Lesson 6: Multipliquemos fracciones

Standards Alignments

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

Teacher-facing Learning Goals

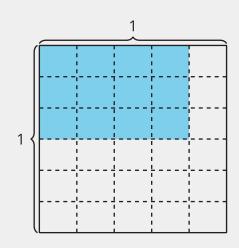- Represent multiplication of two non-unit fractions with expressions.

Student-facing Learning Goals

- Multipliquemos dos fracciones no unitarias usando diagramas y expresiones.

Lesson Purpose

The purpose of this lesson is for students to calculate areas of rectangles where both side lengths are non-unit fractions.

As in previous lessons, students represent a product of fractions with a diagram. This diagram represents the product $\frac{3}{6} \times \frac{4}{5}$. The diagram shows $\frac{3}{6}$ of $\frac{4}{5}$ of the square so that's $\frac{3}{6} \times \frac{4}{5}$. The number of shaded pieces is 3×4, the product of the numerators. The number of pieces in the whole square is 6×5, the product of the denominators. So the value of the product can also be written as $\frac{3 \times 4}{6 \times 5}$. In the first activity, students relate expressions to the area in diagrams like this and then they use this structure to find products of non-unit fractions in the second activity.

Access for:

♿ Students with Disabilities

- Action and Expression (Activity 2)

Instructional Routines

Which One Doesn't Belong? (Warm-up)

Lesson Timeline

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

Teacher Reflection Question

With which math ideas from today's lesson did students grapple most? Did this surprise you or was this what you expected?

Cool-down (to be completed at the end of the lesson)   🕐 5 min
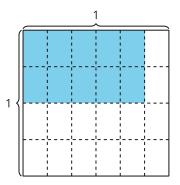
¿Cuál es el área?

Standards Alignments

Addressing   5.NF.B.4.b

Student-facing Task Statement

1. a. Escribe una expresión de multiplicación que represente el área de la región coloreada, en unidades cuadradas.

    b. ¿Cuál es el área de la región coloreada, en unidades cuadradas?

Student Responses

1. a. $\frac{2}{4} \times \frac{5}{6}$ or equivalent

    b. $\frac{10}{24}$ or equivalent