Four-Side Sort

Look closely at corners and sides.

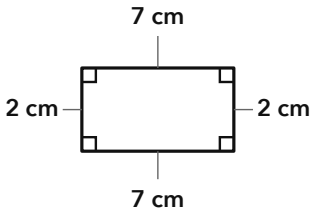
3.G.1 "Use attributes of quadrilaterals to classify rhombuses, rectangles, and squares. Understand that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles..."

NAME _____ DATE _____

RECTANGLE, RHOMBUS, OR SQUARE

A four-sided shape is in this group if it has four square corners or four equal sides. A square has both, so it is a rectangle and a rhombus.

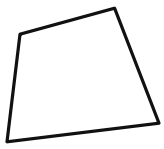
This 2 cm by 7 cm shape has four square corners.



OTHER QUADRILATERAL

This shape has four sides, but it does not have four square corners or four equal sides. It is not a rectangle, rhombus, or square.

This four-sided shape has sides and corners that do not meet either rule above.



1 SORT

8 items

Circle GROUP or OTHER for each figure, then choose one figure from each group and explain how you know.

1.

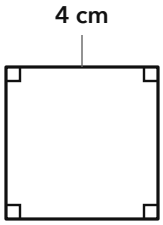


Figure 1

GROUP **OTHER**

2.

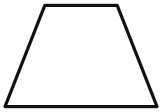


Figure 2

GROUP **OTHER**

3.

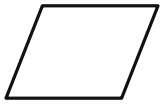


Figure 3

GROUP **OTHER**

4.

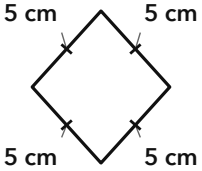


Figure 4

GROUP **OTHER**

5.

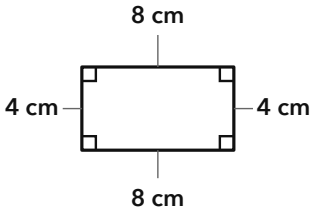


Figure 5

GROUP **OTHER**

6.

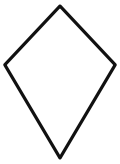


Figure 6

GROUP **OTHER**

7.

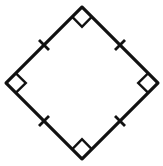


Figure 7

GROUP **OTHER**

8.

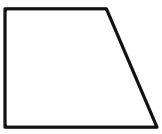


Figure 8

GROUP **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

Draw one new four-sided shape for GROUP and one for OTHER, and write the group name under each.

GROUP _____

OTHER _____

CHALLENGE

Draw a shape that belongs to GROUP in two ways, and write both names it can have.

ANSWER KEY # Four-Side Sort

GRADE 3 · 3.G.1

PART 1 · SORT

#	ITEM	CATEGORY	WHY
1	Figure 1 (square)	**GROUP**	It has four square corners and four equal sides.
2	Figure 2 (trapezoid)	**OTHER**	It has neither four square corners nor four equal sides.
3	Figure 3 (parallelogram)	**OTHER**	It has neither four square corners nor four equal sides.
4	Figure 4 (rhombus)	**GROUP**	Its four sides are equal.
5	Figure 5 (rectangle)	**GROUP**	It has four square corners.
6	Figure 6 (kite)	**OTHER**	It has neither four square corners nor four equal sides.
7	Figure 7 (polygon)	**GROUP**	This turned square still has four square corners and four equal sides.
8	Figure 8 (right_trapezoid)	**OTHER**	It has two square corners, not four, and its four sides are not equal.

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)

- **GROUP**: a 1 cm by 9 cm rectangle.
- **OTHER**: a four-sided shape with no square corners and four different side lengths.

Challenge: A square, labeled rectangle and rhombus.

For the explanations, students might say Figure 1 is GROUP because it has four square corners, and Figure 2 is OTHER because it has neither four square corners nor four equal sides. Accept any correctly drawn new examples that meet the rules.