Lesson 15: Estimate and Subtract

Standards Alignments

Addressing   5.NBT.B.7

Teacher-facing Learning Goals

- Subtract decimals to the hundredths using strategies based on place value and the relationship between addition and subtraction.

Student-facing Learning Goals

- Let's use place value to subtract decimals.

Lesson Purpose

The purpose of this lesson is for students to estimate and find the value of subtraction expressions with decimals.

In a previous lesson, students found decimal differences in a way that made sense to them. In this lesson, students see that the standard algorithm for subtraction, which they have used in grade 4, also works for decimals. Students then estimate differences and find their values. Students are not required to use the standard algorithm, but see how it is an efficient way to subtract.

The lesson also includes an optional activity where students analyze an error in subtracting decimals with the standard algorithm. This activity can be used if students are still struggling with combining digits with the same place values in two numbers when they add and subtract.

Display the Decimal Subtraction chart from a previous lesson to be used during lesson synthesis.

Access for:

⬤ Students with Disabilities

- Action and Expression (Activity 2)

Instructional Routines

MLR1 Stronger and Clearer Each Time (Activity 1), MLR3 Clarify, Critique, Correct (Activity 3), Number Talk (Warm-up)

Lesson Timeline

Warm-up	10 min
Activity 1	15 min
Activity 2	20 min
Activity 3	10 min
Lesson Synthesis	10 min
Cool-down	5 min

Teacher Reflection Question

What aspects of the math community are going well? What aspects would you like to work on? What actions can you take to improve those areas?

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

🕐 5 min

Subtract Decimals

Student-facing Task Statement

Find the value of $321.87 - 20.4$. Explain or show your reasoning.

Student Responses

301.47. Sample responses:

- $321 - 20 = 301, 0.8 - 0.4 = 0.4, 0.07 - 0 = 0.07, 301 + 0.4 + 0.07 = 301.47$

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\begin{array}{r}
3\ 2\ 1.\ 8\ 7 \\
-\ \ \ \ 2\ 0.\ 4\ 0 \\
\hline
3\ 0\ 1.\ 4\ 7
\end{array}
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