Around the Edge

Add the outside sides to find each perimeter.

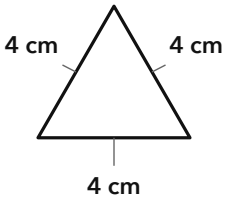
3.GR.C.8 "Identify perimeter as an attribute of two-dimensional figures and measure the distance around the outside of a figure by counting units or adding lengths."

NAME _____ DATE _____

12 CM PERIMETER

Perimeter is the distance around the outside of a shape. Add all the side lengths. If the total is 12 cm, choose TWELVE.

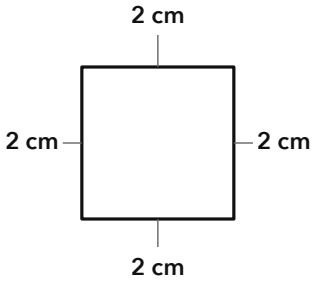
This triangle has a perimeter of $4 + 4 + 4 = 12$ cm.



NOT 12 CM

Add all the outside side lengths. If the total is not 12 cm, choose OTHER.

This square has a perimeter of $2 + 2 + 2 + 2 = 8$ cm.



1 SORT

8 items

Circle TWELVE or OTHER for each figure, then choose two figures for Part 2 and explain how you found their perimeters.

1.

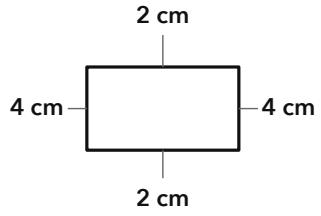


Figure 1

TWELVE OTHER

2.

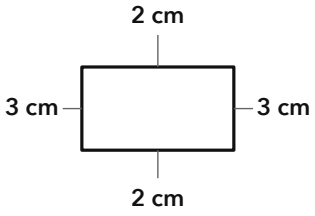


Figure 2

TWELVE OTHER

3.

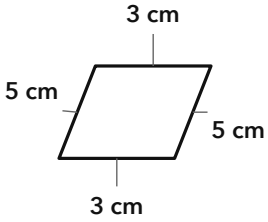


Figure 3

TWELVE OTHER

4.

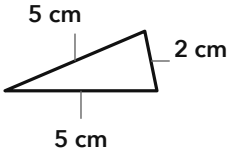


Figure 4

TWELVE OTHER

5.

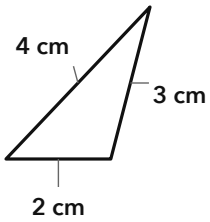


Figure 5

TWELVE OTHER

6.

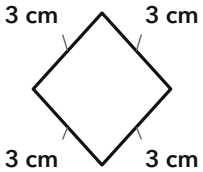


Figure 6

TWELVE OTHER

7.

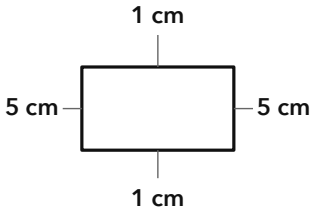


Figure 7

TWELVE OTHER

8.

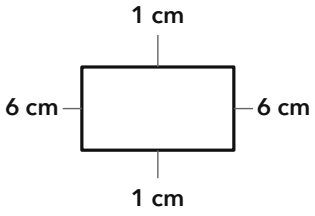


Figure 8

TWELVE OTHER

2 PROVE IT

Explain your thinking

Pick two items from Part 1. For each one, tell how you knew where it belonged.

ITEM # _____ **HOW I KNEW** _____

ITEM # _____ **HOW I KNEW** _____

3 MAKE YOUR OWN

One of each

For Part 3, write one new shape with labeled side lengths for TWELVE and one for OTHER, then find each perimeter.

TWELVE

OTHER

CHALLENGE

Draw two different shapes that each have a 12 cm perimeter, label every side, and write an addition equation for each.

ANSWER KEY # Around the Edge

PART 1 · SORT

#	ITEM	CATEGORY	WHY
1	Figure 1 (rectangle)	**TWELVE**	2 + 4 + 2 + 4 = 12 cm.
2	Figure 2 (rectangle)	**OTHER**	2 + 3 + 2 + 3 = 10 cm.
3	Figure 3 (parallelogram)	**OTHER**	3 + 5 + 3 + 5 = 16 cm.
4	Figure 4 (isosceles)	**TWELVE**	5 + 2 + 5 = 12 cm.
5	Figure 5 (triangle)	**OTHER**	2 + 3 + 4 = 9 cm.
6	Figure 6 (rhombus)	**TWELVE**	3 + 3 + 3 + 3 = 12 cm.
7	Figure 7 (rectangle)	**TWELVE**	1 + 5 + 1 + 5 = 12 cm.
8	Figure 8 (rectangle)	**OTHER**	1 + 6 + 1 + 6 = 14 cm.

PART 2 · PROVE IT

Accept any explanation that names the deciding feature from the rule box for the chosen item.

PART 3 · MAKE YOUR OWN (SAMPLE ANSWERS)

- **TWELVE**: A square with four 3 cm sides has a perimeter of 3 + 3 + 3 + 3 = 12 cm.
- **OTHER**: A triangle with sides of 4 cm, 4 cm, and 5 cm has a perimeter of 4 + 4 + 5 = 13 cm.

Challenge: Square: four 3 cm sides, 3 + 3 + 3 + 3 = 12 cm. Triangle: sides of 2 cm, 5 cm, and 5 cm, 2 + 5 + 5 = 12 cm.

For Part 2, accept any two figures when the student adds every outside side length and uses the totals to justify the categories. The perimeter must be stated in centimeters.