$ of her salary an hour, or \$2.50, for a new salary of \$27.50. If you want to place a towel bar $9\frac{3}{4}$ inches long in the center of a door that is $27\frac{1}{2}$ inches wide, you will need to place the bar about 9 inches from each edge; this estimate can be used as a check on the exact computation.	7.EE.03	<ul style="list-style-type: none"> <li>Expressing a Decimal as a Percent &gt; % Nitrogen in Air</li> <li>• Percent &gt; Fraction/Decimal to Percent &gt; Expressing a Decimal as a Percent &gt; Batting Averages</li> <li>• Percent &gt; Fraction/Decimal to Percent &gt; Expressing a Fraction as a Percent &gt; Method 2 &gt; Example 2</li> <li>• Percent &gt; Fraction/Decimal to Percent &gt; Expressing a Fraction as a Percent &gt; An Example</li> <li>• Percent &gt; Fraction/Decimal to Percent &gt; Expressing a Fraction as a Percent &gt; Method 1 &gt; Example 1</li> <li>• Percent &gt; Fraction/Decimal to Percent &gt; Expressing a Fraction as a Percent &gt; Method 1 &gt; Example 2</li> <li>• Percent &gt; Fraction/Decimal to Percent &gt; Expressing a Fraction as a Percent &gt; Method 2 &gt; Example 1</li> <li>• Percent &gt; Fraction/Decimal to Percent &gt; Expressing a Fraction as a Percent &gt; Lightning Example</li> <li>• Fractions &gt; Multiplication and Division of Decimals &gt; Pictorial Models for Decimal Division &gt; Tenths &gt; Example 1</li> <li>• Fractions &gt; Multiplication and Division of Decimals &gt; Pictorial Models for Decimal Division &gt; Tenths &gt; Example 2</li> <li>• Fractions &gt; Multiplication and Division of Decimals &gt; Pictorial Models for Decimal Division &gt; Hundredths &gt; Example 1</li> <li>• Fractions &gt; Multiplication and Division of Decimals &gt; Pictorial Models for Decimal Division &gt; Hundredths &gt; Example 2</li> <li>•</li> </ul>
118.)	Grade 7	Expressions and Equations	Solve real-life and mathematical problems using numerical and algebraic expressions and equations.	<p>Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities.</p> <p>a.) Solve word problems leading to equations of the form <math>px + q = r</math> and <math>p(x + q) = r</math>, where <math>p</math>, <math>q</math>, and <math>r</math> are specific rational numbers. Solve equations of these forms fluently. Compare an algebraic solution to an arithmetic solution, identifying the sequence of the operations used in each approach. For example, the perimeter of a rectangle is 54 cm. Its length is 6 cm. What is its width?</p> <p>b.) Solve word problems leading to inequalities of the form <math>px + q &gt; r</math> or <math>px + q &lt; r</math>, where <math>p</math>, <math>q</math>, and <math>r</math> are specific rational numbers. Graph the solution set of the inequality and interpret it in the context of the problem. For example: As a salesperson, you are paid \$50 per week plus \$3 per sale. This week you want your pay to be at least \$100. Write an inequality for the number of sales you need to</p>	7.EE.04	<ul style="list-style-type: none"> <li>• a.)</li> <li>• Equations &gt; Problem Solving &gt; Pool Puzzler The First Problem</li> <li>• Algebra &gt; Patterns, Formulas, Substitution &gt; Patterns - Toothpicks &gt; Introduction</li> <li>• Algebra &gt; Patterns, Formulas, Substitution &gt; Patterns - Toothpicks &gt; Exploration</li> <li>• Algebra &gt; Patterns, Formulas, Substitution &gt; Patterns - Toothpicks &gt; To Formula &gt; Pattern 1</li> <li>• Algebra &gt; Patterns, Formulas, Substitution &gt; Patterns - Toothpicks &gt; To Formula &gt; Pattern 2</li> <li>• Algebra &gt; Patterns, Formulas, Substitution &gt; Patterns - Toothpicks &gt; To Formula &gt; Pattern 3</li> <li>• Algebra &gt; Patterns, Formulas, Substitution &gt; Patterns - Toothpicks &gt; To Formula &gt; Pattern 4</li> <li>• Algebra &gt; Patterns, Formulas, Substitution &gt; Patterns - Toothpicks &gt; Summary</li> <li>• b.)</li> <li>• Equations &gt; Solving Inequalities &gt; Real-Life Applications &gt; Example 3</li> <li>• Equations &gt; Solving Inequalities &gt; Real-Life Applications &gt; Example 4</li> <li>• Equations &gt; Solving Inequalities &gt; Real-Life Applications &gt; Example 5</li> </ul>

				make, and describe the solutions.		
119.)	Grade 7	Geometry	Draw, construct and describe geometrical figures and describe the relationships between them.	Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.	7.G.01	<ul style="list-style-type: none"> <li>Fractions &gt; Ratios and Proportions &gt; Proportions &gt; Example 7 - Scale Drawing</li> <li>Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Walk Around a Polygon &gt; Perimeter of The Ranch</li> <li>Measurement &amp; Geometry &gt; An Introduction to Measurement &gt; Measurement with a Ruler - Centimeters &gt; Scale &gt; Example 3</li> <li>Measurement &amp; Geometry &gt; An Introduction to Measurement &gt; Measurement with a Ruler - Inches &gt; Scale &gt; Example 3</li> </ul>
120.)	Grade 7	Geometry	Draw, construct and describe geometrical figures and describe the relationships between them.	Draw (freehand, with ruler and protractor, and with technology) geometric shapes with given conditions. Focus on constructing triangles from three measures of angles or sides, noticing when the conditions determine a unique triangle, more than one triangle, or no triangle.	7.G.02	<ul style="list-style-type: none"> <li>Measurement &amp; Geometry &gt; Angles and Polygons &gt; Angles in Triangles &gt; Exploration</li> <li>Measurement &amp; Geometry &gt; Angles and Polygons &gt; Angles in Triangles &gt; An Explanation</li> <li>Measurement &amp; Geometry &gt; Angles and Polygons &gt; Triangle - Sides &gt; Example 1</li> <li>Measurement &amp; Geometry &gt; Angles and Polygons &gt; Triangle - Sides &gt; Example 2</li> <li>Measurement &amp; Geometry &gt; Angles and Polygons &gt; Triangle - Sides &gt; Summary</li> </ul>
121.)	Grade 7	Geometry	Draw, construct and describe geometrical figures and describe the relationships between them.	Describe the two-dimensional figures that result from slicing three-dimensional figures, as in plane sections of right rectangular prisms and right rectangular pyramids.	7.G.03	<ul style="list-style-type: none"> <li>Measurement &amp; Geometry &gt; Projective Geometry &gt; Orthographic Projections - Introduction</li> </ul>
122.)	Grade 7	Geometry	Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.	Know the formulas for the area and circumference of a circle and use them to solve problems; give an informal derivation of the relationship between the circumference and area of a circle.	7.G.04	<ul style="list-style-type: none"> <li>Measurement &amp; Geometry &gt; Circles &gt; AREA of a Circle &gt; Ex. 1 - Wheel</li> <li>Measurement &amp; Geometry &gt; Circles &gt; AREA of a Circle &gt; Ex. 2 - Pizza</li> <li>Measurement &amp; Geometry &gt; Circles &gt; Circumference of a Circle &gt; Ex. 1 - Ogg</li> <li>Measurement &amp; Geometry &gt; Circles &gt; Circumference of a Circle &gt; Ex. 2 - The Well</li> <li>Algebra &gt; Patterns, Formulas, Substitution &gt; Substitution Examples &gt; Example 2: Area Formulas</li> <li>Exponents &gt; Exponents in Formulas &gt; Examples with Area Formulas &gt; Example 3</li> </ul>
123.)	Grade 7	Geometry	Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.	Use facts about supplementary, complementary, vertical, and adjacent angles in a multi-step problem to write and solve simple equations for an unknown angle in a figure.	7.G.05	<ul style="list-style-type: none"> <li>Measurement &amp; Geometry &gt; Angles and Polygons &gt; Angles in Triangles &gt; Exploration</li> <li>Measurement &amp; Geometry &gt; Angles and Polygons &gt; Angles in Triangles &gt; An Explanation</li> <li>Measurement &amp; Geometry &gt; Angles and Polygons &gt; Angles in Triangles &gt; Exterior Angles</li> <li>Measurement &amp; Geometry &gt; Angles and Polygons &gt; Angles in Triangles &gt; Example</li> <li>Measurement &amp; Geometry &gt; Angles and Polygons &gt; Parallel Lines</li> <li>Measurement &amp; Geometry &gt; Angles and Polygons &gt; Examples with Parallel Lines &gt; Example 1</li> <li>Measurement &amp; Geometry &gt; Angles and Polygons &gt; Examples with Parallel Lines &gt; Example 2</li> </ul>
						<ul style="list-style-type: none"> <li>Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Areas of Polygons &gt; Area of a Rectangle &gt; Example 1</li> <li>Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Areas of Polygons &gt; Area of a Rectangle &gt; Example 2</li> <li>Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Areas of Polygons &gt; Polygons Broken into Simpler Shapes &gt; Example 1</li> <li>Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Areas of Polygons &gt; Polygons</li> </ul>

124.)	Grade 7	Geometry	Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.	Solve real-world and mathematical problems involving area, volume and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms.	7.G.06	<ul style="list-style-type: none"> <li>Broken into Simpler Shapes &gt; Example 2</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Areas of Polygons &gt; Polygons Broken into Simpler Shapes &gt; Example 3</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Problems Section &gt; Area of Wall</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Problems Section &gt; Harvest Time - Metric</li> <li>• Measurement &amp; Geometry &gt; Perimeter and Area of Polygons &gt; Problems Section &gt; Harvest Time - US Standard</li> <li>• Measurement &amp; Geometry &gt; Circles &gt; AREA of a Circle &gt; Ex. 3 - The Semi-Circle</li> <li>• Measurement &amp; Geometry &gt; Circles &gt; AREA of a Circle &gt; Ex. 4 - The Dogs Run</li> <li>• Measurement &amp; Geometry &gt; Circles &gt; AREA of a Circle &gt; Ex. 5 - The Hockey Rink</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Volume of a Solid &gt; Displacement Method</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Volume of a Solid &gt; Volume of a Prism: Formula 1</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Volume of a Solid &gt; Volume of a Prism: Formula 2</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Volume of a Solid &gt; Volume of a Cylinder</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Volume of a Solid &gt; Volume of a Pyramid</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Volume of a Solid &gt; Volume of a Cone</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Volume of a Solid &gt; Volume of a Sphere</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Real World Problems &gt; Recycling</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Real World Problems &gt; Volume of Gas</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Real World Problems &gt; Wedge of Cheese</li> <li>• Exponents &gt; Exponents in Formulas &gt; Examples with Area Formulas &gt; Example 1</li> <li>• Exponents &gt; Pythagorean Theorem &gt; Squares on a Grid &gt; Example 2</li> <li>• Exponents &gt; Pythagorean Theorem &gt; Squares on a Grid &gt; Example 3</li> <li>• Exponents &gt; Pythagorean Theorem &gt; Squares on a Grid &gt; Example 4</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Surface Area of a Solid &gt; Total Surface Area</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Surface Area of a Solid &gt; Lateral Surface Area</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Surface Area of a Solid &gt; Surface Area of Cubes &gt; Example 1</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Surface Area of a Solid &gt; Surface Area of Cubes &gt; Example 2</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Surface Area of a Solid &gt; Surface Area of Rectangular Prisms &gt; Example 3</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Surface Area of a Solid &gt; Surface Area of Rectangular Prisms &gt; Example 4</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Surface Area of a Solid &gt; Surface Area of Triangular Prisms &gt; Example 3</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Surface Area of a Solid &gt; Surface Area of Triangular Prisms &gt; Example 4</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Surface Area of a Solid &gt; Surface Area of a Pyramid &gt; Example 1</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Surface Area of a Solid &gt; Surface Area of a Pyramid &gt; Example 2</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Surface Area of a Solid &gt;</li> </ul>
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						<ul style="list-style-type: none"> <li>• Surface Area of a Pyramid &gt; Example 3</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Surface Area of a Solid &gt; Surface Area of a Pyramid &gt; Example 4</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Surface Area of a Solid &gt; Surface Area of a Pyramid &gt; Example 5</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Surface Area of a Solid &gt; Surface Area of a Pyramid &gt; Example 6</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Surface Area of a Solid &gt; Surface Area of a Pyramid &gt; Example 7</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Surface Area of a Solid &gt; Surface Area of a Pyramid &gt; Example 8</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Surface Area of a Solid &gt; Surface Area of a Cylinder &gt; Example 1</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Surface Area of a Solid &gt; Surface Area of a Cylinder &gt; Example 2</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Surface Area of a Solid &gt; Surface Area of a Cylinder &gt; Example 3</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Surface Area of a Solid &gt; Surface Area of a Sphere</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Real World Problems &gt; Rectangular Prisms &gt; Painting</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Real World Problems &gt; Triangular Prisms &gt; The Cage</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Real World Problems &gt; Triangular Prisms &gt; Tri-Fold Sign</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Real World Problems &gt; Triangular Prisms &gt; Play Tent</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Real World Problems &gt; Cubes &gt; Fish Tank</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Real World Problems &gt; Cubes &gt; Gift Wrap</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Real World Problems &gt; Rectangular Pyramids &gt; Robotic Window Washer</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Real World Problems &gt; Rectangular Pyramids &gt; Tale of Two Teepees</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Real World Problems &gt; Triangular Pyramids &gt; Wet Floor Signs</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Real World Problems &gt; Composite 3D Figures &gt; Doghouse</li> <li>• Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Real World Problems &gt; Composite 3D Figures &gt; Birdhouse</li> </ul>
125.)	Grade 7	Statistics and Probability	Use random sampling to draw inferences about a population.	<p>Understand that statistics can be used to gain information about a population by examining a sample of the population; generalizations about a population from a sample are valid only if the sample is representative of that population. Understand that random sampling tends to produce representative samples and support valid inferences.</p> <p>Use data from a random sample to draw inferences about a population with an unknown characteristic of interest. Generate multiple samples (or</p>	7.SP.01	<ul style="list-style-type: none"> <li>• Graphing &gt; Statistics &gt; Population Samples &gt; Introduction</li> <li>• Graphing &gt; Statistics &gt; Population Samples &gt; Random Samples</li> <li>• Graphing &gt; Statistics &gt; Population Samples &gt; Generalizations &gt; Valid vs. Invalid</li> <li>• Graphing &gt; Statistics &gt; Population Samples &gt; Making Predictions from Samples</li> </ul>

126.)	Grade 7	Statistics and Probability	Use random sampling to draw inferences about a population.	simulated samples) of the same size to gauge the variation in estimates or predictions. For example, estimate the mean word length in a book by randomly sampling words from the book; predict the winner of a school election based on randomly sampled survey data. Gauge how far off the estimate or prediction might be.	7.SP.02	<ul style="list-style-type: none"> <li>Graphing &gt; Statistics &gt; Population Samples &gt; Introduction</li> <li>Graphing &gt; Statistics &gt; Population Samples &gt; Random Samples</li> <li>Graphing &gt; Statistics &gt; Population Samples &gt; Generalizations &gt; Valid vs. Invalid</li> <li>Graphing &gt; Statistics &gt; Population Samples &gt; Making Predictions from Samples</li> </ul>
127.)	Grade 7	Statistics and Probability	Draw informal comparative inferences about two populations.	Informally assess the degree of visual overlap of two numerical data distributions with similar variabilities, measuring the difference between the centers by expressing it as a multiple of a measure of variability. For example, the mean height of players on the basketball team is 10 cm greater than the mean height of players on the soccer team, about twice the variability (mean absolute deviation) on either team; on a dot plot, the separation between the two distributions of heights is noticeable.	7.SP.03	<ul style="list-style-type: none"> <li>Graphing &gt; Statistics &gt; Measures of Central Tendency &gt; The Mean</li> <li>Graphing &gt; Statistics &gt; Measures of Central Tendency &gt; The Median Average</li> <li>Graphing &gt; Statistics &gt; Measures of Central Tendency &gt; The Mode</li> <li>Graphing &gt; Statistics &gt; Measures of Variation &gt; Comparing Data Distributions &gt; Introduction</li> <li>Graphing &gt; Statistics &gt; Measures of Variation &gt; Comparing Data Distributions &gt; Example 1</li> <li>Graphing &gt; Statistics &gt; Measures of Variation &gt; Comparing Data Distributions &gt; Example 2</li> <li>Graphing &gt; Statistics &gt; Measures of Variation &gt; Comparing Data Distributions &gt; Informal Inferences</li> </ul>
128.)	Grade 7	Statistics and Probability	Draw informal comparative inferences about two populations.	Use measures of center and measures of variability for numerical data from random samples to draw informal comparative inferences about two populations. For example, decide whether the words in a chapter of a seventh-grade science book are generally longer than the words in a chapter of a fourth-grade science book.	7.SP.04	<ul style="list-style-type: none"> <li>Graphing &gt; Statistics &gt; Measures of Variation &gt; Comparing Data Distributions &gt; Introduction</li> <li>Graphing &gt; Statistics &gt; Measures of Variation &gt; Comparing Data Distributions &gt; Example 1</li> <li>Graphing &gt; Statistics &gt; Measures of Variation &gt; Comparing Data Distributions &gt; Example 2</li> <li>Graphing &gt; Statistics &gt; Measures of Variation &gt; Comparing Data Distributions &gt; Informal Inferences</li> </ul>
129.)	Grade 7	Statistics and Probability	Investigate chance processes and develop, use, and evaluate probability models.	Understand that the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring. Larger numbers indicate greater likelihood. A probability near 0 indicates an unlikely event, a probability around 1/2 indicates an event that is neither unlikely nor likely, and a probability near 1 indicates a likely event.	7.SP.05	<ul style="list-style-type: none"> <li>Probability &gt; Introduction to Probability &gt; Impossible To Certain &gt; Activity 1</li> <li>Probability &gt; Introduction to Probability &gt; Impossible To Certain &gt; Activity 2</li> <li>Probability &gt; Introduction to Probability &gt; Probability Lines &gt; Line 1</li> <li>Probability &gt; Introduction to Probability &gt; Probability Lines &gt; Line 2</li> <li>Probability &gt; Whats the Chance? &gt; Probability Examples &gt; 7. Travel Example</li> <li>Probability &gt; Whats the Chance? &gt; Probability Examples &gt; 8. Number Example</li> <li>Probability &gt; Whats the Chance? &gt; Probability Examples &gt; 9. Rabbit Example</li> <li>Probability &gt; Whats the Chance? &gt; Probability Examples &gt; 10. Mailing Letters</li> <li>Probability &gt; Whats the Chance? &gt; Probability Examples &gt; 11. Forest</li> <li>Probability &gt; Whats the Chance? &gt; Probability Examples &gt; 12. Ahmeds Maze</li> <li></li> </ul>
						<ul style="list-style-type: none"> <li>Probability &gt; Introduction to Probability &gt; Experiments With Spinners &gt; Experiment 1</li> <li>Probability &gt; Introduction to Probability &gt; Experiments With Spinners &gt; Experiment 2</li> <li>Probability &gt; Introduction to Probability &gt; Experiments With Spinners &gt; Experiment 3</li> <li>Probability &gt; Introduction to Probability &gt; Experiments With Spinners &gt; Experiment 4</li> </ul>

130.)	Grade 7	Statistics and Probability	Investigate chance processes and develop, use, and evaluate probability models.	<p>Approximate the probability of a chance event by collecting data on the chance process that produces it and observing its long-run relative frequency, and predict the approximate relative frequency given the probability. For example, when rolling a number cube 600 times, predict that a 3 or 6 would be rolled roughly 200 times, but probably not exactly 200 times.</p>	7.SP.06	<ul style="list-style-type: none"> <li>• Probability &gt; Introduction to Probability &gt; Experiments With Spinners &gt; Experiment 5</li> <li>• Probability &gt; Introduction to Probability &gt; Experiments With Spinners &gt; Experiment 6</li> <li>• Probability &gt; Whats the Chance? &gt; Experimental Probability &gt; Introduction</li> <li>• Probability &gt; Whats the Chance? &gt; Experimental Probability &gt; Example 1</li> <li>• Probability &gt; Whats the Chance? &gt; Experimental Probability &gt; Example 2</li> <li>• Probability &gt; Dice Probabilities &gt; Roll One Die &gt; Your Experiment</li> <li>• Probability &gt; Dice Probabilities &gt; Roll One Die &gt; Computers Experiment</li> <li>• Probability &gt; Dice Probabilities &gt; Roll One Die &gt; Theoretical Probability</li> <li>• Probability &gt; Dice Probabilities &gt; Roll One Die &gt; Patterns</li> <li>• Probability &gt; Dice Probabilities &gt; Roll One Die &gt; Summary</li> <li>• Probability &gt; Pascals Triangle &gt; Pascals Triangle... Row One &gt; Experimental</li> <li>• Probability &gt; Pascals Triangle &gt; Pascals Triangle... Row One &gt; Theoretical</li> <li>• Probability &gt; Pascals Triangle &gt; Pascals Triangle... Row Two &gt; Experimental</li> <li>• Probability &gt; Pascals Triangle &gt; Pascals Triangle... Row Two &gt; Theoretical</li> <li>• Probability &gt; Pascals Triangle &gt; Pascals Triangle... Row Three &gt; Experimental</li> <li>• Probability &gt; Pascals Triangle &gt; Pascals Triangle... Row Three &gt; Theoretical</li> <li>• Probability &gt; Pascals Triangle &gt; Pascals Triangle... Row Four &gt; Experimental</li> <li>• Probability &gt; Pascals Triangle &gt; Pascals Triangle... Row Four &gt; Theoretical</li> <li>• Probability &gt; Pascals Triangle &gt; Patterns &gt; Pattern 1</li> <li>• Probability &gt; Pascals Triangle &gt; Patterns &gt; Pattern 2</li> <li>• Probability &gt; Pascals Triangle &gt; Patterns &gt; Pattern 3</li> <li>• Probability &gt; Pascals Triangle &gt; Patterns &gt; Pattern Summary</li> <li>• Graphing &gt; Statistics &gt; Collecting Data &gt; Throw A Die</li> <li>• Graphing &gt; Statistics &gt; Collecting Data &gt; Throw 2 Dice</li> </ul>
				<p>Develop a probability model and use it to find probabilities of events. Compare probabilities</p>		<ul style="list-style-type: none"> <li>• a.)</li> <li>• Probability &gt; Introduction to Probability &gt; Possible Outcomes &gt; What Are They?</li> <li>• Probability &gt; Introduction to Probability &gt; Possible Outcomes &gt; 1. Coins</li> <li>• Probability &gt; Introduction to Probability &gt; Possible Outcomes &gt; 2. Pick 1 Ball</li> <li>• Probability &gt; Introduction to Probability &gt; Possible Outcomes &gt; 3. Pick 2 Balls</li> <li>• Probability &gt; Introduction to Probability &gt; Possible Outcomes &gt; 4. Eye Test</li> <li>• Probability &gt; Introduction to Probability &gt; Possible Outcomes &gt; 5. Travel</li> <li>• Probability &gt; Introduction to Probability &gt; Possible Outcomes &gt; 6. Class Pick</li> <li>• Probability &gt; Introduction to Probability &gt; Possible Outcomes &gt; 7. Team Member</li> <li>• Probability &gt; Introduction to Probability &gt; Possible Outcomes &gt; 8. Cards</li> <li>• Probability &gt; Introduction to Probability &gt; Experiments With Spinners &gt; Experiment 1</li> <li>• Probability &gt; Introduction to Probability &gt; Experiments With Spinners &gt; Experiment 2</li> <li>• Probability &gt; Introduction to Probability &gt; Experiments With Spinners &gt; Experiment 3</li> <li>• Probability &gt; Introduction to Probability &gt; Experiments With Spinners &gt; Experiment 4</li> <li>• Probability &gt; Introduction to Probability &gt; Experiments With Spinners &gt; Experiment 5</li> <li>• Probability &gt; Introduction to Probability &gt; Experiments With Spinners &gt; Experiment 6</li> <li>• Probability &gt; Whats the Chance? &gt; Probability &gt; What is it</li> <li>• Probability &gt; Whats the Chance? &gt; Probability &gt; Introduction 1</li> <li>• Probability &gt; Whats the Chance? &gt; Probability &gt; Introduction 2</li> <li>• Probability &gt; Whats the Chance? &gt; Probability Examples &gt; 1. Coin Toss</li> </ul>



131.)

Grade  
7

Statistics and  
Probability

Investigate chance processes and develop, use, and evaluate probability models.

from a model to observed frequencies; if the agreement is not good, explain possible sources of the discrepancy.

a.) Develop a uniform probability model by assigning equal probability to all outcomes, and use the model to determine probabilities of events. For example, if a student is selected at random from a class, find the probability that Jane will be selected and the probability that a girl will be selected.

b.) Develop a probability model (which may not be uniform) by observing frequencies in data generated from a chance process. For example, find the approximate probability that a spinning penny will land heads up or that a tossed paper cup will land open-end down. Do the outcomes for the spinning penny appear to be equally likely based on the observed frequencies?

7.SP.07

- Probability > Whats the Chance? > Probability Examples > 2. Picking 1 Ball
  - Probability > Whats the Chance? > Probability Examples > 4. Spinner 1
  - Probability > Whats the Chance? > Probability Examples > 5. Spinner 2
  - Probability > Whats the Chance? > Probability Examples > 6. The Bag
  - Probability > Whats the Chance? > Probability Examples > 7. Travel Example
  - Probability > Whats the Chance? > Probability Examples > 8. Number Example
  - Probability > Whats the Chance? > Probability Examples > 9. Rabbit Example
  - Probability > Whats the Chance? > Probability Examples > 10. Mailing Letters
  - Probability > Whats the Chance? > Probability Examples > 11. Forest
  - Probability > Whats the Chance? > Probability Examples > 12. Ahmeds Maze
  - Probability > Whats the Chance? > The Probability Scale > Examples
  - Probability > Whats the Chance? > The Probability Scale > Summary
  - Probability > Whats the Chance? > Experimental Probability > Introduction
  - Probability > Whats the Chance? > Experimental Probability > Example 1
  - Probability > Whats the Chance? > Experimental Probability > Example 2
  - Probability > Dice Probabilities > Roll One Die > Your Experiment
  - Probability > Dice Probabilities > Roll One Die > Computers Experiment
  - Probability > Dice Probabilities > Roll One Die > Theoretical Probability
  - Probability > Dice Probabilities > Roll One Die > Patterns
  - Probability > Dice Probabilities > Roll One Die > Summary
  - Probability > Pascals Triangle > Pascals Triangle... Row One > Experimental
  - Probability > Pascals Triangle > Pascals Triangle... Row One > Theoretical
  - Probability > Pascals Triangle > Pascals Triangle... Row Two > Experimental
  - Probability > Pascals Triangle > Pascals Triangle... Row Two > Theoretical
  - Probability > Pascals Triangle > Pascals Triangle... Row Three > Experimental
  - Probability > Pascals Triangle > Pascals Triangle... Row Three > Theoretical
  - Probability > Pascals Triangle > Pascals Triangle... Row Four > Experimental
  - Probability > Pascals Triangle > Pascals Triangle... Row Four > Theoretical
  - Probability > Pascals Triangle > Patterns > Pattern 1
  - Probability > Pascals Triangle > Patterns > Pattern 2
  - Probability > Pascals Triangle > Patterns > Pattern 3
  - Probability > Pascals Triangle > Patterns > Pattern Summary
  - Graphing > Statistics > Collecting Data > Throw A Die
  - Graphing > Statistics > Collecting Data > Throw 2 Dice
- b.)
- Probability > Whats the Chance? > Observed Frequencies > Introduction
  - Probability > Whats the Chance? > Observed Frequencies > Example 1
  - Probability > Whats the Chance? > Observed Frequencies > Example 2

Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation.

a.) Understand that, just as with simple events, the

132.)	Grade 7	Statistics and Probability	Investigate chance processes and develop, use, and evaluate probability models.	<p>probability of a compound event is the fraction of outcomes in the sample space for which the compound event occurs.</p> <p>b.) Represent sample spaces for compound events using methods such as organized lists, tables and tree diagrams. For an event described in everyday language (e.g., "rolling double sixes"), identify the outcomes in the sample space which compose the event.</p> <p>c.) Design and use a simulation to generate frequencies for compound events. For example, use random digits as a simulation tool to approximate the answer to the question: If 40% of donors have type A blood, what is the probability that it will take at least 4 donors to find one with type A blood?</p>	7.SP.08	•
133.)	Grade 8	The Number System	Know that there are numbers that are not rational, and approximate them by rational numbers.	Know that numbers that are not rational are called irrational. Understand informally that every number has a decimal expansion; for rational numbers show that the decimal expansion repeats eventually, and convert a decimal expansion which repeats eventually into a rational number.	8.NS.01	<ul style="list-style-type: none"> <li>Percent &gt; Terminating and Repeating Decimals &gt; A Rational Number as a Decimal &gt; Example 1</li> <li>Percent &gt; Terminating and Repeating Decimals &gt; A Rational Number as a Decimal &gt; Example 2</li> <li>Percent &gt; Terminating and Repeating Decimals &gt; A Repeating Decimal as a Rational Number &gt; Example 1</li> <li>Percent &gt; Terminating and Repeating Decimals &gt; A Repeating Decimal as a Rational Number &gt; Example 2</li> <li>Percent &gt; Terminating and Repeating Decimals &gt; A Repeating Decimal as a Rational Number &gt; Example 3</li> </ul>
134.)	Grade 8	The Number System	Know that there are numbers that are not rational, and approximate them by rational numbers.	Use rational approximations of irrational numbers to compare the size of irrational numbers, locate them approximately on a number line diagram, and estimate the value of expressions (e.g., $\pi$ ). For example, by truncating the decimal expansion of $\sqrt{2}$ , show that $\sqrt{2}$ is between 1 and 2, then between 1.4 and 1.5, and explain how to continue on to get better approximations.	8.NS.02	<ul style="list-style-type: none"> <li>Exponents &gt; Square Root &gt; Estimating Square Roots &gt; Example 1</li> <li>Exponents &gt; Square Root &gt; Estimating Square Roots &gt; Example 2</li> <li>Exponents &gt; Square Root &gt; Estimating Square Roots on the Number Line</li> </ul>
						<ul style="list-style-type: none"> <li>Exponents &gt; The Exponent Rules &gt; Multiplication of Powers with the Same Base &gt; Expanding the Exponents</li> <li>Exponents &gt; The Exponent Rules &gt; Multiplication of Powers with the Same Base &gt; The Pattern</li> <li>Exponents &gt; The Exponent Rules &gt; Multiplication of Powers with the Same Base &gt; In General</li> <li>Exponents &gt; The Exponent Rules &gt; Division of Powers with the Same Base &gt; Expanding the Exponents</li> <li>Exponents &gt; The Exponent Rules &gt; Division of Powers with the Same Base &gt; The Pattern</li> <li>Exponents &gt; The Exponent Rules &gt; Division of Powers with the Same Base &gt; In General</li> <li>Exponents &gt; The Exponent Rules &gt; Raising a</li> </ul>

135.)	Grade 8	Expressions and Equations	Work with radicals and integer exponents.	Know and apply the properties of integer exponents to generate equivalent numerical expressions. For example, 3.) $2 \times 3 = 6$ 3.) $-5 = 3 \cdot -1/3$ 3.) $1/3 = 1/27$ .	8.EE.01	<ul style="list-style-type: none"> <li>Power to an Exponent &gt; Expanding the Exponents</li> <li>• Exponents &gt; The Exponent Rules &gt; Raising a Power to an Exponent &gt; The Pattern</li> <li>• Exponents &gt; The Exponent Rules &gt; Raising a Power to an Exponent &gt; In General</li> <li>• Exponents &gt; The Exponent Rules &gt; Raising a Product to an Exponent &gt; Expanding the Exponents</li> <li>• Exponents &gt; The Exponent Rules &gt; Raising a Product to an Exponent &gt; In General</li> <li>• Exponents &gt; The Exponent Rules &gt; A Power with Exponent 0 &gt; Explanation with b</li> <li>• Exponents &gt; The Exponent Rules &gt; A Power with Exponent 0 &gt; Explanation with a</li> <li>• Exponents &gt; The Exponent Rules &gt; A Power with Exponent 0 &gt; Summary</li> <li>• Exponents &gt; The Exponent Rules &gt; A Power with a NEGATIVE Exponent &gt; Method 1 - Explanation with b</li> <li>• Exponents &gt; The Exponent Rules &gt; A Power with a NEGATIVE Exponent &gt; Method 1 - Explanation with k</li> <li>• Exponents &gt; The Exponent Rules &gt; A Power with a NEGATIVE Exponent &gt; Method 2 - Bacteria Doubling</li> <li>• Exponents &gt; The Exponent Rules &gt; A Power with a NEGATIVE Exponent &gt; Summary</li> <li>• Exponents &gt; The Exponent Rules &gt; Summary of Exponent Rules</li> <li>• Exponents &gt; The Exponent Rules &gt; Example Questions &gt; Example 1</li> <li>• Exponents &gt; The Exponent Rules &gt; Example Questions &gt; Example 2</li> <li>• Exponents &gt; The Exponent Rules &gt; Example Questions &gt; Example 3</li> <li>• Exponents &gt; The Exponent Rules &gt; Example Questions &gt; Example 4</li> <li>• Exponents &gt; The Exponent Rules &gt; Example Questions &gt; Example 5</li> <li>• Exponents &gt; The Exponent Rules &gt; Example Questions &gt; Example 6</li> <li>• Exponents &gt; The Exponent Rules &gt; Example Questions &gt; Example 7</li> <li>• Exponents &gt; The Exponent Rules &gt; Example Questions &gt; Example 8</li> <li>• Exponents &gt; The Exponent Rules &gt; Example Questions &gt; Example 9</li> <li>• Exponents &gt; The Exponent Rules &gt; Example Questions &gt; Example 10</li> <li>• Exponents &gt; The Exponent Rules &gt; Example Questions &gt; Example 11</li> <li>• Exponents &gt; The Meaning of Exponents &gt; Examples - Order of Operation &gt; Example 3</li> <li>• Exponents &gt; The Meaning of Exponents &gt; Examples - Substitution &gt; Example 1</li> <li>• Exponents &gt; The Meaning of Exponents &gt; Examples - Substitution &gt; Example 2</li> <li>• Exponents &gt; The Meaning of Exponents &gt; Examples - Substitution &gt; Example 3</li> <li>• Exponents &gt; The Meaning of Exponents &gt; Examples - Substitution &gt; Example 4</li> <li>• Exponents &gt; The Meaning of Exponents &gt; Examples - Order of Operation &gt; Example 1</li> <li>• Exponents &gt; The Meaning of Exponents &gt; Examples - Order of Operation &gt; Example 2</li> <li>• Exponents &gt; The Exponent Rules &gt; Powers with Rational Bases &gt; Example 1</li> <li>• Exponents &gt; The Exponent Rules &gt; Powers with Rational Bases &gt; Example 2</li> <li>• Exponents &gt; The Exponent Rules &gt; Powers with Rational Bases &gt; Example 3</li> <li>• Exponents &gt; The Exponent Rules &gt; Powers with Rational Bases &gt; In General</li> </ul>
136.)	Grade 8	Expressions and Equations	Work with radicals and integer exponents.	Use square root and cube root symbols to represent solutions to equations of the form $x^2 = p$ and $x^3 = p$ , where p is a positive rational number. Evaluate square roots of small	8.EE.02	<ul style="list-style-type: none"> <li>• Exponents &gt; Square Root &gt; Square Roots</li> <li>• Exponents &gt; Square Root &gt; Radical Signs</li> <li>• Exponents &gt; Square Root &gt; Example Questions &gt; 3. Lawn Question</li> <li>• Exponents &gt; Square Root &gt; Example Questions &gt; 4. Make a Square</li> <li>• Exponents &gt; Cube Root &gt; Definition</li> <li>• Exponents &gt; Cube Root &gt; Find the Cube Root &gt; Example 1</li> <li>• Exponents &gt; Cube Root &gt; Find the Cube Root &gt; Example 2</li> <li>• Exponents &gt; Cube Root &gt; Find the Cube Root &gt; Example 3</li> </ul>

				perfect squares and cube roots of small perfect cubes. Know that $\sqrt{2}$ is irrational.		<ul style="list-style-type: none"> <li>Exponents &gt; Cube Root &gt; Find the Cube Root &gt; Example 4</li> <li>Exponents &gt; Cube Root &gt; Evaluate Expressions &gt; Example 1</li> <li>Exponents &gt; Cube Root &gt; Evaluate Expressions &gt; Example 2</li> </ul>
137.)	Grade 8	Expressions and Equations	Work with radicals and integer exponents.	Use numbers expressed in the form of a single digit times an integer power of 10 to estimate very large or very small quantities, and to express how many times as much one is than the other. For example, estimate the population of the United States as $3 \times 10^8$ and the population of the world as $7 \times 10^9$ , and determine that the world population is more than 20 times larger.	8.EE.03	<ul style="list-style-type: none"> <li>Exponents &gt; Scientific Notation &gt; Examples &gt; 5. Snail vs Hair</li> <li>Exponents &gt; Scientific Notation &gt; Examples &gt; 6. The Sun and the Earth</li> <li>Exponents &gt; Scientific Notation &gt; Examples &gt; 7. Mariana Trench</li> <li>Exponents &gt; Scientific Notation &gt; Scientific Notation for Large Numbers &gt; Chart</li> <li>Exponents &gt; Scientific Notation &gt; Scientific Notation for Large Numbers &gt; The Rule</li> <li>Exponents &gt; Scientific Notation &gt; Scientific Notation for Large Numbers &gt; The Steps</li> <li>Exponents &gt; Scientific Notation &gt; Scientific Notation for Small Numbers &gt; Chart</li> <li>Exponents &gt; Scientific Notation &gt; Scientific Notation for Small Numbers &gt; Steps</li> </ul>
138.)	Grade 8	Expressions and Equations	Work with radicals and integer exponents.	Perform operations with numbers expressed in scientific notation, including problems where both decimal and scientific notation are used. Use scientific notation and choose units of appropriate size for measurements of very large or very small quantities (e.g., use millimeters per year for seafloor spreading). Interpret scientific notation that has been generated by technology.	8.EE.04	<ul style="list-style-type: none"> <li>Exponents &gt; Scientific Notation &gt; Examples &gt; 1. Numbering Question</li> <li>Exponents &gt; Scientific Notation &gt; Examples &gt; 2. Park Question</li> <li>Exponents &gt; Scientific Notation &gt; Examples &gt; 3. Sun Question</li> <li>Exponents &gt; Scientific Notation &gt; Examples &gt; 4. Kitchen Question</li> <li>Exponents &gt; Scientific Notation &gt; Examples &gt; 5. Snail vs Hair</li> <li>Exponents &gt; Scientific Notation &gt; Examples &gt; 6. The Sun and the Earth</li> <li>Exponents &gt; Scientific Notation &gt; Examples &gt; 7. Mariana Trench</li> </ul>
139.)	Grade 8	Expressions and Equations	Understand the connections between proportional relationships, lines, and linear equations.	Graph proportional relationships, interpreting the unit rate as the slope of the graph. Compare two different proportional relationships represented in different ways. For example, compare a distance-time graph to a distance-time equation to determine which of two moving objects has greater speed.	8.EE.05	<ul style="list-style-type: none"> <li>Graphing &gt; Linear Relations &gt; The Taxi Example &gt; Setup Equations</li> <li>Graphing &gt; Linear Relations &gt; The Taxi Example &gt; Graph Equations</li> <li>Graphing &gt; Linear Relations &gt; The Elastic Example &gt; Setup Equations</li> <li>Graphing &gt; Linear Relations &gt; The Elastic Example &gt; Graph</li> <li>Graphing &gt; Linear Relations &gt; Lightning Example &gt; Setup Equations</li> <li>Graphing &gt; Linear Relations &gt; Lightning Example &gt; Graph</li> </ul>
140.)	Grade 8	Expressions and Equations	Understand the connections between proportional relationships, lines, and linear equations.	Use similar triangles to explain why the slope $m$ is the same between any two distinct points on a non-vertical line in the coordinate plane; derive the equation $y = mx$ for a line through the origin and the equation $y = mx + b$ for a line intercepting the vertical axis at $b$ .	8.EE.06	<ul style="list-style-type: none"> <li>Graphing &gt; Equation of a Straight Line &gt; Exercise - Slope, Y-Intercept &gt; Example 1</li> <li>Graphing &gt; Equation of a Straight Line &gt; Exercise - Slope, Y-Intercept &gt; Example 2</li> <li>Graphing &gt; Equation of a Straight Line &gt; Exercise - Slope, Y-Intercept &gt; Example 3</li> <li>Graphing &gt; Equation of a Straight Line &gt; Exercise - Slope, Y-Intercept &gt; Example 4</li> <li>Graphing &gt; Slope of a Line &gt; Introductory Examples &gt; Example 1</li> <li>Graphing &gt; Slope of a Line &gt; Sketch Line, Given Point and Slope &gt; Example 1</li> <li>Graphing &gt; Slope of a Line &gt; Sketch Line, Given Point and Slope &gt; Example 2</li> <li>Graphing &gt; Equation of a Straight Line &gt; Graph <math>y = mx + b</math> &gt; Example 1</li> <li>Graphing &gt; Equation of a Straight Line &gt; Graph <math>y = mx + b</math> &gt; Example 2</li> <li>Graphing &gt; Equation of a Straight Line &gt; Graph <math>y = mx + b</math> &gt; Example 3</li> <li>Graphing &gt; Equation of a Straight Line &gt; Graph <math>y = mx + b</math> &gt; Example 4</li> <li>Graphing &gt; Equation of a Straight Line &gt; Graph <math>y = mx + b</math> &gt; Patterns to Summary</li> <li>Graphing &gt; Equation of a Straight Line &gt; Graph <math>y = mx + b</math> &gt; Example 5</li> <li>Graphing &gt; Equation of a Straight Line &gt; Graph <math>y = mx + b</math> &gt; Example 6</li> </ul>

						<ul style="list-style-type: none"> <li>Graphing &gt; Equation of a Straight Line &gt; Graph <math>y = mx + b</math> &gt; Example 7</li> <li>• Graphing &gt; Equation of a Straight Line &gt; Graph <math>y = mx + b</math> &gt; Example 8</li> <li>• Graphing &gt; Slope of a Line &gt; Similar Triangles &gt; Example 1</li> <li>• Graphing &gt; Slope of a Line &gt; Similar Triangles &gt; Example 2</li> </ul>
141.)	Grade 8	Expressions and Equations	Analyze and solve linear equations and pairs of simultaneous linear equations.	<p>Solve linear equations in one variable.</p> <p>a.) Give examples of linear equations in one variable with one solution, infinitely many solutions, or no solutions. Show which of these possibilities is the case by successively transforming the given equation into simpler forms, until an equivalent equation of the form <math>x = a</math>, <math>a = a</math>, or <math>a = b</math> results (where <math>a</math> and <math>b</math> are different numbers).</p> <p>b.) Solve linear equations with rational number coefficients, including equations whose solutions require expanding expressions using the distributive property and collecting like terms.</p>	8.EE.07	<ul style="list-style-type: none"> <li>• a.)</li> <li>• Equations &gt; Solving One-Step Equations &gt; Examples Without Tiles &gt; Example 1</li> <li>• Equations &gt; Solving One-Step Equations &gt; Examples Without Tiles &gt; Example 2</li> <li>• Equations &gt; Solving One-Step Equations &gt; Examples Without Tiles &gt; Example 3</li> <li>• Equations &gt; Solving One-Step Equations &gt; Examples Without Tiles &gt; Example 4</li> <li>• Equations &gt; Solving One-Step Equations &gt; Examples Without Tiles &gt; Example 5</li> <li>• Equations &gt; Solving Two-Step Equations &gt; Examples Without Tiles &gt; Example 1</li> <li>• Equations &gt; Solving Two-Step Equations &gt; Examples Without Tiles &gt; Example 2</li> <li>• Equations &gt; Solving Two-Step Equations &gt; Examples Without Tiles &gt; Example 3</li> <li>• Equations &gt; Solving Two-Step Equations &gt; Examples Without Tiles &gt; Example 4</li> <li>• b.)</li> <li>• Equations &gt; Solving One-Step Equations &gt; Examples With Tiles &gt; Example 1</li> <li>• Equations &gt; Solving One-Step Equations &gt; Examples With Tiles &gt; Example 2</li> <li>• Equations &gt; Solving One-Step Equations &gt; Examples With Tiles &gt; Example 3</li> <li>• Equations &gt; Solving One-Step Equations &gt; Examples With Tiles &gt; Example 4</li> <li>• Equations &gt; Solving One-Step Equations &gt; Examples With Tiles &gt; Example 5</li> <li>• Equations &gt; Solving One-Step Equations &gt; Examples Without Tiles &gt; Example 1</li> <li>• Equations &gt; Solving One-Step Equations &gt; Examples Without Tiles &gt; Example 2</li> <li>• Equations &gt; Solving One-Step Equations &gt; Examples Without Tiles &gt; Example 3</li> <li>• Equations &gt; Solving One-Step Equations &gt; Examples Without Tiles &gt; Example 4</li> <li>• Equations &gt; Solving One-Step Equations &gt; Examples Without Tiles &gt; Example 5</li> <li>• Equations &gt; Solving Two-Step Equations &gt; Examples With Tiles &gt; Example 1</li> <li>• Equations &gt; Solving Two-Step Equations &gt; Examples With Tiles &gt; Example 2</li> <li>• Equations &gt; Solving Two-Step Equations &gt; Examples With Tiles &gt; Example 3</li> <li>• Equations &gt; Solving Two-Step Equations &gt; Examples With Tiles &gt; Example 4</li> <li>• Equations &gt; Solving Two-Step Equations &gt; Examples Without Tiles &gt; Example 1</li> <li>• Equations &gt; Solving Two-Step Equations &gt; Examples Without Tiles &gt; Example 2</li> <li>• Equations &gt; Solving Two-Step Equations &gt; Examples Without Tiles &gt; Example 3</li> <li>• Equations &gt; Solving Two-Step Equations &gt; Examples Without Tiles &gt; Example 4</li> <li>• Equations &gt; Solving Two-Step Equations &gt; Examples Without Tiles &gt; Example 5</li> <li>• Equations &gt; Solving Two-Step Equations &gt; Examples Without Tiles &gt; Example 6</li> <li>• Equations &gt; Solving Multi-Step Equations &gt; Examples Without Tiles &gt; Example 1</li> <li>• Equations &gt; Solving Multi-Step Equations &gt; Examples Without Tiles &gt; Example 2</li> <li>• Equations &gt; Solving Multi-Step Equations &gt; Examples Without Tiles &gt; Example 3</li> <li>• Equations &gt; Solving Multi-Step Equations &gt; Examples Without Tiles &gt; Example 4</li> <li>• Equations &gt; Solving Multi-Step Equations &gt; Examples Without Tiles &gt; Example 5</li> </ul>
						<ul style="list-style-type: none"> <li>• a.)</li> <li>• Equations &gt; Solving Linear Systems &gt; The Meaning of Solving a Linear System</li> <li>• Equations &gt; Solving Linear Systems &gt; Solve a Linear System by Graphing &gt; Example 1: Intersecting Lines</li> <li>• Equations &gt; Solving Linear Systems &gt; Solve a</li> </ul>

142.)	Grade 8	Expressions and Equations	Analyze and solve linear equations and pairs of simultaneous linear equations.	<p>Analyze and solve pairs of simultaneous linear equations.</p> <p>a.) Understand that solutions to a system of two linear equations in two variables correspond to points of intersection of their graphs, because points of intersection satisfy both equations simultaneously.</p> <p>b.) Solve systems of two linear equations in two variables algebraically, and estimate solutions by graphing the equations. Solve simple cases by inspection. For example, <math>3x + 2y = 5</math> and <math>3x + 2y = 6</math> have no solution because <math>3x + 2y</math> cannot simultaneously be 5 and 6.</p> <p>c.) Solve real-world and mathematical problems leading to two linear equations in two variables. For example, given coordinates for two pairs of points, determine whether the line through the first pair of points intersects the line through the second pair.</p>	8.EE.08	<p>Linear System by Graphing &gt; Example 2: Intersecting Lines</p> <ul style="list-style-type: none"> <li>• Equations &gt; Solving Linear Systems &gt; Solve a Linear System by Graphing &gt; Example 3: Intersecting Lines Involving Fractions</li> <li>• Equations &gt; Solving Linear Systems &gt; Solve a Linear System by Graphing &gt; Example 4: Intersecting Lines Involving Fractions</li> <li>• Equations &gt; Solving Linear Systems &gt; Solve a Linear System by Graphing &gt; Example 5: Parallel Lines</li> <li>• Equations &gt; Solving Linear Systems &gt; Solve a Linear System by Graphing &gt; Example 6: Coincidental Lines</li> <li>• Equations &gt; Solving Linear Systems &gt; Solve a Linear System by Substitution &gt; Example 1: Intersecting Lines</li> </ul> <p>b.)</p> <ul style="list-style-type: none"> <li>• Equations &gt; Solving Linear Systems &gt; Solve a Linear System by Substitution &gt; Example 1: Intersecting Lines</li> <li>• Equations &gt; Solving Linear Systems &gt; Solve a Linear System by Substitution &gt; Example 2: Intersecting Lines</li> <li>• Equations &gt; Solving Linear Systems &gt; Solve a Linear System by Substitution &gt; Example 3: Intersecting Lines Involving Fractions</li> <li>• Equations &gt; Solving Linear Systems &gt; Solve a Linear System by Substitution &gt; Example 4: Intersecting Lines Involving Fractions</li> <li>• Equations &gt; Solving Linear Systems &gt; Solve a Linear System by Substitution &gt; Example 5: Parallel Lines</li> <li>• Equations &gt; Solving Linear Systems &gt; Solve a Linear System by Substitution &gt; Example 6: Coincidental Lines</li> <li>• Equations &gt; Solving Linear Systems &gt; Solve a Linear System by Elimination &gt; Example 1: Intersecting Lines</li> <li>• Equations &gt; Solving Linear Systems &gt; Solve a Linear System by Elimination &gt; Example 2: Intersecting Lines</li> <li>• Equations &gt; Solving Linear Systems &gt; Solve a Linear System by Elimination &gt; Example 3: Intersecting Lines Involving Fractions</li> <li>• Equations &gt; Solving Linear Systems &gt; Solve a Linear System by Elimination &gt; Example 4: Intersecting Lines Involving Fractions</li> <li>• Equations &gt; Solving Linear Systems &gt; Solve a Linear System by Elimination &gt; Example 5: Parallel Lines</li> <li>• Equations &gt; Solving Linear Systems &gt; Solve a Linear System by Elimination &gt; Example 6: Coincidental Lines</li> <li>• Equations &gt; Solving Linear Systems &gt; Solve a Linear System by Comparison &gt; Example 1: Intersecting Lines</li> <li>• Equations &gt; Solving Linear Systems &gt; Solve a Linear System by Comparison &gt; Example 2: Intersecting Lines</li> <li>• Equations &gt; Solving Linear Systems &gt; Solve a Linear System by Comparison &gt; Example 3: Intersecting Lines Involving Fractions</li> <li>• Equations &gt; Solving Linear Systems &gt; Solve a Linear System by Comparison &gt; Example 4: Intersecting Lines Involving Fractions</li> <li>• Equations &gt; Solving Linear Systems &gt; Solve a Linear System by Comparison &gt; Example 5: Parallel Lines</li> <li>• Equations &gt; Solving Linear Systems &gt; Solve a Linear System by Comparison &gt; Example 6: Coincidental Lines</li> <li>• Equations &gt; Solving Linear Systems &gt; Solve Problems Using Linear Systems &gt; Example 1 &gt; Beginning of Question</li> <li>• Equations &gt; Solving Linear Systems &gt; Solve Problems Using Linear Systems &gt; Example 1 &gt; Draw Graph</li> <li>• Equations &gt; Solving Linear Systems &gt; Solve Problems Using Linear Systems &gt; Example 2 &gt; Beginning of Question</li> <li>• Equations &gt; Solving Linear Systems &gt; Solve Problems Using Linear Systems &gt; Example 2 &gt; Draw Graph</li> </ul> <p>c.)</p> <ul style="list-style-type: none"> <li>• Equations &gt; Solving Linear Systems &gt; Solve</li> </ul>
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						<ul style="list-style-type: none"> <li>Problems Using Linear Systems &gt; Example 1 &gt; Beginning of Question</li> <li>Equations &gt; Solving Linear Systems &gt; Solve Problems Using Linear Systems &gt; Example 1 &gt; Draw Graph</li> <li>Equations &gt; Solving Linear Systems &gt; Solve Problems Using Linear Systems &gt; Example 2 &gt; Beginning of Question</li> <li>Equations &gt; Solving Linear Systems &gt; Solve Problems Using Linear Systems &gt; Example 2 &gt; Draw Graph</li> <li></li> </ul>
143.)	Grade 8	Functions	Define, evaluate, and compare functions.	Understand that a function is a rule that assigns to each input exactly one output. The graph of a function is the set of ordered pairs consisting of an input and the corresponding output.	8.F.01	<ul style="list-style-type: none"> <li>Graphing &gt; Relations, Equations &amp; Functions &gt; Functions &gt; What is a Function?</li> <li>Graphing &gt; Relations, Equations &amp; Functions &gt; Functions &gt; Example 1</li> <li>Graphing &gt; Relations, Equations &amp; Functions &gt; Functions &gt; Example 2</li> <li>Graphing &gt; Relations, Equations &amp; Functions &gt; Functions &gt; Example 3</li> <li>Graphing &gt; Relations, Equations &amp; Functions &gt; Vertical Line Test &gt; Example 1</li> <li>Graphing &gt; Relations, Equations &amp; Functions &gt; Vertical Line Test &gt; Example 2</li> <li>Graphing &gt; Relations, Equations &amp; Functions &gt; Vertical Line Test &gt; Example 3</li> <li>Algebra &gt; Algebraic Thinking &gt; Function Machine &gt; Introduction</li> <li>Algebra &gt; Algebraic Thinking &gt; Function Machine &gt; Function Machine 1 &gt; Find Output</li> <li>Algebra &gt; Algebraic Thinking &gt; Function Machine &gt; Function Machine 1 &gt; Find Input</li> <li>Algebra &gt; Algebraic Thinking &gt; Function Machine &gt; Function Machine 2 &gt; Find Output</li> <li>Algebra &gt; Algebraic Thinking &gt; Function Machine &gt; Function Machine 2 &gt; Find Input</li> <li></li> </ul>
144.)	Grade 8	Functions	Define, evaluate, and compare functions.	Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). For example, given a linear function represented by a table of values and a linear function represented by an algebraic expression, determine which function has the greater rate of change.	8.F.02	<ul style="list-style-type: none"> <li>Graphing &gt; Linear Relations &gt; The Taxi Example &gt; Setup Equations</li> <li>Graphing &gt; Linear Relations &gt; The Taxi Example &gt; Graph Equations</li> <li>Graphing &gt; Linear Relations &gt; The Elastic Example &gt; Setup Equations</li> <li>Graphing &gt; Linear Relations &gt; The Elastic Example &gt; Graph</li> <li>Graphing &gt; Linear Relations &gt; Lightning Example &gt; Setup Equation</li> <li>Graphing &gt; Linear Relations &gt; Lightning Example &gt; Graph</li> <li>Graphing &gt; Linear Relations &gt; Basketball Example &gt; Setup Equations</li> <li>Graphing &gt; Linear Relations &gt; Basketball Example &gt; Graph</li> <li>Graphing &gt; Linear Relations &gt; What is a Linear Relation</li> <li>Graphing &gt; Relations, Equations &amp; Functions &gt; Function Notation &gt; Example 1</li> <li>Graphing &gt; Relations, Equations &amp; Functions &gt; Function Notation &gt; Example 2</li> <li>Graphing &gt; Relations, Equations &amp; Functions &gt; Patterns to Words to Equations &gt; Example 1</li> <li>Graphing &gt; Relations, Equations &amp; Functions &gt; Patterns to Words to Equations &gt; Example 2</li> <li>Graphing &gt; Relations, Equations &amp; Functions &gt; Patterns to Words to Equations &gt; Example 3</li> <li>Graphing &gt; Relations, Equations &amp; Functions &gt; Patterns to Words to Equations &gt; Example 4</li> <li>Graphing &gt; Equation of a Straight Line &gt; Word Problems-Applications &gt; The Walker &gt; Same Speed</li> <li>Graphing &gt; Equation of a Straight Line &gt; Word Problems-Applications &gt; The Walker &gt; Different Speed</li> </ul>
				Interpret the equation $y = mx + b$ as defining a linear function,		<ul style="list-style-type: none"> <li>Graphing &gt; Equation of a Straight Line &gt; Graph <math>y = mx + b</math> &gt; Example 1</li> <li>Graphing &gt; Equation of a Straight Line &gt; Graph <math>y = mx + b</math> &gt; Example 2</li> <li>Graphing &gt; Equation of a Straight Line &gt; Graph <math>y = mx + b</math> &gt; Example 3</li> <li>Graphing &gt; Equation of a Straight Line &gt; Graph <math>y = mx + b</math> &gt; Example 4</li> <li>Graphing &gt; Equation of a Straight Line &gt; Graph <math>y = mx + b</math> &gt; Patterns to Summary</li> <li>Graphing &gt; Equation of a Straight Line &gt; Graph <math>y = mx + b</math></li> </ul>

145.)	Grade 8	Functions	Define, evaluate, and compare functions.	whose graph is a straight line; give examples of functions that are not linear. For example, the function $A = s^2$ giving the area of a square as a function of its side length is not linear because its graph contains the points (1,1), (2,4) and (3,9), which are not on a straight line.	8.F.03	<ul style="list-style-type: none"> <li>= <math>mx + b</math> &gt; Example 5</li> <li>• Graphing &gt; Equation of a Straight Line &gt; Graph <math>y = mx + b</math> &gt; Example 6</li> <li>• Graphing &gt; Equation of a Straight Line &gt; Graph <math>y = mx + b</math> &gt; Example 7</li> <li>• Graphing &gt; Equation of a Straight Line &gt; Graph <math>y = mx + b</math> &gt; Example 8</li> <li>• Graphing &gt; Linear Relations &gt; Graphs of Linear Relations &gt; Examples &gt; Example 1</li> <li>• Graphing &gt; Linear Relations &gt; Graphs of Linear Relations &gt; Examples &gt; Example 2</li> <li>• Graphing &gt; Linear Relations &gt; Graphs of Linear Relations &gt; Examples &gt; Example 3</li> <li>• Graphing &gt; Linear Relations &gt; Graphs of Linear Relations &gt; Examples &gt; Example 4</li> <li>• Graphing &gt; Linear Relations &gt; Graphs of Linear Relations &gt; Examples &gt; Example 5</li> <li>• Graphing &gt; Linear Relations &gt; Graphs of Linear Relations &gt; Examples &gt; Example 6</li> <li>• Graphing &gt; Linear Relations &gt; Graphs of Linear Relations &gt; Concept</li> </ul>
146.)	Grade 8	Functions	Use functions to model relationships between quantities.	Construct a function to model a linear relationship between two quantities. Determine the rate of change and initial value of the function from a description of a relationship or from two (x, y) values, including reading these from a table or from a graph. Interpret the rate of change and initial value of a linear function in terms of the situation it models, and in terms of its graph or a table of values.	8.F.04	<ul style="list-style-type: none"> <li>• Graphing &gt; Equation of a Straight Line &gt; Exercise - Slope, Y-Intercept &gt; Concept</li> <li>• Graphing &gt; Equation of a Straight Line &gt; Exercise - Slope, Y-Intercept &gt; Example 1</li> <li>• Graphing &gt; Equation of a Straight Line &gt; Exercise - Slope, Y-Intercept &gt; Example 2</li> <li>• Graphing &gt; Equation of a Straight Line &gt; Exercise - Slope, Y-Intercept &gt; Example 3</li> <li>• Graphing &gt; Equation of a Straight Line &gt; Exercise - Slope, Y-Intercept &gt; Example 4</li> <li>• Graphing &gt; Linear Relations &gt; The Taxi Example &gt; Setup Equations</li> <li>• Graphing &gt; Linear Relations &gt; The Taxi Example &gt; Graph Equations</li> <li>• Graphing &gt; Linear Relations &gt; The Elastic Example &gt; Setup Equations</li> <li>• Graphing &gt; Linear Relations &gt; The Elastic Example &gt; Graph</li> <li>• Graphing &gt; Linear Relations &gt; Lightning Example &gt; Setup Equation</li> <li>• Graphing &gt; Linear Relations &gt; Lightning Example &gt; Graph</li> <li>• Graphing &gt; Linear Relations &gt; Basketball Example &gt; Setup Equations</li> <li>• Graphing &gt; Linear Relations &gt; Basketball Example &gt; Graph</li> <li>• Graphing &gt; Slope of a Line &gt; Positive and Negative Slope &gt; Example 1</li> <li>• Graphing &gt; Slope of a Line &gt; Positive and Negative Slope &gt; Example 2</li> <li>• Graphing &gt; Slope of a Line &gt; Positive and Negative Slope &gt; Example 3</li> <li>• Graphing &gt; Slope of a Line &gt; Positive and Negative Slope &gt; Example 4</li> <li>• Graphing &gt; Slope of a Line &gt; Positive and Negative Slope &gt; Pattern</li> <li>• Graphing &gt; Slope of a Line &gt; Special Slopes &gt; Example 1</li> <li>• Graphing &gt; Slope of a Line &gt; Special Slopes &gt; Example 2</li> <li>• Graphing &gt; Slope of a Line &gt; Special Slopes &gt; Example 3</li> <li>• Graphing &gt; Slope of a Line &gt; Special Slopes &gt; Example 4</li> <li>• Graphing &gt; Slope of a Line &gt; Special Slopes &gt; Pattern</li> <li>• Algebra &gt; Algebraic Thinking &gt; Function Machine &gt; Function Machine 1 &gt; Find the Rule &gt; Rule 1</li> <li>• Algebra &gt; Algebraic Thinking &gt; Function Machine &gt; Function Machine 1 &gt; Find the Rule &gt; Rule 2</li> <li>• Algebra &gt; Algebraic Thinking &gt; Function Machine &gt; Function Machine 1 &gt; Find the Rule &gt; Rule 3</li> <li>• Algebra &gt; Algebraic Thinking &gt; Function Machine &gt; Function Machine 1 &gt; Find the Rule &gt; Rule 4</li> <li>• Algebra &gt; Algebraic Thinking &gt; Function Machine &gt; Function Machine 2 &gt; Find the Rule &gt; Rule 1</li> <li>• Algebra &gt; Algebraic Thinking &gt; Function Machine &gt; Function Machine 2 &gt; Find the Rule &gt; Rule 2</li> <li>• Algebra &gt; Algebraic Thinking &gt; Function Machine &gt; Function Machine 2 &gt; Find the Rule &gt; Rule 2</li> </ul>



						<ul style="list-style-type: none"> <li>Rule 3</li> <li>Algebra &gt; Algebraic Thinking &gt; Function Machine &gt; Function Machine 2 &gt; Find the Rule &gt; Rule 4</li> <li></li> </ul>
147.)	Grade 8	Functions	Use functions to model relationships between quantities.	Describe qualitatively the functional relationship between two quantities by analyzing a graph (e.g., where the function is increasing or decreasing, linear or nonlinear). Sketch a graph that exhibits the qualitative features of a function that has been described verbally.	8.F.05	<ul style="list-style-type: none"> <li>Graphing &gt; Reading &amp; Sketching Graphs &gt; Graphs Without a Scale &gt; Concept... Age and Weight</li> <li>Graphing &gt; Reading &amp; Sketching Graphs &gt; Graphs Without a Scale &gt; Example 1... Height and Weight</li> <li>Graphing &gt; Reading &amp; Sketching Graphs &gt; Graphs Without a Scale &gt; Example 2... Errors and Years</li> <li>Graphing &gt; Reading &amp; Sketching Graphs &gt; Graphs Without a Scale &gt; Example 3... Pushups and Situps</li> <li>Graphing &gt; Reading &amp; Sketching Graphs &gt; Graphs Without a Scale &gt; Example 4... Nelias Bike Ride</li> <li>Graphing &gt; Reading &amp; Sketching Graphs &gt; Graphs Without a Scale &gt; Example 5... Temperature and Time</li> <li>Graphing &gt; Reading &amp; Sketching Graphs &gt; Graphs Without a Scale &gt; Example 6... Melissa Eating Popcorn</li> <li>Graphing &gt; Reading &amp; Sketching Graphs &gt; Graphs Without a Scale &gt; Example 7... Glasses of Water</li> <li>Graphing &gt; Reading &amp; Sketching Graphs &gt; Graphs Without a Scale &gt; Example 8... Bottles of Water</li> <li>Graphing &gt; Reading &amp; Sketching Graphs &gt; Graphs Without a Scale &gt; Example 9... Bottles of Water... Matching</li> <li>Graphing &gt; Reading &amp; Sketching Graphs &gt; Graphs Without a Scale &gt; Example 11... The Bathtub 1</li> <li>Graphing &gt; Reading &amp; Sketching Graphs &gt; Graphs Without a Scale &gt; Example 12... The Bathtub 2</li> <li>Graphing &gt; Reading &amp; Sketching Graphs &gt; Graphs Without a Scale &gt; Example 13... The Hot Tub</li> </ul>
						<ul style="list-style-type: none"> <li>a.)</li> <li>Graphing &gt; Transformations &gt; Rotations &gt; Object to Image</li> <li>Graphing &gt; Transformations &gt; Rotations &gt; We Say, We Write</li> <li>Graphing &gt; Transformations &gt; Rotations &gt; Rotation Mapping Rule</li> <li>Graphing &gt; Transformations &gt; Rotations &gt; Examples &gt; Example 1</li> <li>Graphing &gt; Transformations &gt; Rotations &gt; Examples &gt; Example 2</li> <li>Graphing &gt; Transformations &gt; Reflections &gt; Object to Image</li> <li>Graphing &gt; Transformations &gt; Reflections &gt; We Say, We Write</li> <li>Graphing &gt; Transformations &gt; Reflections &gt; Reflection Mapping Rule</li> <li>Graphing &gt; Transformations &gt; Reflections &gt; Examples &gt; Example 1</li> <li>Graphing &gt; Transformations &gt; Reflections &gt; Examples &gt; Example 2</li> <li>Graphing &gt; Transformations &gt; Translations &gt; Object to Image</li> <li>Graphing &gt; Transformations &gt; Translations &gt; We Say, We Write</li> <li>Graphing &gt; Transformations &gt; Translations &gt; Translation Mapping Rule</li> <li>Graphing &gt; Transformations &gt; Translations &gt; Examples &gt; Example 1</li> <li>Graphing &gt; Transformations &gt; Translations &gt; Examples &gt; Example 2</li> <li>Graphing &gt; Transformations &gt; Translations &gt; Examples &gt; Example 3</li> <li>Graphing &gt; Transformations &gt; Translations An Introduction &gt; Slide 1</li> <li>Graphing &gt; Transformations &gt; Translations An Introduction &gt; Slide 2</li> <li>Graphing &gt; Transformations &gt; Translations An Introduction &gt; Slide 3</li> <li>Graphing &gt; Transformations &gt; Translations An Introduction &gt; Slide 4</li> <li>Graphing &gt; Transformations &gt; Reflections An</li> </ul>

148.)	Grade 8	Geometry	<p>Understand congruence and similarity using physical models, transparencies, or geometry software.</p>	<p>Verify experimentally the properties of rotations, reflections, and translations:</p> <p>a.) Lines are taken to lines, and line segments to line segments of the same length.</p> <p>b.) Angles are taken to angles of the same measure.</p> <p>c.) Parallel lines are taken to parallel lines.</p>	8.G.01	<ul style="list-style-type: none"> <li>Introduction &gt; Flip 1</li> <li>• Graphing &gt; Transformations &gt; Reflections An Introduction &gt; Flip 2</li> <li>• Graphing &gt; Transformations &gt; Reflections An Introduction &gt; Flip 3</li> <li>• Graphing &gt; Transformations &gt; Rotations An Introduction &gt; Turn 1</li> <li>• Graphing &gt; Transformations &gt; Rotations An Introduction &gt; Turn 2</li> <li>• Graphing &gt; Transformations &gt; Rotations An Introduction &gt; Turn 3</li> <li>• Graphing &gt; Transformations &gt; Rotations An Introduction &gt; Turn 4</li> <li>• Graphing &gt; Transformations &gt; Rotations An Introduction &gt; Turn 5</li>   <li>b.)</li> <li>• Graphing &gt; Transformations &gt; Rotations &gt; Object to Image</li> <li>• Graphing &gt; Transformations &gt; Rotations &gt; We Say, We Write</li> <li>• Graphing &gt; Transformations &gt; Rotations &gt; Rotation Mapping Rule</li> <li>• Graphing &gt; Transformations &gt; Rotations &gt; Examples &gt; Example 1</li> <li>• Graphing &gt; Transformations &gt; Rotations &gt; Examples &gt; Example 2</li> <li>• Graphing &gt; Transformations &gt; Reflections &gt; Object to Image</li> <li>• Graphing &gt; Transformations &gt; Reflections &gt; We Say, We Write</li> <li>• Graphing &gt; Transformations &gt; Reflections &gt; Reflection Mapping Rule</li> <li>• Graphing &gt; Transformations &gt; Reflections &gt; Examples &gt; Example 1</li> <li>• Graphing &gt; Transformations &gt; Reflections &gt; Examples &gt; Example 2</li> <li>• Graphing &gt; Transformations &gt; Translations &gt; Object to Image</li> <li>• Graphing &gt; Transformations &gt; Translations &gt; We Say, We Write</li> <li>• Graphing &gt; Transformations &gt; Translations &gt; Translation Mapping Rule</li> <li>• Graphing &gt; Transformations &gt; Translations &gt; Examples &gt; Example 1</li> <li>• Graphing &gt; Transformations &gt; Translations &gt; Examples &gt; Example 2</li> <li>• Graphing &gt; Transformations &gt; Translations &gt; Examples &gt; Example 3</li> <li>• Graphing &gt; Transformations &gt; Translations An Introduction &gt; Slide 1</li> <li>• Graphing &gt; Transformations &gt; Translations An Introduction &gt; Slide 2</li> <li>• Graphing &gt; Transformations &gt; Translations An Introduction &gt; Slide 3</li> <li>• Graphing &gt; Transformations &gt; Translations An Introduction &gt; Slide 4</li> <li>• Graphing &gt; Transformations &gt; Reflections An Introduction &gt; Flip 1</li> <li>• Graphing &gt; Transformations &gt; Reflections An Introduction &gt; Flip 2</li> <li>• Graphing &gt; Transformations &gt; Reflections An Introduction &gt; Flip 3</li> <li>• Graphing &gt; Transformations &gt; Rotations An Introduction &gt; Turn 1</li> <li>• Graphing &gt; Transformations &gt; Rotations An Introduction &gt; Turn 2</li> <li>• Graphing &gt; Transformations &gt; Rotations An Introduction &gt; Turn 3</li> <li>• Graphing &gt; Transformations &gt; Rotations An Introduction &gt; Turn 4</li> <li>• Graphing &gt; Transformations &gt; Rotations An Introduction &gt; Turn 5</li>   <li>c.)</li> <li>• Graphing &gt; Transformations &gt; Rotations &gt; Object to Image</li> <li>• Graphing &gt; Transformations &gt; Rotations &gt; We Say, We Write</li> <li>• Graphing &gt; Transformations &gt; Rotations &gt; Rotation Mapping Rule</li> <li>• Graphing &gt; Transformations &gt; Rotations &gt; Examples &gt; Example 1</li> <li>• Graphing &gt; Transformations &gt; Rotations &gt; Examples &gt; Example 2</li> <li>• Graphing &gt; Transformations &gt; Reflections &gt; Object to Image</li> <li>• Graphing &gt; Transformations &gt; Reflections &gt; We Say, We Write</li> </ul>
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						<ul style="list-style-type: none"> <li>Say, We Write</li> <li>• Graphing &gt; Transformations &gt; Reflections &gt; Reflection Mapping Rule</li> <li>• Graphing &gt; Transformations &gt; Reflections &gt; Examples &gt; Example 1</li> <li>• Graphing &gt; Transformations &gt; Reflections &gt; Examples &gt; Example 2</li> <li>• Graphing &gt; Transformations &gt; Translations &gt; Object to Image</li> <li>• Graphing &gt; Transformations &gt; Translations &gt; We Say, We Write</li> <li>• Graphing &gt; Transformations &gt; Translations &gt; Translation Mapping Rule</li> <li>• Graphing &gt; Transformations &gt; Translations &gt; Examples &gt; Example 1</li> <li>• Graphing &gt; Transformations &gt; Translations &gt; Examples &gt; Example 2</li> <li>• Graphing &gt; Transformations &gt; Translations &gt; Examples &gt; Example 3</li> <li>• Graphing &gt; Transformations &gt; Translations An Introduction &gt; Slide 1</li> <li>• Graphing &gt; Transformations &gt; Translations An Introduction &gt; Slide 2</li> <li>• Graphing &gt; Transformations &gt; Translations An Introduction &gt; Slide 3</li> <li>• Graphing &gt; Transformations &gt; Translations An Introduction &gt; Slide 4</li> <li>• Graphing &gt; Transformations &gt; Reflections An Introduction &gt; Flip 1</li> <li>• Graphing &gt; Transformations &gt; Reflections An Introduction &gt; Flip 2</li> <li>• Graphing &gt; Transformations &gt; Reflections An Introduction &gt; Flip 3</li> <li>• Graphing &gt; Transformations &gt; Rotations An Introduction &gt; Turn 1</li> <li>• Graphing &gt; Transformations &gt; Rotations An Introduction &gt; Turn 2</li> <li>• Graphing &gt; Transformations &gt; Rotations An Introduction &gt; Turn 3</li> <li>• Graphing &gt; Transformations &gt; Rotations An Introduction &gt; Turn 4</li> <li>• Graphing &gt; Transformations &gt; Rotations An Introduction &gt; Turn 5</li> </ul>
149.)	Grade 8	Geometry	Understand congruence and similarity using physical models, transparencies, or geometry software.	Understand that a two-dimensional figure is congruent to another if the second can be obtained from the first by a sequence of rotations, reflections, and translations; given two congruent figures, describe a sequence that exhibits the congruence between them.	8.G.02	<ul style="list-style-type: none"> <li>• Graphing &gt; Transformations &gt; The Transformation Machine &gt; Example 1</li> <li>• Graphing &gt; Transformations &gt; The Transformation Machine &gt; Example 2</li> <li>• Graphing &gt; Transformations &gt; The Transformation Machine &gt; Example 3</li> <li>• Graphing &gt; Transformations &gt; The Transformation Machine &gt; Example 4</li> <li>• Graphing &gt; Transformations &gt; The Transformation Machine &gt; Example 5</li> <li>• Graphing &gt; Transformations &gt; Tessellations &gt; Examples &gt; Example 1</li> <li>• Graphing &gt; Transformations &gt; Tessellations &gt; Examples &gt; Example 2</li> <li>• Graphing &gt; Transformations &gt; Tessellations &gt; Examples &gt; Example 3</li> <li>• Graphing &gt; Transformations &gt; Tessellations &gt; Examples &gt; Example 4</li> <li>• Graphing &gt; Transformations &gt; Tessellations &gt; Examples &gt; Example 5</li> </ul>
						<ul style="list-style-type: none"> <li>• Graphing &gt; Transformations &gt; Dilations &gt; Object to Image</li> <li>• Graphing &gt; Transformations &gt; Dilations &gt; We Say, We Write</li> <li>• Graphing &gt; Transformations &gt; Dilations &gt; Dilation Mapping Rule</li> <li>• Graphing &gt; Transformations &gt; Dilations &gt; Examples &gt; Example 1</li> <li>• Graphing &gt; Transformations &gt; Dilations &gt; Examples &gt; Example 2</li> <li>• Graphing &gt; Transformations &gt; Rotations &gt; Object to Image</li> <li>• Graphing &gt; Transformations &gt; Rotations &gt; We Say, We Write</li> <li>• Graphing &gt; Transformations &gt; Rotations &gt; Rotation Mapping Rule</li> <li>• Graphing &gt; Transformations &gt; Rotations &gt; Examples &gt; Example 1</li> <li>• Graphing &gt; Transformations &gt; Rotations &gt; Examples &gt; Example 2</li> <li>• Graphing &gt; Transformations &gt; Reflections &gt; Object to Image</li> <li>• Graphing &gt; Transformations &gt; Reflections &gt; We Say, We Write</li> </ul>

150.)	Grade 8	Geometry	Understand congruence and similarity using physical models, transparencies, or geometry software.	Describe the effect of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates.	8.G.03	<p>Say, We Write</p> <ul style="list-style-type: none"> <li>Graphing &gt; Transformations &gt; Reflections &gt; Reflection Mapping Rule</li> <li>Graphing &gt; Transformations &gt; Reflections &gt; Examples &gt; Example 1</li> <li>Graphing &gt; Transformations &gt; Reflections &gt; Examples &gt; Example 2</li> <li>Graphing &gt; Transformations &gt; Translations &gt; Object to Image</li> <li>Graphing &gt; Transformations &gt; Translations &gt; We Say, We Write</li> <li>Graphing &gt; Transformations &gt; Translations &gt; Translation Mapping Rule</li> <li>Graphing &gt; Transformations &gt; Translations &gt; Examples &gt; Example 1</li> <li>Graphing &gt; Transformations &gt; Translations &gt; Examples &gt; Example 2</li> <li>Graphing &gt; Transformations &gt; Translations &gt; Examples &gt; Example 3</li> <li>Graphing &gt; Transformations &gt; Similar Figures &gt; Congruent v Similar &gt; Definitions &gt; Congruent</li> <li>Graphing &gt; Transformations &gt; Similar Figures &gt; Congruent v Similar &gt; Definitions &gt; Similar</li> <li>Graphing &gt; Transformations &gt; Similar Figures &gt; Congruent v Similar &gt; Classification Activity</li> <li>Graphing &gt; Transformations &gt; Translations An Introduction &gt; Slide 1</li> <li>Graphing &gt; Transformations &gt; Translations An Introduction &gt; Slide 2</li> <li>Graphing &gt; Transformations &gt; Translations An Introduction &gt; Slide 3</li> <li>Graphing &gt; Transformations &gt; Translations An Introduction &gt; Slide 4</li> <li>Graphing &gt; Transformations &gt; Reflections An Introduction &gt; Flip 1</li> <li>Graphing &gt; Transformations &gt; Reflections An Introduction &gt; Flip 2</li> <li>Graphing &gt; Transformations &gt; Reflections An Introduction &gt; Flip 3</li> <li>Graphing &gt; Transformations &gt; Rotations An Introduction &gt; Turn 1</li> <li>Graphing &gt; Transformations &gt; Rotations An Introduction &gt; Turn 2</li> <li>Graphing &gt; Transformations &gt; Rotations An Introduction &gt; Turn 3</li> <li>Graphing &gt; Transformations &gt; Rotations An Introduction &gt; Turn 4</li> <li>Graphing &gt; Transformations &gt; Rotations An Introduction &gt; Turn 5</li> </ul>
151.)	Grade 8	Geometry	Understand congruence and similarity using physical models, transparencies, or geometry software.	Understand that a two-dimensional figure is similar to another if the second can be obtained from the first by a sequence of rotations, reflections, translations, and dilations; given two similar two-dimensional figures, describe a sequence that exhibits the similarity between them.	8.G.04	<ul style="list-style-type: none"> <li>Graphing &gt; Transformations &gt; Similar Figures &gt; Congruent v Similar &gt; Definitions &gt; Congruent</li> <li>Graphing &gt; Transformations &gt; Similar Figures &gt; Congruent v Similar &gt; Definitions &gt; Similar</li> <li>Graphing &gt; Transformations &gt; Similar Figures &gt; Congruent v Similar &gt; Classification Activity</li> <li>Graphing &gt; Transformations &gt; Similar Figures &gt; Solving for Unknown &gt; Ex 1 - Rectangle</li> <li>Graphing &gt; Transformations &gt; Similar Figures &gt; Solving for Unknown &gt; Ex 2 - Trapezoid</li> <li>Graphing &gt; Transformations &gt; Similar Figures &gt; Solving for Unknown &gt; Ex 3 - Envelopes</li> </ul>
152.)	Grade 8	Geometry	Understand congruence and similarity using physical models, transparencies, or geometry software.	Use informal arguments to establish facts about the angle sum and exterior angle of triangles, about the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles. For example, arrange three copies of the same triangle so that the sum of the three angles appears to form a line, and give an argument in terms of transversals why this is so.	8.G.05	<ul style="list-style-type: none"> <li>Measurement &amp; Geometry &gt; Angles and Polygons &gt; Angles in Triangles &gt; Exploration</li> <li>Measurement &amp; Geometry &gt; Angles and Polygons &gt; Angles in Triangles &gt; An Explanation</li> <li>Measurement &amp; Geometry &gt; Angles and Polygons &gt; Angles in Triangles &gt; Exterior Angles</li> <li>Measurement &amp; Geometry &gt; Angles and Polygons &gt; Angles in Triangles &gt; Example</li> <li>Measurement &amp; Geometry &gt; Angles and Polygons &gt; Parallel Lines</li> <li>Measurement &amp; Geometry &gt; Angles and Polygons &gt; Examples with Parallel Lines &gt; Example 1</li> <li>Measurement &amp; Geometry &gt; Angles and Polygons &gt; Examples with Parallel Lines &gt; Example 2</li> </ul> <p>Exponents &gt; Pythagorean Theorem &gt; Squares on the Sides of a Right Triangle &gt; Triangle 1</p>

153.)	Grade 8	Geometry	Understand and apply the Pythagorean Theorem.	Explain a proof of the Pythagorean Theorem and its converse.	8.G.06	<ul style="list-style-type: none"> <li>Exponents &gt; Pythagorean Theorem &gt; Squares on the Sides of a Right Triangle &gt; Triangle 2</li> <li>Exponents &gt; Pythagorean Theorem &gt; Squares on the Sides of a Right Triangle &gt; Triangle 3</li> <li>Exponents &gt; Pythagorean Theorem &gt; The Pythagorean Theorem &gt; The Pattern</li> <li>Exponents &gt; Pythagorean Theorem &gt; The Pythagorean Theorem &gt; In General</li> <li>Exponents &gt; Pythagorean Theorem &gt; The Pythagorean Theorem &gt; Theorem</li> </ul>
154.)	Grade 8	Geometry	Understand and apply the Pythagorean Theorem.	Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two and three dimensions.	8.G.07	<ul style="list-style-type: none"> <li>Exponents &gt; Pythagorean Theorem &gt; Example Questions &gt; Example 1... Pole Example</li> <li>Exponents &gt; Pythagorean Theorem &gt; Example Questions &gt; Example 2... Tower Example</li> <li>Exponents &gt; Pythagorean Theorem &gt; Example Questions &gt; Example 3... Walking Example</li> <li>Exponents &gt; Pythagorean Theorem &gt; Example Questions &gt; Example 4... Lake Example</li> <li>Exponents &gt; Pythagorean Theorem &gt; Example Questions &gt; Example 5... Geometric Example</li> <li>Exponents &gt; Pythagorean Theorem &gt; Example Questions &gt; Example 6... Skateboard Ramp</li> </ul>
155.)	Grade 8	Geometry	Understand and apply the Pythagorean Theorem.	Apply the Pythagorean Theorem to find the distance between two points in a coordinate system.	8.G.08	<ul style="list-style-type: none"> <li>Exponents &gt; Pythagorean Theorem &gt; Distance on the Coordinate Plane &gt; Thames River Trail</li> </ul>
156.)	Grade 8	Geometry	Solve real-world and mathematical problems involving volume of cylinders, cones and spheres.	Know the formulas for the volumes of cones, cylinders, and spheres and use them to solve real-world and mathematical problems.	8.G.09	<ul style="list-style-type: none"> <li>Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Volume of a Solid &gt; Displacement Method</li> <li>Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Volume of a Solid &gt; Volume of a Cylinder</li> <li>Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Volume of a Solid &gt; Volume of a Cone</li> <li>Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Volume of a Solid &gt; Volume of a Sphere</li> <li>Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Real World Problems &gt; Cylinders &gt; Paint Roller</li> <li>Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Real World Problems &gt; Cylinders &gt; Push Mower</li> <li>Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Real World Problems &gt; Cylinders &gt; Pool Liner</li> <li>Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Real World Problems &gt; Cylinders &gt; Recycling</li> <li>Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Real World Problems &gt; Cylinders &gt; Volume of Gas</li> <li>Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Real World Problems &gt; Cylinders &gt; Wedge of Cheese</li> <li>Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Real World Problems &gt; Spheres &gt; Marble</li> <li>Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Real World Problems &gt; Spheres &gt; Lampshade</li> <li>Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Real World Problems &gt; Spheres &gt; Bowl</li> <li>Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Real World Problems &gt; Spheres &gt; Soccer Ball</li> <li>Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Real World Problems &gt; Spheres &gt; Pendant Lamp</li> <li>Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Real World Problems &gt; Cones &gt; Castle Tower</li> <li>Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Real World Problems &gt; Cones &gt; Ice Cream Cone</li> <li>Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Real World Problems &gt; Cones &gt; Gazebo</li> <li>Measurement &amp; Geometry &gt; Solids... Volumes and Surface Area &gt; Real World Problems &gt; Cones &gt; Sundae Cone</li> <li>Measurement &amp; Geometry &gt; Solids... Volumes</li> </ul>

						<ul style="list-style-type: none"> <li>and Surface Area &gt; Real World Problems &gt; Cones &gt; Party Hats</li> <li>Algebra &gt; Patterns, Formulas, Substitution &gt; Substitution Examples &gt; Example 3: Volume Formulas</li> <li>Exponents &gt; Exponents in Formulas &gt; Examples with Volume Formulas &gt; Example 1</li> <li>Exponents &gt; Exponents in Formulas &gt; Examples with Volume Formulas &gt; Example 2</li> <li>Exponents &gt; Exponents in Formulas &gt; Examples with Volume Formulas &gt; Example 3</li> </ul>
157.)	Grade 8	Statistics and Probability	Investigate patterns of association in bivariate data.	Construct and interpret scatter plots for bivariate measurement data to investigate patterns of association between two quantities. Describe patterns such as clustering, outliers, positive or negative association, linear association, and nonlinear association.	8.SP.01	<ul style="list-style-type: none"> <li>Graphing &gt; Statistics &gt; Presenting Data &gt; Scatter Plot &gt; Example 1... The T-Shirt Tailor</li> <li>Graphing &gt; Statistics &gt; Presenting Data &gt; Scatter Plot &gt; Example 2... Matching</li> </ul>
158.)	Grade 8	Statistics and Probability	Investigate patterns of association in bivariate data.	Know that straight lines are widely used to model relationships between two quantitative variables. For scatter plots that suggest a linear association, informally fit a straight line, and informally assess the model fit by judging the closeness of the data points to the line.	8.SP.02	<ul style="list-style-type: none"> <li>Graphing &gt; Linear Relations &gt; Lines of Best Fit &gt; Example 1</li> <li>Graphing &gt; Linear Relations &gt; Lines of Best Fit &gt; Example 2</li> </ul>
159.)	Grade 8	Statistics and Probability	Investigate patterns of association in bivariate data.	Use the equation of a linear model to solve problems in the context of bivariate measurement data, interpreting the slope and intercept. For example, in a linear model for a biology experiment, interpret a slope of 1.5 cm/hr as meaning that an additional hour of sunlight each day is associated with an additional 1.5 cm in mature plant height.	8.SP.03	<ul style="list-style-type: none"> <li>Graphing &gt; Equation of a Straight Line &gt; Find Slope and Y-Intercept Given Data &gt; Table Example &gt; Slope</li> <li>Graphing &gt; Equation of a Straight Line &gt; Find Slope and Y-Intercept Given Data &gt; Table Example &gt; Y-Intercept</li> <li>Graphing &gt; Equation of a Straight Line &gt; Find Slope and Y-Intercept Given Data &gt; Table Example &gt; Linear Equation</li> <li>Graphing &gt; Equation of a Straight Line &gt; Find Slope and Y-Intercept Given Data &gt; Scatter Plot Example &gt; Line of Best Fit</li> <li>Graphing &gt; Equation of a Straight Line &gt; Find Slope and Y-Intercept Given Data &gt; Scatter Plot Example &gt; Ex 1: Height vs Arm-Span</li> <li>Graphing &gt; Equation of a Straight Line &gt; Find Slope and Y-Intercept Given Data &gt; Scatter Plot Example &gt; Ex 2: Running a Mile</li> </ul>
160.)	Grade 8	Statistics and Probability	Investigate patterns of association in bivariate data.	Understand that patterns of association can also be seen in bivariate categorical data by displaying frequencies and relative frequencies in a two-way table. Construct and interpret a two-way table summarizing data on two categorical variables collected from the same subjects. Use relative frequencies calculated for rows or columns to describe possible association between the two variables. For example, collect data from students in your class on whether or not they have a curfew on school nights and whether or not they have assigned chores at home. Is there evidence that	8.SP.04	<ul style="list-style-type: none"> <li>Graphing &gt; Statistics &gt; Presenting Data &gt; Two-Way Table &gt; Introduction</li> <li>Graphing &gt; Statistics &gt; Presenting Data &gt; Two-Way Table &gt; Relative Frequencies &gt; Calculate</li> <li>Graphing &gt; Statistics &gt; Presenting Data &gt; Two-Way Table &gt; Relative Frequencies &gt; Example</li> <li>Graphing &gt; Statistics &gt; Presenting Data &gt; Two-Way Table &gt; Relative Frequencies &gt; Interpret</li> <li>Graphing &gt; Statistics &gt; Presenting Data &gt; Two-Way Table &gt; Ex. 1 - Word Problem</li> <li>Graphing &gt; Statistics &gt; Presenting Data &gt; Two-Way Table &gt; Ex. 2 - Venn Diagram</li> </ul>

			those who have a curfew also tend to have chores?		
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