

Lesson 16: Estimemos productos (Optional)

Standards Alignments

Addressing 5.NF.B.4, 5.NF.B.4.b

Building Towards 5.NF.B.4

Teacher-facing Learning Goals

- Use estimation and the properties of operations to reason about the product of a whole number and a fraction greater than 1.

Student-facing Learning Goals

- Estimemos productos entre un número entero y una fracción.

Lesson Purpose

The purpose of this lesson is for students to reason about the value of the product of a whole number and a fraction greater than 1 and use the properties of operations to find the product.

In previous lessons, students represented the decomposition of a rectangle with diagrams, expressions, and equations and found the product of a whole number and a fraction. In this optional lesson, students will practice multiplying fractions by using their understanding of the properties of operations. This time, they will not be provided with a diagram to represent each product. They will also apply what they have learned about multiplying fractions to reason about the proximity of fractional areas to whole number areas.

This lesson has a Student Section Summary.

Access for:

Students with Disabilities

- Representation (Activity 1)

English Learners

- MLR5 (Activity 1)

Instructional Routines

Notice and Wonder (Warm-up)

Lesson Timeline

Warm-up 10 min

Teacher Reflection Question

What evidence did you see in today's lesson that your students are extending their understanding of multiplication?

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

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

 5 min

Estima y resuelve

Standards Alignments

Addressing 5.NF.B.4.b

Student-facing Task Statement

Jada dice que el valor de cada producto es aproximadamente 20. Para cada problema, explica por qué la estimación de Jada es muy alta, razonable o muy baja.

1. $5\frac{5}{6} \times 4 = \underline{\hspace{2cm}}$

20 es... muy baja muy alta razonable

2. $3 \times 6\frac{5}{8} = \underline{\hspace{2cm}}$

20 es... muy baja muy alta razonable

Student Responses

1. 20 is too low. $5\frac{5}{6}$ is very close to 6, and $6 \times 4 = 24$. $5\frac{5}{6} \times 4 = 23\frac{2}{6}$

2. 20 is about right. $3 \times 6 = 18$ and $\frac{5}{8}$ is a little more than $\frac{1}{2}$ so it's a little more than $18 + \frac{3}{2}$.