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?



Record an estimate that is:

too low	about right	too high

7.1: Larger Numbers to Multiply

1. Clare drew this diagram.



- a. What multiplication expression can be represented by the diagram?
- b. Find the value of the expression. Show your reasoning.

- 2. Consider the expression 6×252 .
 - a. Draw a diagram to represent the expression.

b. Find the value of the expression. Show your reasoning.



3. Lin drew 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 reasoning.

7.2: Jada's Errors

1. Jada used a diagram to multiply $3 \times 6,489$ and made a few errors.



a. Explain the errors Jada made.

b. Find the value of $3 \times 6,489$. Show your reasoning.

2. Find the value of 5×699 . Show your reasoning.

3. Find the value of $8 \times 4,973$. Show your reasoning.