

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.

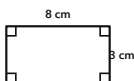


Figure 1

RECTANGLES

OTHERS

2.

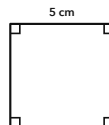


Figure 2

RECTANGLES

OTHERS

3.

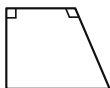


Figure 3

RECTANGLES

OTHERS

4.

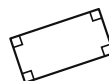


Figure 4

RECTANGLES

OTHERS

5.

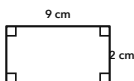


Figure 5

RECTANGLES

OTHERS

6.

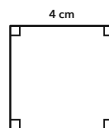


Figure 6

RECTANGLES

OTHERS

7.

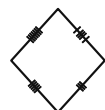


Figure 7

RECTANGLES

OTHERS

8.

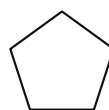


Figure 8

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.

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.