Lesson 2: Sums and Differences of Fractions

Standards Alignments

Addressing	4.NF.A.1, 4.NF.A.2, 4.NF.B.3.a, 4.NF.B.3.b, 4.NF.B.3.c, 4.NF.B.3.d
Building Towards	5.NF.A.1

Teacher-facing Learning Goals

- Add and subtract fractions and mixed numbers with like denominators.
- Compare fractions and mixed numbers by reasoning about equivalence.

Student-facing Learning Goals

- Let's practice solving problems involving fractions.

Lesson Purpose

The purpose of this lesson is for students to represent and solve problems involving the addition and subtraction of fractions. Students also reason about equivalence to compare fractions and make sense of problems.

In this lesson, students apply what they know about equivalence and addition and subtraction of fractions to solve problems. Throughout the lesson, students have opportunities to reason quantitatively and abstractly as they connect their representations, including equations, to the situations (MP2) and to compare their reasoning with others' (MP3).

The work of this lesson helps prepare students for adding and subtracting with unlike denominators in grade 5. If students need additional support with the concepts in this lesson, refer back to Unit 3, Section B in the curriculum materials.

Access for:

Students with Disabilities

- Action and Expression (Activity 2)

English Learners

- MLR8 (Activity 1)

Instructional Routines

Number Talk (Warm-up)

Lesson Timeline

Warm-up	10 min

Teacher Reflection Question

What strategies were students using to solve

Activity 1	15 min
Activity 2	20 min
Lesson Synthesis	10 min
Cool-down	5 min

problems? What evidence did students show that they were reasoning about equivalence as they solved the problems?

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

5 min

The Flagpole

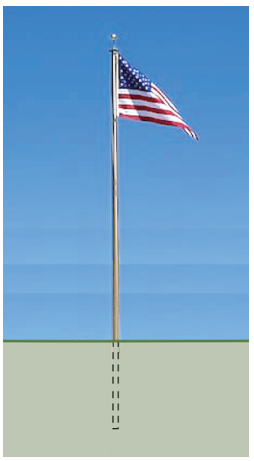
Standards Alignments

Addressing 4.NF.B.3.c, 4.NF.B.3.d

Student-facing Task Statement

The school flagpole is placed about $3\frac{2}{6}$ feet into the ground. Students can see $12\frac{4}{6}$ feet of the flagpole.

How long is the entire flagpole? Show your reasoning.



Student Responses

16 feet, because $12\frac{4}{6} + 3\frac{2}{6} = 16$.