



# 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<br>(square feet) | length<br>(feet) | width<br>(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<br>(cubic feet) | base<br>(square feet) | height<br>(feet) |
|------------------------|-----------------------|------------------|
| 375                    | 15                    |                  |
| 1,176                  |                       | 28               |

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

| volume<br>(cubic feet) | length<br>(feet) | width<br>(feet) | height<br>(feet) |
|------------------------|------------------|-----------------|------------------|
| 882                    | 6                | 7               |                  |

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

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

3. Complete the table.

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

