Lesson 14: Encontremos el área de figuras con lados desconocidos

Standards Alignments

Addressing   3.MD.C.7.d

Teacher-facing Learning Goals

- Calculate the area of ungridded figures composed of rectangles, including figures with missing side lengths.

Student-facing Learning Goals

- Encontremos el área de figuras que tienen lados de longitudes desconocidas.

Lesson Purpose

The purpose of this lesson is for students to calculate the area of ungridded figures made of rectangles, including figures with missing side lengths.

In previous lessons, students found the area of figures that were fully gridded with squares and moved toward figures without a grid but had all their side lengths labeled. In this lesson, students use the strategies they have learned to decompose the figures into non-overlapping rectangles. They realize that not all measurements need to be given, and that some lengths can be determined given the rectangular structure of these figures.

This lesson has a Student Section Summary.

Access for:

♿ Students with Disabilities

- Engagement (Activity 2)

🌐 English Learners

- MLR8 (Activity 2)

Instructional Routines

Notice and Wonder (Warm-up)

Lesson Timeline

Warm-up	10 min
Activity 1	10 min

Teacher Reflection Question

Reflect on which students have not shared their strategies in class lately. How can their insight or ways of thinking be highlighted in or tied to

Activity 2	25 min
Lesson Synthesis	10 min
Cool-down	5 min

upcoming lessons?

Cool-down (to be completed at the end of the lesson)   🕐   5 min
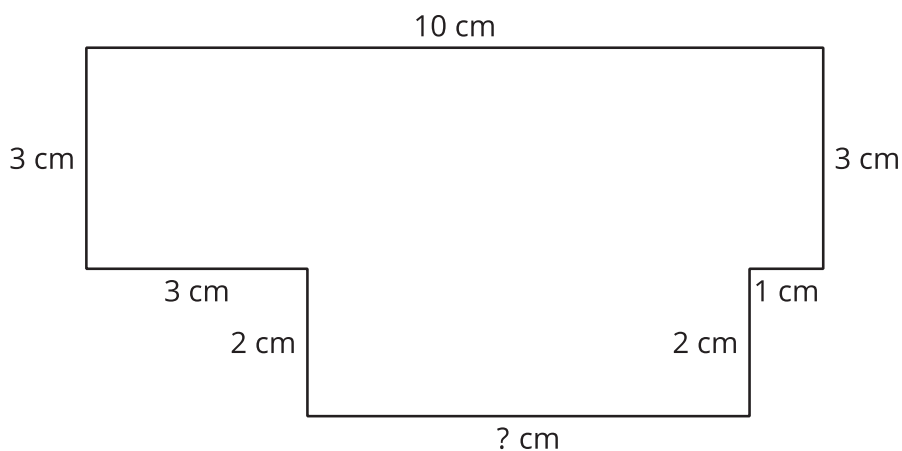
Área con un lado desconocido

Standards Alignments

Addressing   3.MD.C.7.d

Student-facing Task Statement

Encuentra el área de la figura. Explica o muestra tu razonamiento.

10 cm

3 cm   3 cm

3 cm   1 cm

2 cm   2 cm

? cm

Student Responses

42 sq cm. Sample response: I found the area of the top rectangle to be 30 sq cm because
$3 \times 10 = 30$. Then I found the missing side length to be 6 cm by subtracting 3 cm and 1 cm from
10 cm because opposite side lengths are equal in a rectangle. Then I found the area of the smaller
rectangle on the bottom to be 2×6, which is 12 sq cm. Then I added $30 + 12$ to get 42 sq cm.