

**Grade 4 Unit 5**

Lesson 17

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**Unit 5 Lesson 17: More Perimeter Problems****WU True or False: Fractions and Whole Numbers (Warm up)**

## Student Task Statement

Decide if each statement is true or false. Be prepared to explain your reasoning.

- $\frac{8}{12} + \frac{3}{12} + \frac{9}{12} + \frac{4}{12} = 2$
- $\frac{20}{4} + \frac{10}{4} + \frac{6}{4} = 8$
- $2 = \frac{59}{100} + \frac{41}{100} + \frac{89}{100} + \frac{11}{100}$
- $2 = \frac{3}{8} + \frac{3}{8} + \frac{12}{8}$

**1 Along the Walls in Tiny Steps**

## Student Task Statement

A rectangular room has a perimeter of 39 feet and a length of  $10\frac{1}{2}$  feet.

1. What is the width of the room in feet? Explain or show your reasoning.
2. An ant walked along two walls of the room, always in a straight line. It started in one corner and ended up in a corner opposite of where it started. How many inches did it travel? Explain or show your reasoning.

**2 Missing Measurements**

## Student Task Statement

Your teacher has posted six quadrilaterals around the room. Each one has a missing side length or a missing perimeter.

1. Choose two diagrams—one with a missing length and another with a missing perimeter. Make sure that all six shapes will be visited by at least one person in your group.

Find the missing values. Show your reasoning and remember to include the units.

2. Discuss your responses with your group until everyone agrees on the missing measurements for all six figures.
3. Answer one of the following questions. Explain or show your reasoning.

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- a. The perimeter of B is how many times the perimeter of D?
  - b. The perimeter of one figure is 1,000 times that of another figure. Which are the two figures?
  - c. The perimeter of F is how many times the perimeter of B?