

Lesson 17: Fraction Multiplication and Division Situations

Standards Alignments

Addressing 5.NF.B.4, 5.NF.B.6, 5.NF.B.7

Teacher-facing Learning Goals

- Solve problems involving multiplication and division with fractions.

Student-facing Learning Goals

- Let's solve problems involving multiplying and dividing fractions.

Lesson Purpose

The purpose of this lesson is for students to solve multiplication and division problems with fractions with an emphasis on making sense of the problems and the operation needed to solve them.

Earlier in this unit students learned how to multiply and how to divide a whole number by a unit fraction or a unit fraction by a whole number. In this lesson, they solve a variety of problems some of which encourage representing and solving with a specific operation.

Access for:

Students with Disabilities

- Engagement (Activity 2)

Instructional Routines

MLR4 Information Gap (Activity 1), Number Talk (Warm-up)

Materials to Copy

- Info Gap: Tiles (groups of 2): Activity 1

Lesson Timeline

| | |
|------------|--------|
| Warm-up | 10 min |
| Activity 1 | 20 min |
| Activity 2 | 15 min |

Teacher Reflection Question

Think about a recent time from class when your students were confused. What did you do to support them in reasoning about their confusion together as a community of learners?

Lesson Synthesis 10 min

Cool-down 5 min

Cool-down (to be completed at the end of the lesson)

🕒 5 min

How Much Milk?

Standards Alignments

Addressing 5.NF.B.6

Student-facing Task Statement

1. A container has 2 cups of milk in it. How many $\frac{1}{4}$ cups of milk are in the container? Explain or show your reasoning.
2. A container has 2 cups of milk in it. The container is $\frac{1}{3}$ full. How many cups does the container hold? Explain or show your reasoning.

Student Responses

1. $8 \cdot 2 \div \frac{1}{4} = 8$
2. $6 \cdot 2 \div \frac{1}{3} = 6$ or $3 \times 2 = 6$.