

# Lesson 13: Multiples of 100

## Standards Alignments

Addressing 3.NBT.A.1

Building Towards 3.NBT.A.1

## Teacher-facing Learning Goals

- Recognize that numbers are often approximated by their closest multiples of 10 or 100.
- Understand the meaning of the nearest multiple of 100.

## Student-facing Learning Goals

- Let's explore multiples of 100 and how other numbers relate to them.

## Lesson Purpose

The purpose of this lesson is for students to reason about the position of numbers relative to their immediate multiples of 100, using number lines to do so.

In grade 2, students learned to represent whole numbers within 1,000 and make sense of their relative sizes on a number line. They also used number lines to represent addition and subtraction, and they often and intuitively relied on multiples of 10 and 100 as benchmarks to reason about sums and differences. (For example, to find  $105 - 17$ , they may start at 105, move 5 to the left to 100, move 10 more to the left to 90 and then move 2 more to land at 88.)

In this lesson, students take a closer look at the relationship between numbers within 1,000 and multiples of 100. The lesson begins by eliciting students' informal ideas about what it means for numbers to be "close to" multiples of 100. Then, they use number lines to identify the multiples of 100 between which a two- or three-digit number lies and examine their relative distance from the number.

The work with number lines here allows students to reason visually about proximity to multiples of 100, preparing them to reason numerically about nearest multiples of 100 and about the idea of rounding in upcoming lessons.

## Access for:



### Students with Disabilities

- Action and Expression (Activity 1)



### English Learners

- MLR8 (Activity 2)

## Instructional Routines

Estimation Exploration (Warm-up)

### Lesson Timeline

Warm-up	10 min
Activity 1	10 min
Activity 2	25 min
Lesson Synthesis	10 min
Cool-down	5 min

### Teacher Reflection Question

In grade 2, students were introduced to the number line. What previous understandings are students leveraging as they use the number line to find the nearest multiple of 100?

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

 5 min

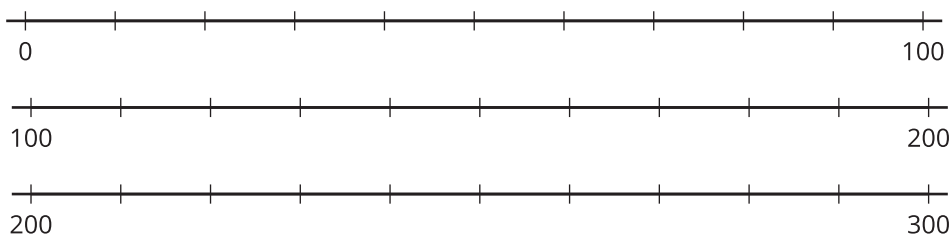
Locate, Label, and Name

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Addressing 3.NBT.A.1

### Student-facing Task Statement

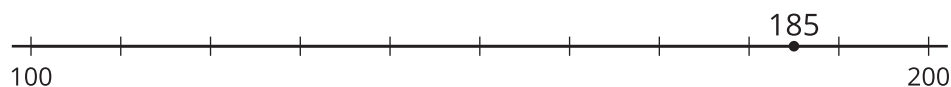
1. Locate and label 185 on the number line on which it belongs.



2. Name the closest multiple of 100 to 185.

### Student Responses

- 1.



2. 200