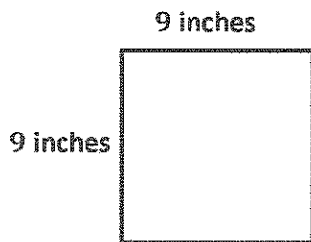


G3-M7-Lesson 24

1. Robin draws a square with a perimeter of 36 inches. What is the width and length of the square?

$$36 \div 4 = 9$$



I know that all 4 sides of a square are the same length. I can divide the perimeter by 4 to find the width and length of Robin's square.

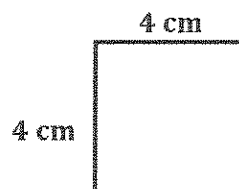
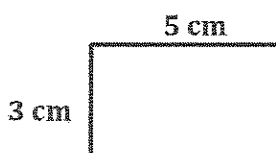
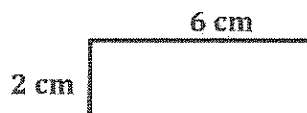
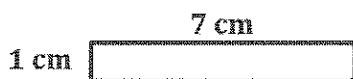
The width and length of Robin's square are each 9 inches.

2. A rectangle has a perimeter of 16 centimeters.
- a. Estimate to draw as many different rectangles as you can that have a perimeter of 16 centimeters. Label the width and length of each rectangle.

$$16 \div 2 = 8$$

$1 + 7 = 8$	$w = 1, l = 7$
$2 + 6 = 8$	$w = 2, l = 6$
$3 + 5 = 8$	$w = 3, l = 5$
$4 + 4 = 8$	$w = 4, l = 4$

I can divide the perimeter by 2 and then find pairs of numbers that have a sum of 8.



I can estimate to draw the 4 rectangles that I found.

- b. Explain the strategy you used to find the rectangles.

I divided the perimeter by 2, so $16 \div 2 = 8$. Then I found pairs of numbers that have a sum of 8. The pairs of numbers that have sums of 8 give me possible whole number side lengths for rectangles with a perimeter of 16 centimeters.

I can divide the perimeter by 2 because the perimeter of a rectangle can be found by adding the width and the length and then multiplying by 2.

$$\text{Perimeter} = 2 \times (\text{width} + \text{length})$$

$$\text{Perimeter} \div 2 = \text{width} + \text{length}$$