## 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 |

1. 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 |  |

* 1. First, Clare finds the quotient . What could she do next to find the height?
  2. Find the missing height to finish the problem for Clare.

1. Complete the table.

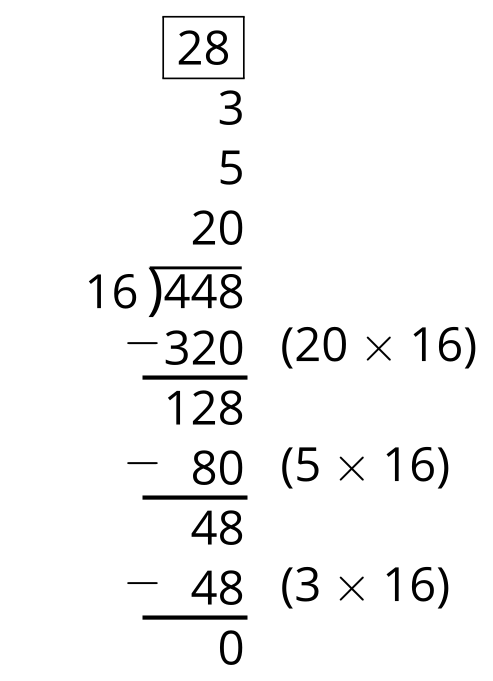
| * volume (cubic feet) | * length (feet) | * width (feet) | * height (feet) |
| --- | --- | --- | --- |
| * 936 | * 8 |  | * 9 |
| * 1,536 |  | * 48 | * 2 |
| * 1,008 | * 36 |  |  |

### Section Summary

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

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





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