



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:

◦ Onions:

◦ Celery:

◦ Vegetable broth:

◦ Carrots:



Activity 2

Sums in Fifths and Thirds

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

a. $\frac{9}{5} = \underline{\hspace{1cm}} + \underline{\hspace{1cm}} + \underline{\hspace{1cm}} + \underline{\hspace{1cm}} + \underline{\hspace{1cm}}$

b. $\frac{9}{5} = \underline{\hspace{1cm}} + \underline{\hspace{1cm}} + \underline{\hspace{1cm}} + \underline{\hspace{1cm}}$

c. $\frac{9}{5} = \underline{\hspace{1cm}} + \underline{\hspace{1cm}} + \underline{\hspace{1cm}}$

d. $\frac{9}{5} = \underline{\hspace{1cm}} + \underline{\hspace{1cm}}$

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.