# Lesson 9: All Kinds of Numbers on the Number Line

### Standards Alignments

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| --- | --- |
| 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

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| --- | --- |
| 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) 5min

Where is 1 Now?

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|  |  |
| --- | --- |
| Addressing | 3.NF.A.2 |

### 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.

