

Four-Side Detectives

Sort quadrilaterals by their shape families.

3.6.B “use attributes to recognize rhombuses, parallelograms, trapezoids, rectangles, and squares as examples of quadrilaterals and draw examples of quadrilaterals that do not belong to any of these subcategories;”

NAME _____

DATE _____

NAMED QUADRILATERAL

This four-sided shape is a square, rectangle, rhombus, parallelogram, or trapezoid. These named shapes have special side or angle patterns.

A right trapezoid.



OTHER QUADRILATERAL

This four-sided shape is not a square, rectangle, rhombus, parallelogram, or trapezoid. It still has exactly 4 sides.

An irregular four-sided shape with no parallel sides.



1 SORT _____ 8 items

For Part 1, circle SPECIAL or OTHER for each figure, then for Part 2, pick two figures and explain how you knew.

1.

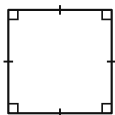


Figure 1

SPECIAL

OTHER

2.



Figure 2

SPECIAL

OTHER

3.

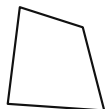


Figure 3

SPECIAL

OTHER

4.

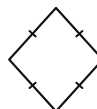


Figure 4

SPECIAL

OTHER

5.

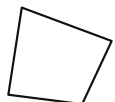


Figure 5

SPECIAL

OTHER

6.

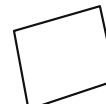


Figure 6

SPECIAL

OTHER

7.

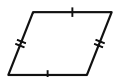


Figure 7

SPECIAL

OTHER

8.



Figure 8

SPECIAL

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

For Part 3, draw one new SPECIAL quadrilateral and one new OTHER quadrilateral.

SPECIAL

OTHER

CHALLENGE

Choose one OTHER figure from Part 1. Write two reasons it is not a square.

PART 1 • SORT

#	ITEM	CATEGORY	WHY
1	Figure 1 (square)	SPECIAL	A square is a named quadrilateral.
2	Figure 2 (rectangle)	SPECIAL	A rectangle is a named quadrilateral.
3	Figure 3 (polygon)	OTHER	This irregular quadrilateral has no parallel sides or right angles.
4	Figure 4 (rhombus)	SPECIAL	A rhombus is a named quadrilateral.
5	Figure 5 (polygon)	OTHER	This irregular quadrilateral has no parallel sides or right angles.
6	Figure 6 (polygon)	OTHER	This irregular quadrilateral has no parallel sides or right angles.
7	Figure 7 (parallelogram)	SPECIAL	A parallelogram is a named quadrilateral.
8	Figure 8 (trapezoid)	SPECIAL	A trapezoid is a named 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)

- **SPECIAL:** Draw a trapezoid.
- **OTHER:** Draw an irregular four-sided shape with no parallel sides.

Challenge: Figure 3 does not have four equal sides, and it does not have four right angles.

Part 2 answers vary. Students should name visible attributes, such as four equal sides, four right angles, parallel sides, or a lack of these attributes.