Rectangle Detectives

Use right angles to sort each figure.

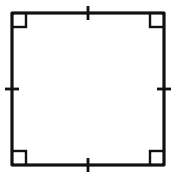
CCSS.Math.Content.5.G.B.3 "Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category. For example, all rectangles have four right angles and squares are rectangles..."

NAME _____ DATE _____

RECTANGLE

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

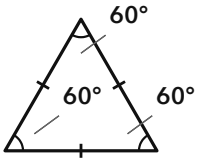
Example figure



NOT A RECTANGLE

A figure that does not have four right angles is not a rectangle.

Example figure



1 SORT

8 items

Circle RECTANGLE or NOT for each figure; then, in **PROVE IT**, choose two figures and explain how you knew where each belonged.

1.

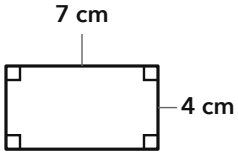


Figure 1

RECTANGLE **NOT**

2.

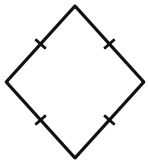


Figure 2

RECTANGLE **NOT**

3.

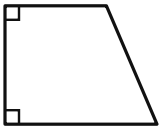


Figure 3

RECTANGLE **NOT**

4.



Figure 4

RECTANGLE **NOT**

5.

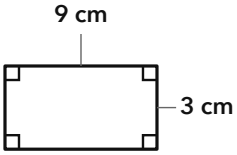


Figure 5

RECTANGLE **NOT**

6.

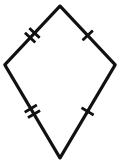


Figure 6

RECTANGLE **NOT**

7.

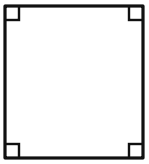


Figure 7

RECTANGLE **NOT**

8.

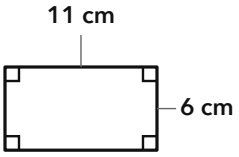


Figure 8

RECTANGLE **NOT**

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

In **MAKE YOUR OWN**, write one new example of a rectangle and one new example of a figure that is not a rectangle. Tell why each example belongs in that category.

RECTANGLE _____

NOT _____

CHALLENGE

A figure has four right angles and all four sides are equal. Is it a rectangle or not? Explain.

ANSWER KEY

Rectangle Detectives

GRADE 5 · 5.G.B.3

PART 1 · SORT

#	ITEM	CATEGORY	WHY
1	Figure 1 (rectangle)	**RECTANGLE**	It has four right angles.
2	Figure 2 (rhombus)	**NOT**	A rhombus like this does not have four right angles.
3	Figure 3 (right_trapezoid)	**NOT**	It has only two right angles, not four.
4	Figure 4 (polygon)	**RECTANGLE**	It has four right angles.
5	Figure 5 (rectangle)	**RECTANGLE**	It has four right angles.
6	Figure 6 (kite)	**NOT**	This kite does not have four right angles.
7	Figure 7 (polygon)	**RECTANGLE**	It has four right angles.
8	Figure 8 (rectangle)	**RECTANGLE**	It has four right angles.

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)

- **RECTANGLE**: A square is a rectangle because it has four right angles.
- **NOT**: Not a Rectangle: A circle is not a rectangle because it does not have four right angles.

Challenge: It is a rectangle. It is a square, and squares have four right angles.

Items 1, 4, 5, 7, and 8 are RECTANGLE. Items 2, 3, and 6 are NOT; accept explanations that correctly use the number of right angles.