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| **How many servings? – 6.NS.1** |
| **Domain** | **The Number System** |
| **Cluster** | **Apply and extend previous understandings of multiplication and division to divided fractions by fractions.** |
| **Standard(s)** | **6.NS.1** 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 story context for (2/3) ÷ (3/4) and use a visual fraction model to show the quotient; use the relationship between multiplication and division to explain that (2/3) ÷ (3/4) = 8/9 because 3/4 of 8/9 is 2/3. (In general, (a/b) ÷ (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?. |
| **Materials** | Activity sheet |
| **Task** | **How many servings?**Jonas usually eats servings of yogurt that are 1 and 1/4 cups. The following yogurt flavors are in his refrigerator with the following amounts:Blueberry: 3/4 of a cupStrawberry: 1 and 1/8 cupsPeach: 2/3 of a cupVanilla: 2 and 1/3 cupsPart 1: For each yogurt flavor determine how many servings there are. Show a visual fraction model and an equation for each flavor.Part 2:Write an explanation how you found the answer for one of the flavors.   |

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| **Rubric** |
| **Level I** | 1. **Level II**
 | **Level III** |
| * Student uses inappropriate solution strategy and does not get the correct answer.
 | 1. Not Yet Proficient
* There are one or two errors.
 | Proficient in Performance * Accurately solves problem
* Part 1: Blueberry: 3/5 of a serving; Strawberry: 9/10 of a serving; Peach: 8/15 of a serving; Vanilla: 1 and 13/15 servings.
* Part 2: The explanation is clear and accurate.
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| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| 3. Constructs viable arguments and critiques the reasoning of others. |
| **4. Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| 6. Attends to precision. |
| 7. Looks for and makes use of structure. |
| **8. Looks for and expresses regularity in repeated reasoning.** |

**How many servings?**

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The following yogurt flavors are in his refrigerator with the following amounts:

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Peach: 2/3 of a cup

Vanilla: 2 and 1/3 cups

Part 1:

For each yogurt flavor determine how many servings there are. Show a visual fraction model and an equation for each flavor.

Part 2:

Write an explanation how you found the answer for one of the flavors.