Unit 6, Lesson 7

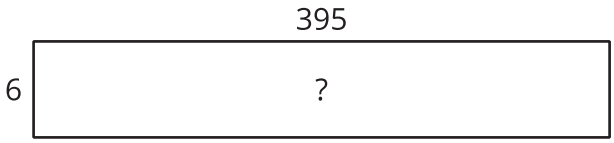
# Multiply Three- and Four-Digit Numbers by One-Digit Numbers

Let's multiply three- and four-digit numbers by one-digit numbers.

Warm-up

## Estimation Exploration: Mysterious Area

What is the area of the rectangle represented by the diagram?



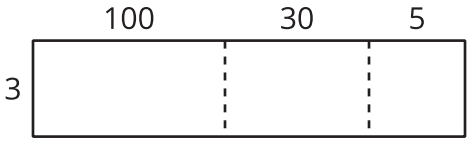

Record an estimate that is:

| too low | about right | too high |
|---|---|---|
| | | |

Activity 1

## Larger Numbers to Multiply

1. Clare draws this diagram.




   a. What multiplication expression can be represented by the diagram?

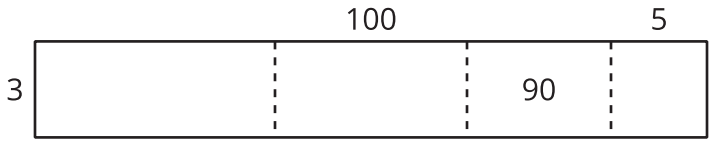
   b. Find the value of the expression. Show your thinking using diagrams, symbols, or other representations.

2. Consider the expression $6 \times 252$.

   a. Draw a diagram to represent the expression.

   b. Find the value of the expression. Show your thinking using diagrams, symbols, or other representations.

3. Lin draws a diagram to represent $3 \times 2{,}135$.




a. Complete Lin's diagram.

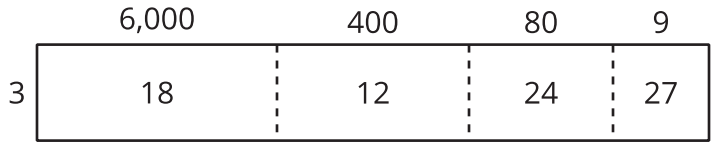
b. Write an expression to represent the value of each part of the diagram.

c. Find the value of $3 \times 2{,}135$. Show your thinking using diagrams, symbols, or other representations.

Activity 2

## Jada's Errors

1. Jada uses this diagram to multiply $3 \times 6{,}489$. She makes a few errors in the diagram.




   a. Explain the errors Jada made.

   b. Find the value of $3 \times 6{,}489$. Show your thinking using diagrams, symbols, or other representations.

2. Find the value of $5 \times 699$. Show your thinking using diagrams, symbols, or other representations.

3. Find the value of $8 \times 4{,}973$. Show your thinking using diagrams, symbols, or other representations.