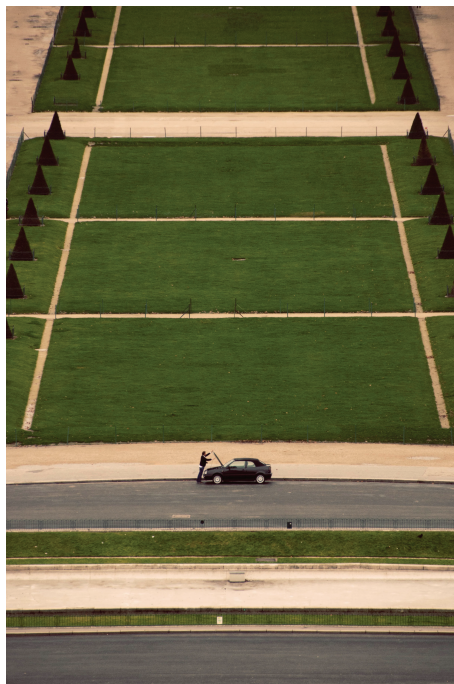


Lesson 15: Find Missing Side Lengths

- 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

15.1: Find the Missing Side Length, Part 1

Complete the table.

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

15.2: Find the Missing 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 the following 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 missing 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		

Section Summary

Section Summary

In this section, we learned how to divide multi-digit whole numbers. To find a quotient like $448 \div 16$ we broke 448 down into multiples of 16 and then added these partial quotients.

$$\begin{array}{r}
 320 \div 16 = 20 \\
 80 \div 16 = 5 \\
 48 \div 16 = 3 \\
 \hline
 448 \div 16 = 28
 \end{array}$$

Then, we worked with a way to record these calculations that we first saw in an earlier course.

$$\begin{array}{r}
 \boxed{28} \\
 3 \\
 5 \\
 20 \\
 16 \overline{)448} \\
 \underline{-320} \quad (20 \times 16) \\
 128 \\
 \underline{-80} \quad (5 \times 16) \\
 48 \\
 \underline{-48} \quad (3 \times 16) \\
 0
 \end{array}$$