

Lesson 21: Multiply More Decimals

Standards Alignments

Addressing 5.NBT.A.1, 5.NBT.B.7

Teacher-facing Learning Goals

- Calculate products of decimals using whole number products and place value understanding.

Student-facing Learning Goals

- Let's multiply decimals.

Lesson Purpose

The purpose of this lesson is for students to use place value understanding and multi-digit whole number products to find multi-digit decimal products.

In this lesson, students use place value understanding and properties of operations to find products of decimals. The numbers are more complex in this lesson so diagrams representing the products are less helpful. Students find the values of both types of expressions they have worked with in the last several lessons, products of two decimals to the tenth and products of a whole number and a decimal to the hundredth. Students find the products using a strategy of their choice. When they explain their reasoning, students will apply their understanding of place value to relate decimal products to whole number products based on the repeated reasoning they have acquired (MP3, MP7, MP8).

This lesson has a Student Section Summary.

Access for:



Students with Disabilities

- Engagement (Activity 2)



English Learners

- MLR2 (Activity 1)

Instructional Routines

Estimation Exploration (Warm-up)

Lesson Timeline

Warm-up	10 min
Activity 1	20 min

Teacher Reflection Question

Reflect on a time your thinking changed about something in class recently. How will you alter your teaching practice to incorporate your new understanding?

Activity 2	15 min
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Lesson Synthesis	10 min
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Cool-down	5 min
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Cool-down (to be completed at the end of the lesson)

 5 min

Explain Why Expressions are Equal

Standards Alignments

Addressing 5.NBT.A.1, 5.NBT.B.7

Student-facing Task Statement

1. Explain why 2.5×6.4 and $(25 \times 64) \times 0.01$ are equal.
2. Find the value of 2.5×6.4 .

Student Responses

1. $2.5 = 25 \times 0.1$ and $6.4 = 64 \times 0.1$ so $2.5 \times 6.4 = (25 \times 64) \times 0.01$
2. $25 \times 64 = 1,600$ so $2.5 \times 6.4 = 16.00$