Unit 4, Lesson 14

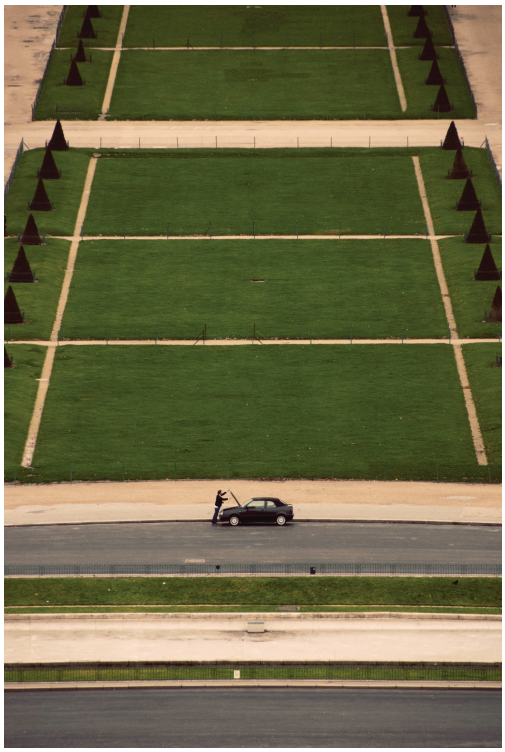
Find Unknown Side Lengths

Let's use the relationship between multiplication and division to solve problems.

Warm-up

Estimation Exploration: The Garden

What is the area of one of the large rectangles in the garden?



Record an estimate that is:

too low	about right	too high

Activity 1

Find the Unknown Side Length (Part 1)

Complete the table.

area (square feet)	length (feet)	width (feet)
816	24	
1,248		48
	23	253
5,796		36

Activity 2

Find the Unknown Side Length (Part 2)

1. Complete the table.

volume (cubic feet)	base (square feet)	height (feet)
375	15	
1,176		28

2. Clare wants to find the height of a rectangular prism with these measurements.

volume (cubic feet)	length (feet)	width (feet)	height (feet)
882	6	7	

   a. First, Clare finds the quotient $882 \div 6$. What could she do next to find the height?

   b. Find the unknown height to finish the problem for Clare.

3. Complete the table.

volume (cubic feet)	length (feet)	width (feet)	height (feet)
936	8		9
1,536		48	2
1,008	36		