Right Angle Sort

Use right angles to find rectangles.

NY-4.G.2.c "Identify and name all quadrilaterals with four right angles as rectangles."

NAME _____ DATE _____

RECTANGLES

A rectangle is a quadrilateral with four right angles. A square is also a rectangle because it has four right angles.

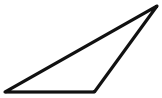
Example shape



OTHER SHAPES

Other shapes do not have both four sides and four right angles.

Example shape



1 SORT

8 items

For each figure, circle RECTANGLES or OTHERS, then choose two figures and tell how their sides and right angles helped you sort them.

1.

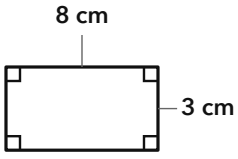


Figure 1

RECTANGLES OTHERS

2.

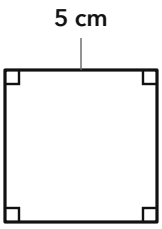


Figure 2

RECTANGLES OTHERS

3.

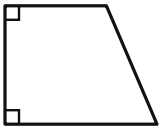


Figure 3

RECTANGLES **OTHERS**

4.

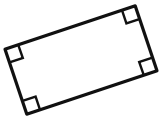


Figure 4

RECTANGLES **OTHERS**

5.

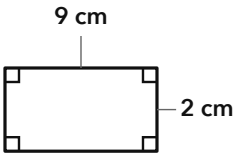


Figure 5

RECTANGLES **OTHERS**

6.

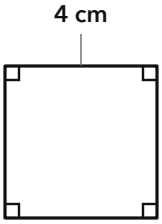


Figure 6

RECTANGLES **OTHERS**

7.

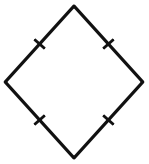


Figure 7

RECTANGLES **OTHERS**

8.

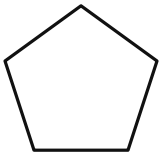


Figure 8

RECTANGLES **OTHERS**

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

Write one new example for each category. Do not use a figure from Part 1.

RECTANGLES _____

OTHERS _____

CHALLENGE

Can a quadrilateral have exactly three right angles? Explain your answer.

ANSWER KEY

Right Angle Sort

GRADE 4 · NY-4.G.2.c

PART 1 · SORT

#	ITEM	CATEGORY	WHY
1	Figure 1 (rectangle)	**RECTANGLES**	It has four sides and four right angles.
2	Figure 2 (square)	**RECTANGLES**	A square has four sides and four right angles, so it is a rectangle.
3	Figure 3 (right_trapezoid)	**OTHERS**	It has only two right angles, not four.
4	Figure 4 (polygon)	**RECTANGLES**	It is a four-sided shape with four right angles.
5	Figure 5 (rectangle)	**RECTANGLES**	It has four sides and four right angles.
6	Figure 6 (square)	**RECTANGLES**	A square has four right angles, so it is a rectangle.
7	Figure 7 (rhombus)	**OTHERS**	It does not have four right angles.
8	Figure 8 (pentagon)	**OTHERS**	It has five sides, so it is not a quadrilateral.

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)

- **RECTANGLES**: A quadrilateral with side lengths 11 cm and 4 cm and four right angles.
- **OTHERS**: A shape with five sides.

Challenge: No. If a quadrilateral has three right angles, its fourth angle must also be a right angle, so it is a rectangle.

Sort key: 1, 2, 4, 5, and 6 are RECTANGLES. Figures 3, 7, and 8 are OTHERS. For Part 2, accept explanations that correctly identify four sides and four right angles, or explain which requirement is missing.