

**Fractions, Unit 6**  
**4.NF.B.3**  
**Fourth Grade**

**Proficiency Scale Descriptors**

**Evidence of Meeting the Standard (Examples)**

<b>4-Exceeds Standard</b>	<p>Student will construct and solve real world problems by adding and subtracting mixed numbers with like denominators.</p> <p><i>(Table 1 in the Iowa Core lists various problem types for students to use.)</i></p>	<p>Students create and solve addition and subtraction story problems using mixed numbers with like denominators.</p>
	<p>3.5    Meets Level 3 and shows some evidence of Level 4</p>	
<p><b>3-Meets Standard</b></p> <p><i>(Consistent Evidence, Independent)</i></p>	<p><b>Understand a fraction <math>a/b</math> with <math>a &gt; 1</math> as a sum of fractions <math>1/b</math>.</b></p> <p>A. <i>Understand addition and subtraction of fractions as joining and separating parts referring to the same whole.</i></p> <p>B. <i>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 \frac{1}{8} = 1 + 1 + 1/8 = 8/8 + 8/8 + 1/8</math>.</i></p> <p>C. <b>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.</b></p> <p>D. <b>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 equations to represent the problem. (4.NF.B.3.) (DOK 1,2,3)</b></p>	<p>Students will be able to do all of the following independently:</p> <ul style="list-style-type: none"> <li>● Add/subtract mixed numbers</li> <li>● Show equivalent fractions</li> <li>● Solve word problems involving fractions with the same denominators</li> <li>● Create visual models and equations to represent a story problem</li> </ul> <p><math>6 \frac{3}{8} + 3 \frac{3}{8} = n</math>    Solve for n.</p> <p>Decompose <math>5/6</math> three different ways</p> <p>Finn got two new games for his birthday. He spent <math>3/12</math> of an hour playing Minecraft and <math>7/12</math> of an hour playing Pokemon. Draw a visual model to show how much longer he played Pokemon.</p>
	<p>2.5    Meets Level 2 and shows some evidence of Level 3</p>	
<p><b>2-Approaching Standard</b></p> <p><i>(Independent)</i></p>	<p><b>Students recognize or recall specific vocabulary such as:</b></p> <ul style="list-style-type: none"> <li>● Numerator/Denominator      Mixed Number</li> <li>● Unit Fraction                      Equivalent</li> </ul> <p><b>Students demonstrate they have the ability to:</b></p> <ul style="list-style-type: none"> <li>● Add/Subtract fractions with like denominators</li> </ul>	<p>Students will be able to do the following:</p> <ul style="list-style-type: none"> <li>● Add/subtract fractions with like denominators using hands on strategies.</li> </ul> <p>Subtract <math>8/10 - 4/10</math> using a number line.  Add <math>3/4 + 3/4</math> using fraction tiles.</p>
<p><b>1-Not at Standard</b></p>	<p>With help, partial success at score 2.0 content and score 3.0 content</p>	
<p><b>0-No Evidence</b></p>	<p>With help, no success and/or no evidence of success.</p>	

