

Lesson 8: Formas de encontrar la longitud desconocida (parte 2)

Standards Alignments

Addressing 4.G.A.3, 4.MD.A, 4.NF.B.3.c, 4.NF.B.4

Teacher-facing Learning Goals

• Find the unknown side lengths of twodimensional shapes using their attributes.

Student-facing Learning Goals

 Encontremos las longitudes desconocidas en figuras.

Lesson Purpose

The purpose of this lesson is for students to use the attributes of two-dimensional figures (such as perimeter and symmetry) to reason about side lengths.

In the previous lesson, students used given side lengths and symmetry to find the perimeter of a figure. In this lesson, students reason in the other direction—given the perimeter and information about symmetry, they find the side lengths of two-dimensional figures. Students also practice completing a figure given a line of symmetry and half of the figure, and then reason about the perimeter of the whole figure. Along the way, students reinforce their ability to add fractions and to multiply fractions by whole numbers.

This lesson has a Student Section Summary.

Access for:

③ Students with Disabilities

Engagement (Activity 1)

English Learners

MLR8 (Activity 1)

Instructional Routines

True or False (Warm-up)

Materials to Gather

- Patty paper: Activity 1, Activity 2
- Rulers or straightedges: Activity 1, Activity 2



Lesson Timeline

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

Teacher Reflection Question

The tasks in this lesson prompted students to apply what they learned about adding fractions and multiplying fractions by a whole number. How comfortable were students with these operations? What ideas or strategies do students need more practice with?

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

① 5 min

La simetría del escenario

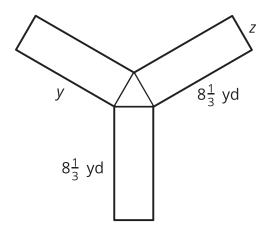
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Student-facing Task Statement

En un concierto, un escenario tiene la forma de la letra Y. El escenario tiene 3 líneas de simetría y su perímetro es 56 yardas.

- 1. Dibuja las líneas de simetría.
- 2. Encuentra la longitud de los lados marcados con *y* y *z*. Explica o muestra tu razonamiento.





Student Responses

- 1. See drawing.
- 2. y is $8\frac{1}{3}$ yards and z is 2 yards. Sample response: The lines of symmetry tell us that the 6 long sides are equal and the 3 short sides are equal. $6 \times 8\frac{1}{3} = 50$ and 56 50 = 6. Since 3 times z is 6, z must be 2 yards.

