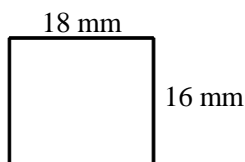


NAME: _____

P.I. G.G.39: Investigate, justify, and apply theorems about special parallelograms (rectangles, squares) involving their angles, sides, and diagonals

1. What is the perimeter of the rectangle?



2. A rectangle is 6.2 inches long and 1.7 inches wide. Find its perimeter.

[A] 7.9 in. [B] 105.4 in.²
[C] 15.8 in. [D] 10.54 in.²

3. Crystal wants to put a fence around her vegetable garden. Her garden is 5 ft wide and 4 ft long. She plans to put a post at each corner and at every foot. How many fence posts will Crystal need?

[A] 19 [B] 18 [C] 14 [D] 20

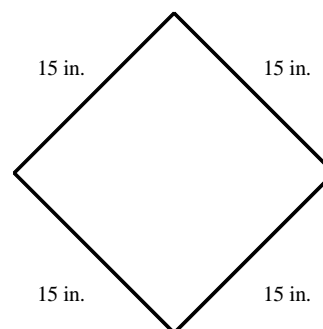
4. Use any problem solving strategy to solve the following problem. Suppose you are fencing a rectangular dog pen with 100 ft of fencing. The pen is to be 10 feet longer than it is wide. What are the dimensions of the pen?

5. Use any problem solving strategy to solve the following problem. The formula for the perimeter of a rectangle is $P = 2(l + w)$. If the width of a rectangle is half its length, how many times its length is its perimeter?

6. The width of a rectangle is 20 centimeters. Find all possible values for the length of the rectangle if the perimeter is at least 584 centimeters.

[A] $x \geq 29.20$ cm [B] $x \geq 146$ cm
[C] $x \geq 272$ cm [D] $x \geq 126$ cm

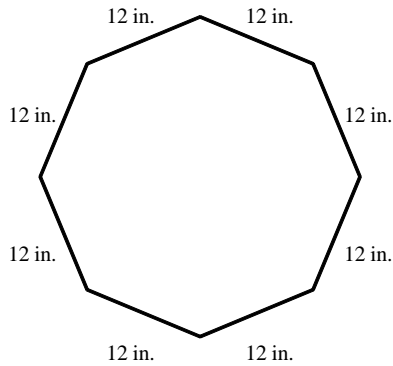
7. Alicia is making a pillow that is shaped like a square, as pictured below. What is the perimeter of the pillow?



[A] 60 in. [B] 45 in.
[C] 210 in. [D] 225 in.

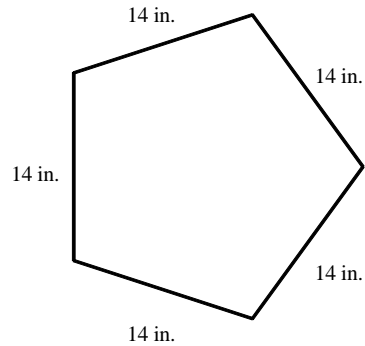
NAME: _____

8. Leila is making a pillow that is shaped like a regular octagon, as pictured below. What is the perimeter of the pillow?



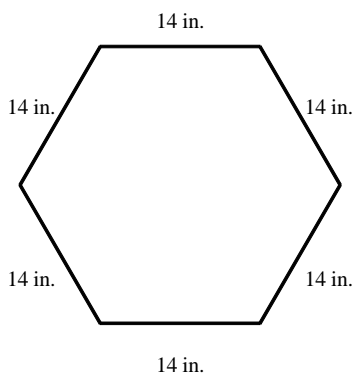
- [A] 96 in. [B] 144 in.
[C] 156 in. [D] 108 in.

10. Cindy is making a pillow that is shaped like a regular pentagon, as pictured below. What is the perimeter of the pillow?



- [A] 84 in. [B] 210 in.
[C] 70 in. [D] 196 in.

9. Martha is making a pillow that is shaped like a regular hexagon, as pictured below. What is the perimeter of the pillow?



- [A] 182 in. [B] 70 in.
[C] 196 in. [D] 84 in.

11. One side of a parallelogram has a length of 5.8 kilometers while another side has a length of 29.6 kilometers. What is the perimeter of the parallelogram?

- [A] 41.2 km [B] 35.4 km
[C] 171.68 km [D] 70.8 km

- [1] 68 mm
- [2] C
- [3] B
- [4] 20 ft by 30 ft
- [5] 3
- [6] C
- [7] A
- [8] A
- [9] D
- [10] C
- [11] D