

3rd Grade American Math HW 19

Chapter 15: Understand Perimeter

Dear Family,

During the next few weeks, our math class will be learning more about perimeter of figures. You can expect to see homework that provides practice with measuring and finding perimeter, by counting units around a figure, adding measured lengths, and by using a formula.

Vocabulary

- **Composite Figure:** A figure made by joining one or more figures.
- **Perimeter:** The distance around a figure.
- **Formula:** A mathematical rule.

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- **Homework due date: Sunday, Feb. 15th** (Upload Homework on Archie)
 - This week, we will review Chapter 15 and start with Chapter 14 (Relate Multiplication and Area).
 - **Feel free to contact me with any questions at diana.charaf@archimedean.org**

Complete homework daily based on the schedule provided below:

Monday 02/09	Solve page 3 + Review Perimeter and Formulas (Pages 1 and 2)
Tuesday 02/10	Pages: 721 - 722
Wednesday 02/11	Pages: 723 - 724
Thursday 02/12	Pages: 725 - 726
Friday 02/13	No Homework

Perimeter

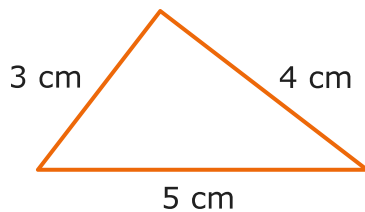
What is perimeter?

Perimeter is the distance around the outside of a two-dimensional shape. The perimeter of a shape is the total length of the shape's sides. Perimeter is measured in units such as centimeters, inches, feet, yards, meters, kilometers, and miles.

To find the perimeter of any closed shape, add the lengths of all the sides.

Let's try it!

The perimeter of this triangle is **highlighted**.

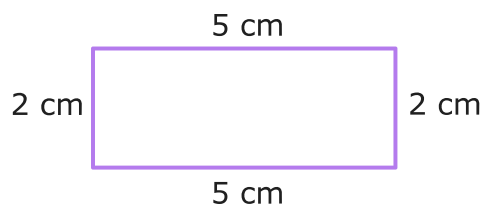


To find the perimeter, add the lengths of all three sides.

$$3 + 4 + 5 = 12$$

So, the perimeter is 12 centimeters!

The perimeter of the rectangle is **highlighted**.



To find the perimeter, add the lengths of all four sides.

$$2 + 5 + 2 + 5 = 14$$

So, the perimeter is 14 centimeters!

You can use a formula to find the perimeter of a rectangle.

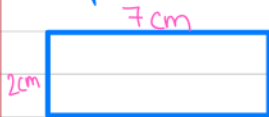
* A formula is a mathematical rule.

1. To find the perimeter of a rectangle, you can use this formula:

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

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

* example:



length (L) = 7 cm
width (w) = 2 cm

$$\begin{aligned} P &= (2 \times L) + (2 \times w) \\ &= (2 \times 7) + (2 \times 2) \\ &= 14 + 4 \\ &= 18 \text{ cm} \end{aligned}$$

$$P = 18 \text{ cm}$$

OR

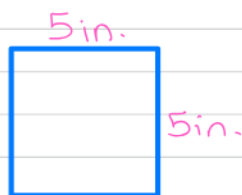
$$\begin{aligned} P &= 2 \times (L + w) \\ &= 2 \times (7 + 2) \\ &= 2 \times 9 \\ &= 18 \text{ cm} \end{aligned}$$

$$P = 18 \text{ cm}$$

2. To find the perimeter of a square, use this formula:

$$P = 4 \times \text{side}$$

* example:

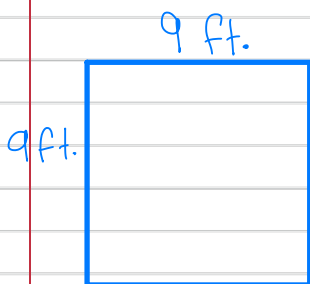
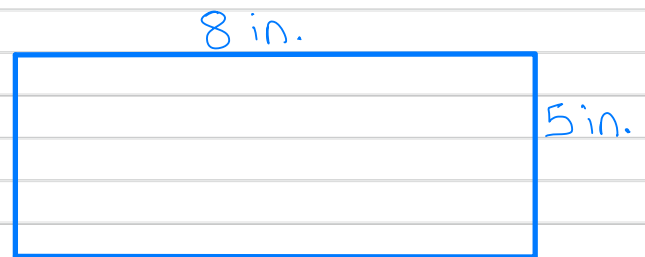
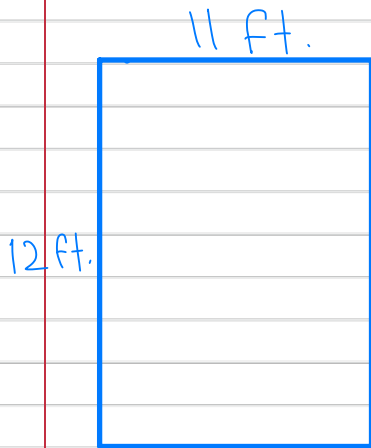
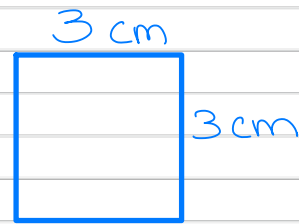
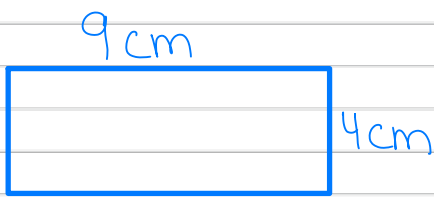


side length = 5 in.

$$\begin{aligned} P &= 4 \times s \\ &= 4 \times 5 \\ &= 20 \text{ in.} \end{aligned}$$

$$P = 20 \text{ in.}$$

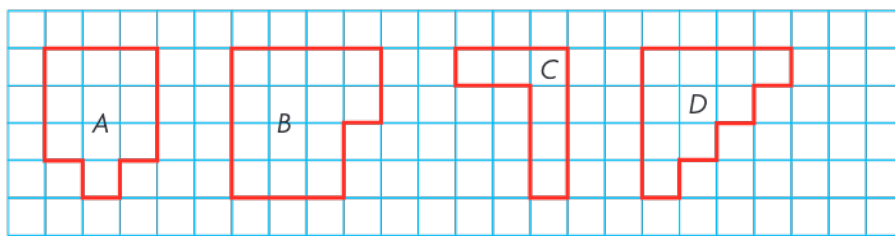
Use a formula to find the perimeter of the rectangle or square.



Name _____

Chapter Review

1. Find the perimeter of each figure on the grid. Identify the figures that have a perimeter of 14 units. Mark all that apply.



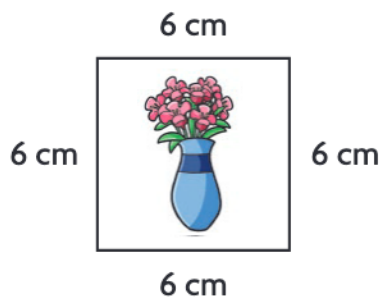
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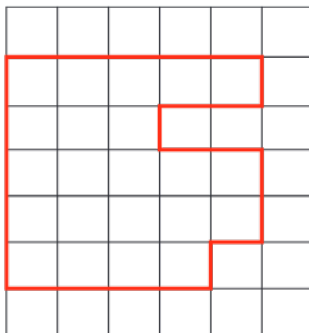
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2. Kim wants to put trim around a picture she drew. How many centimeters of trim does Kim need for the perimeter of the picture?



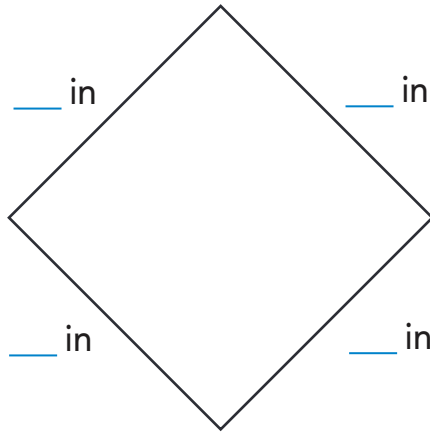
_____ centimeters

3. Terrence drew this figure on grid paper. What is the perimeter of the figure?



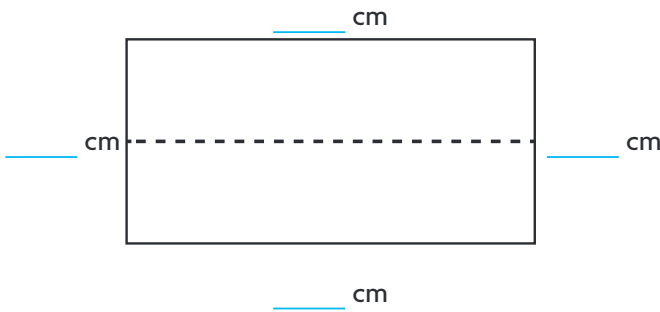
_____ units

4. Use an inch ruler to find the length of each side. Then find perimeter.



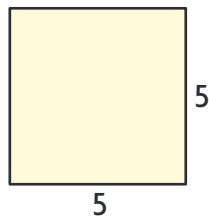
_____ inches

5. Use a centimeter ruler to find the length of each side. Then find the perimeter.



_____ centimeters

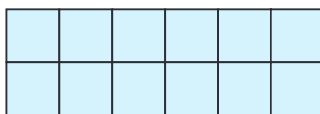
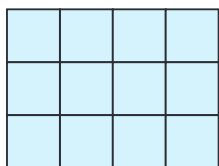
6. Write a formula that can be used to find the perimeter of the square shown. Then find the perimeter.



Name _____

7. Tomas drew two rectangles on grid paper.

Circle the words that make the sentence true.



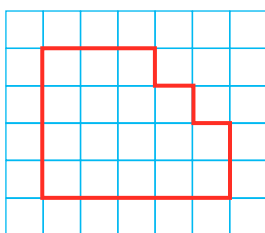
B

Rectangle *A* has a perimeter that is

less than
the same as
greater than

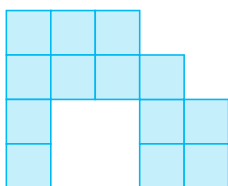
the perimeter of rectangle *B*.

8. Yuji drew this figure on grid paper. What is the perimeter of the figure?



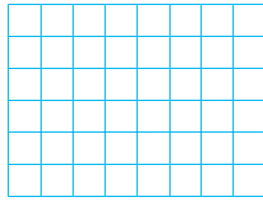
_____ units

9. What is the perimeter of the figure shown? Each square represents 1 square meter.

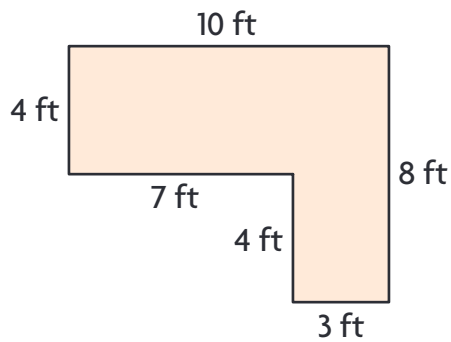


_____ meters

10. Shawn drew a rectangle that was 2 units wide and 6 units long. Draw a rectangle with different side lengths that has the same perimeter.



11. Mrs. Rios put a wallpaper border around the room shown below. Find the perimeter of the room.



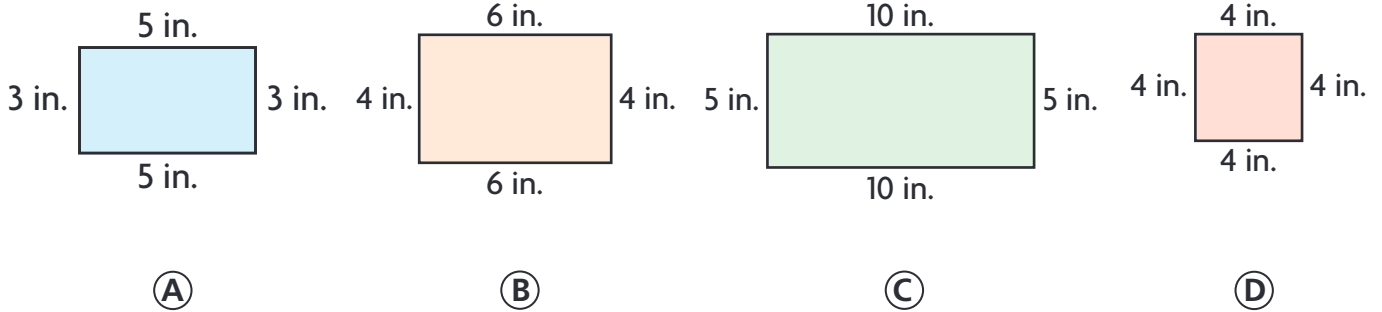
_____ feet

12. Christina is putting a fence around her square garden. Each side of her garden is 2 meters long. The fence costs \$5 for each meter. How much will the fence cost?

\$ _____

Name _____

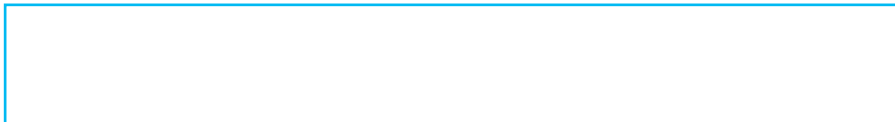
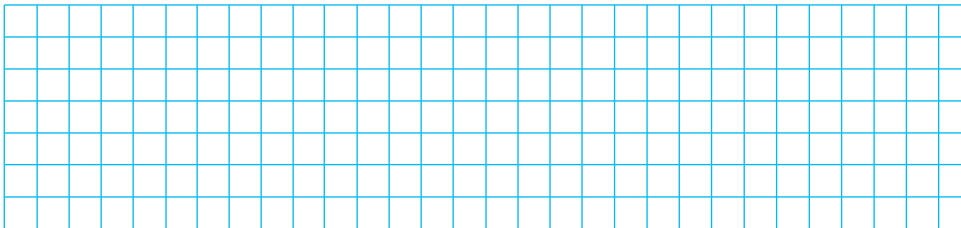
13. Marcus bought some postcards. Each postcard had a perimeter of 16 inches. Which could be one of the postcards Marcus bought? Mark all that apply.



14. Anthony wants to make two different rectangular flowerbeds, each with a perimeter of 24 feet. He will build a wooden frame around each flowerbed.

Part A

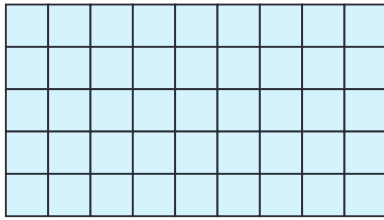
Each unit square on the grid represents 1 square foot. Draw two possible flowerbeds, one longer than the other. Label each with a letter.



Part B

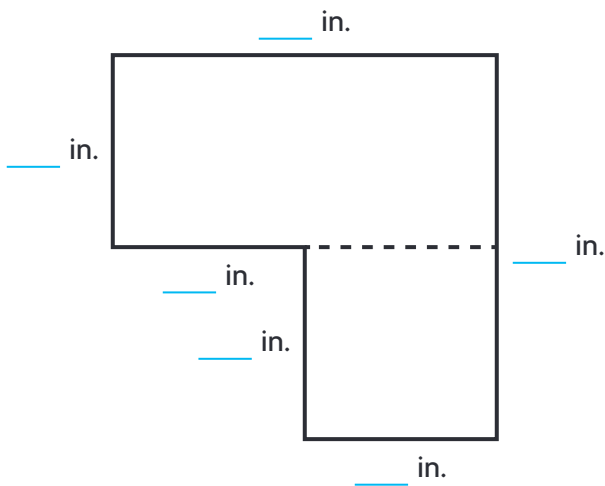
Compare the amount of wood he would need to make a fence around the first flowerbed you drew to the amount of wood he would need to make a fence around the second flowerbed you drew.

15. Alisha draws a sketch of her living room on grid paper. Each square represents 1 square meter. Write and solve an equation that can be used to find the perimeter of the living room in meters.



_____ meters

16. Use an inch ruler to find the length of each side. Then find the perimeter.



_____ inches

17. A book cover in the shape of a rectangle has a length of 10 inches and a width of 6 inches. Write a formula that can be used to find the perimeter of the book cover. Then find the perimeter.

