Unit 3, Lesson 7

Fractions as Sums

Let's write fractions as sums.

Activity 1

Barley Soup

Lin is learning to make barley soup, using a family recipe. Here are some ingredients in the recipe:



- $\frac{3}{4}$ cup barley
- $\frac{5}{4}$ cups chopped celery
- $\frac{6}{4}$ cups chopped carrots
- 1 cup chopped onions
- $2\frac{1}{4}$ cups vegetable broth

1. Lin only has one measuring cup that measures $\frac{1}{4}$ cup. Show how Lin could use the cup to measure the ingredients in the recipe.
    - Barley:
    - Celery:
    - Carrots:
    - Onions:
    - Vegetable broth:

2. Lin finds a $\frac{3}{4}$-cup. She can now measure the ingredients, using both a $\frac{3}{4}$-cup and a $\frac{1}{4}$-cup. Show how she could use the cups to measure the ingredients in the recipe.

   - Barley:
   - Celery:
   - Carrots:
   - Onions:
   - Vegetable broth:

Activity 2

Sums in Fifths and Thirds

1. Use different combinations of fifths to make a sum of $\frac{9}{5}$.

   a. $\frac{9}{5} =$ _____ + _____ + _____ + _____ + _____

   b. $\frac{9}{5} =$ _____ + _____ + _____ + _____

   c. $\frac{9}{5} =$ _____ + _____ + _____

   d. $\frac{9}{5} =$ _____ + _____

2. Write different ways to use thirds to make a sum of $\frac{4}{3}$. How many can you find? Write an equation for each combination.

3. Is it possible to write any fraction with a denominator of 5 as a sum of other fifths? Explain or show your reasoning.