2A.2 **Learning Opportunity**

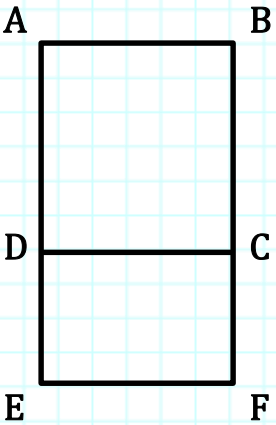
Name: _____

Problem Solving:
Perimeter and Area

1) The figure shown consists of 8 identical squares. The area of the figure is 72 square centimeters. What is the perimeter of the figure?

2) A **regular** polygon is both **equilateral** (all sides congruent), and **equiangular** (all angles congruent). If the perimeter of the regular octagon, pictured below, is 67 inches, how long is each side? (your answer need not be a whole number)

3) The area of rectangle ABCD is 63 square centimeters. The area of rectangle DCFE is 35 square centimeters. In each rectangle, the length of each side is a counting number of centimeters. Side AB is longer than side DE. What is the perimeter of rectangle ABFE?



4) The perimeter of a rectangle is 26 units. Each side is measured in counting numbers. What is the greatest possible area of the rectangle, in square units?

5) Logan is making an origami paper crane. She folds her square piece of paper in half to form a rectangle. This rectangle has a perimeter of 24 cm.

Find the area of the original square piece of paper.