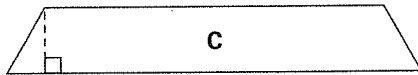
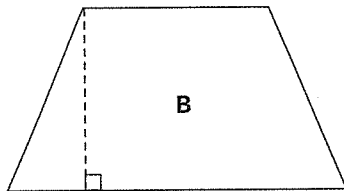
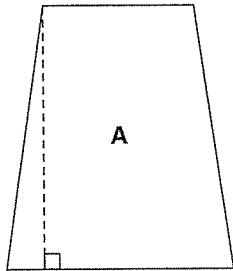


5.5

Exploring the Area and Perimeter of a Trapezoid

- **GOAL:** Explore the relationship between the area and the perimeter of a trapezoid.



At-Home Help

The formula for the area of a trapezoid is

$$A = (a + b) \times h \div 2$$

where a and b represent the lengths of the parallel sides, and h is the height.

1. Measure the three trapezoids above, and fill out the table.

	Side length (cm)	Side length (cm)	Base a (cm)	Base b (cm)	Height h (cm)
Trapezoid A					
Trapezoid B					
Trapezoid C					

2. a) All three trapezoids have the same perimeter. What is it? _____

- b) Predict which trapezoid has the greatest area. _____

3. a) Calculate the area for each trapezoid.

Trapezoid A:

Trapezoid B:

Trapezoid C:

- b) Which trapezoid has the greatest area? _____