

Side Sleuth Sort

Use sides to sort shapes.

MA.3.GR.1.2 "Identify and draw quadrilaterals based on their defining attributes. Quadrilaterals include parallelograms, rhombi, rectangles, squares and trapezoids."

NAME _____

DATE _____

FOUR-SIDED SHAPES

These shapes are closed and have exactly four straight sides. They are quadrilaterals.

A square goes in FOUR SIDES.

OTHER SHAPES

These do not have exactly four straight sides, or they are not closed. They are not quadrilaterals.

A circle goes in OTHER.

1 SORT _____ 8 items

Circle FOUR SIDES or OTHER for each item, then in PROVE IT choose two items and tell whether each one is closed and has exactly four straight sides.

- | | | |
|--|----------------------------------|-----------------------------|
| 1. A triangle with 3 straight sides | ☐ FOUR SIDES | ☐ OTHER |
| 2. A rectangle with 4 straight sides | ☐ FOUR SIDES | ☐ OTHER |
| 3. A rhombus with 4 equal straight sides | ☐ FOUR SIDES | ☐ OTHER |
| 4. A closed shape with 5 straight sides | ☐ FOUR SIDES | ☐ OTHER |
| 5. A shape with 4 sides, but 1 side is curved | ☐ FOUR SIDES | ☐ OTHER |
| 6. A trapezoid with 4 straight sides | ☐ FOUR SIDES | ☐ OTHER |
| 7. 4 straight segments that do not meet to close a shape | ☐ FOUR SIDES | ☐ OTHER |
| 8. A parallelogram with 4 straight sides | ☐ FOUR SIDES | ☐ 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

Write one new example for FOUR SIDES and one new example for OTHER.

FOUR SIDES _____

OTHER _____

CHALLENGE

Draw a quadrilateral that is not a rectangle or a square. Label its four sides.

PART 1 • SORT

#	ITEM	CATEGORY	WHY
1	A triangle with 3 straight sides	OTHER	It has only 3 straight sides.
2	A rectangle with 4 straight sides	FOUR SIDES	A rectangle is closed and has 4 straight sides.
3	A rhombus with 4 equal straight sides	FOUR SIDES	A rhombus is closed and has 4 straight sides.
4	A closed shape with 5 straight sides	OTHER	It has 5 sides, not 4.
5	A shape with 4 sides, but 1 side is curved	OTHER	A quadrilateral must have 4 straight sides.
6	A trapezoid with 4 straight sides	FOUR SIDES	A trapezoid is closed and has 4 straight sides.
7	4 straight segments that do not meet to close a shape	OTHER	The segments do not make a closed shape.
8	A parallelogram with 4 straight sides	FOUR SIDES	A parallelogram is closed and has 4 straight sides.

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)

- **FOUR SIDES:** A closed shape with four straight sides that are 2 cm, 4 cm, 3 cm, and 5 cm long.
- **OTHER:** A closed shape with 6 straight sides.

Challenge: A trapezoid with its four sides labeled 3 cm, 5 cm, 4 cm, and 6 cm.

Sort key: 1 OTHER, 2 FOUR SIDES, 3 FOUR SIDES, 4 OTHER, 5 OTHER, 6 FOUR SIDES, 7 OTHER, 8 FOUR SIDES. In PROVE IT, accept explanations that correctly name the number of straight sides and whether the figure is closed.