![Illustrative Mathematics logo]

Grade 4 Unit 3
Lesson 7
CC BY 2021 Illustrative Mathematics®

Unit 3 Lesson 7: Fractions as Sums

WU Choral Count: Three-fourths at a Time (Warm up)

Student Task Statement

1 Barley Soup

Student Task Statement

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

- $\frac{3}{4}$ cup of barley

- $\frac{5}{4}$ cups of chopped celery

- $\frac{6}{4}$ cups of chopped carrots

- 1 cup of chopped onions

- $2\frac{1}{4}$ cups of vegetable broth

1. Lin has only one measuring cup that measures $\frac{1}{4}$ cup. Show how Lin could use the cup to measure the right amount of each ingredient.

   - Barley:
   - Celery:
   - Carrots:

   - Onions:
   - Vegetable broth:

2. Lin later found a $\frac{3}{4}$-cup measuring cup. Show how she could use the cups to measure the right amount of each ingredient.

   - Barley:
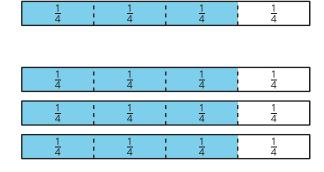   - Celery:
   - Carrots:

   - Onions:
   - Vegetable broth:

Activity Synthesis

| $\frac{1}{4}$ | $\frac{1}{4}$ | $\frac{1}{4}$ | $\frac{1}{4}$ |

| $\frac{1}{4}$ | $\frac{1}{4}$ | $\frac{1}{4}$ | $\frac{1}{4}$ |

| $\frac{1}{4}$ | $\frac{1}{4}$ | $\frac{1}{4}$ | $\frac{1}{4}$ |

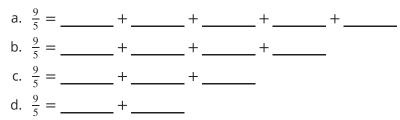| $\frac{1}{4}$ | $\frac{1}{4}$ | $\frac{1}{4}$ | $\frac{1}{4}$ |

2 Sums in Fifths and Thirds

Student Task Statement

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 think of? 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.