

Rectangle Match

Can two matching shapes make a rectangle?

2.8.D "compose two-dimensional shapes and three-dimensional solids with given properties or attributes; and"

NAME _____

DATE _____

MAKES A RECTANGLE

Put the shape beside one matching copy. If the two shapes can make one rectangle, choose MAKES.

A right trapezoid and a matching copy can make a rectangle.



DOES NOT MAKE A RECTANGLE

Put the shape beside one matching copy. If the two shapes cannot make one rectangle, choose CANNOT.

A regular octagon and a matching copy cannot make a rectangle.



1 SORT _____ 8 items

For Part 1, circle MAKES or CANNOT for each figure; for Part 2, choose two figures and explain how putting each one with a matching copy does or does not make a rectangle.

1.

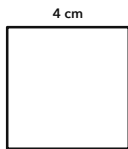


Figure 1

MAKES

CANNOT

2.

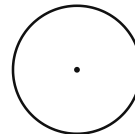


Figure 2

MAKES

CANNOT

3.

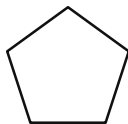


Figure 3

MAKES

CANNOT

4.

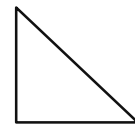


Figure 4

MAKES

CANNOT

5.

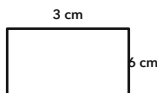


Figure 5

MAKES

CANNOT

6.

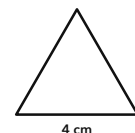


Figure 6

MAKES

CANNOT

7.

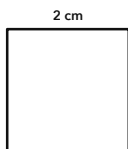


Figure 7

MAKES

CANNOT

8.



Figure 8

MAKES

CANNOT

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 for MAKES and one new shape for CANNOT.

MAKES _____

CANNOT _____

CHALLENGE

Draw two matching right triangles that make a rectangle, and draw the line where the triangles touch.

PART 1 • SORT

#	ITEM	CATEGORY	WHY
1	Figure 1 (square)	MAKES	Two matching squares placed side by side make a rectangle.
2	Figure 2 (circle)	CANNOT	Two matching circles make a larger rounded figure, not a rectangle.
3	Figure 3 (pentagon)	CANNOT	Two matching regular pentagons do not make one rectangle.
4	Figure 4 (right_triangle)	MAKES	Two matching right triangles can join along their longest sides to make a rectangle.
5	Figure 5 (rectangle)	MAKES	Two matching rectangles placed side by side make a larger rectangle.
6	Figure 6 (equilateral)	CANNOT	Two matching equilateral triangles make a diamond shape, not a rectangle.
7	Figure 7 (square)	MAKES	Two matching squares placed side by side make a rectangle.
8	Figure 8 (semicircle)	CANNOT	Two matching semicircles make a circle, not a rectangle.

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)

- **MAKES:** a 2-by-3 rectangle
- **CANNOT:** an octagon

Challenge: A rectangle with one diagonal drawn from one corner to the opposite corner, making two matching right triangles.

Part 1 answers are 1 MAKES, 2 CANNOT, 3 CANNOT, 4 MAKES, 5 MAKES, 6 CANNOT, 7 MAKES, 8 CANNOT. In Part 2, accept explanations that correctly describe whether two matching copies can join to form one rectangle.