Lesson 14: Ways to Represent Multiplication of Teen Numbers

Standards Alignments

Addressing	3.OA.B.5
Building Towards	3.OA.C.7

Teacher-facing Learning Goals

- Make sense of representations of multiplication (base-ten blocks and area diagrams) where one factor is a teen number.

Student-facing Learning Goals

- Let's make sense of some ways to represent the multiplication of teen numbers.

Lesson Purpose

The purpose of this lesson is for students to make sense of representations of the multiplication of teen numbers.

The work of this lesson connects to previous work because students have solved problems involving multiplication of teen numbers in ways that make sense to them. In the previous section they also used the distributive property to find products of single-digit factors using facts they know. In this lesson, students consider and connect different representations of a strategy used in the previous section that can also be used to multiply a teen number. This will be helpful in the next lesson when students solve these types of problems and choose how to represent the problem.

Access for:

♿ Students with Disabilities

- Representation (Activity 2)

🌐 English Learners

- MLR8 (Activity 2)

Instructional Routines

Notice and Wonder (Warm-up)

Materials to Gather

- Base-ten blocks: Activity 1

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

How did their previous work with area diagrams support students in their work today with multiplying teen numbers?

Cool-down (to be completed at the end of the lesson)   🕐 5 min
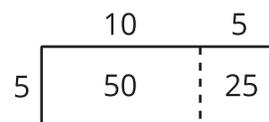
Multiply and Explain

Standards Alignments

Addressing   3.OA.B.5

Student-facing Task Statement

Find the value of 5×15 and explain how it's represented in the diagram.

	10	5
5	50	25

Student Responses

75. Sample response: I can see 5×10 in the large part of the rectangle and 5×5 in the smaller part. If we add those parts of the rectangle, we get the product of 5×15, which is 75.