

Lesson 9: All Kinds of Numbers on the Number Line

Standards Alignments

Addressing 3.NF.A.2

Teacher-facing Learning Goals

- Locate 1 on the number line given the location of a non-unit fraction.

Student-facing Learning Goals

- Let's locate numbers on the number line when we are given the location of one fraction.

Lesson Purpose

The purpose of this lesson is for students to use their knowledge of fractions on the number line to locate 1 when given a non-unit fraction.

Previously, students have located fractions on the number line, including locating 1 when given a unit fraction. In the first activity, students reinforce their understanding of the numerator and denominator of a fraction as they find 1 given a fraction greater than 1. They use the numerator of the given fraction to identify the size of a unit fraction and then to locate 1. Later, they locate a non-unit fraction given the location of a unit fraction with a different denominator. There, students use their knowledge of locating 1 first and then locating the non-unit fraction from 1.

The second activity in this lesson is optional because it goes beyond the depth of understanding required to address grade 3 standards.

This lesson has a Student Section Summary.

Access for:

Students with Disabilities

- Action and Expression (Activity 1)

English Learners

- MLR8 (Activity 2)

Instructional Routines

5 Practices (Activity 2), MLR1 Stronger and Clearer Each Time (Activity 1), Which One Doesn't Belong? (Warm-up)

Lesson Timeline

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

Teacher Reflection Question

What unfinished learning or misunderstandings do your students have about fractions? How did you leverage those misconceptions in a positive way to further the understanding of the class?

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

🕒 5 min

Where is 1 Now?

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Student-facing Task Statement

Locate and label 1 on the number line. Explain your reasoning.



Student Responses

I know there are 7 one-sixths in $\frac{7}{6}$, so I split the space into 7 equal parts. I counted 6 of the parts to get to 1.

