

Lesson 15: Encontramos las longitudes desconocidas de los lados

Standards Alignments

Addressing 5.NBT.B.5, 5.NBT.B.6

Teacher-facing Learning Goals

- Solve problems involving area and volume using the relationship between multiplication and division.

Student-facing Learning Goals

- Usemos la relación que hay entre la multiplicación y la división para resolver problemas.

Lesson Purpose

The purpose of this lesson is for students to find missing side lengths of rectangles and rectangular prisms using their understanding of area, volume, and multi-digit division.

In an earlier unit, students learned to find the volume of rectangular prisms either by multiplying the length, width, and height or choosing a base and multiplying the area of that base by the corresponding height. In this unit, students learned to use division strategies to divide multi-digit numbers. The purpose of this lesson is to use multiplication and division to solve problems about area and volume. Throughout, students apply multiplication and division and what they know about the relationship between the length, width, and height of a rectangular prism and its volume to solve problems (MP2).

This lesson has a Student Section Summary.

Access for:

Students with Disabilities

- Engagement (Activity 2)

English Learners

- MLR8 (Activity 2)

Instructional Routines

Estimation Exploration (Warm-up)

Lesson Timeline

Warm-up

10 min

Teacher Reflection Question

As you finish up this unit, reflect on the norms

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

and activities that have supported each student in learning math. List ways you have seen each student grow as a young mathematician throughout this work. List ways you have seen yourself grow as a teacher. What will you continue to do and what will you improve on in the next unit?

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

🕒 5 min

El área del jardín

Standards Alignments

Addressing 5.NBT.B.6

Student-facing Task Statement

El área de un jardín rectangular es 832 pies cuadrados y su largo es 16 pies. ¿Cuál es su ancho?

Student Responses

52 feet. Sample response:

$$\begin{array}{r}
 \boxed{52} \\
 2 \\
 10 \\
 40 \\
 16 \overline{)832} \\
 \underline{-640} \\
 192 \\
 \underline{-160} \\
 32 \\
 \underline{-32} \\
 0
 \end{array}$$