

Symbol Match Up

Tell segment names from angle names.

4.MG.5.f "Use symbolic notation to name line segments and angles in quadrilaterals."

NAME _____

DATE _____

LINE SEGMENT

A line segment name has two endpoint letters with a bar over them. It can name a side or a diagonal of a quadrilateral.

$\overline{WY}$ in quadrilateral WXYZ

ANGLE

An angle name has an angle symbol and three letters. The middle letter names the vertex.

$\angle XYZ$ in quadrilateral WXYZ

1 SORT

8 items

Part 1: Circle SEGMENT or ANGLE for each expression; Part 2: choose two items and tell which symbol or letters helped you decide.

1. $\overline{AB}$ in quadrilateral ABCD

SEGMENT

ANGLE

2. $\angle FGH$ in quadrilateral EFGH

SEGMENT

ANGLE

3. $\angle JKL$ in quadrilateral JKLM

SEGMENT

ANGLE

4. $\overline{NP}$ in quadrilateral NOPQ

SEGMENT

ANGLE

5. $\overline{RS}$ in quadrilateral RSTU

SEGMENT

ANGLE

6. $\angle VWX$ in quadrilateral UVWX

SEGMENT

ANGLE

7. $\overline{YZ}$ in quadrilateral YZCD

SEGMENT

ANGLE

8. $\overline{DE}$ in quadrilateral DEFG

SEGMENT

ANGLE

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

Part 3 MAKE YOUR OWN: For quadrilateral CDEF, write one new line-segment name and one new angle name using symbols.

SEGMENT _____

ANGLE _____

CHALLENGE

Draw quadrilateral GHJK with vertices in order. Then write symbolic names for all four sides and all four angles.

PART 1 • SORT

#	ITEM	CATEGORY	WHY
1	$\overline{AB}$ in quadrilateral ABCD	SEGMENT	It has a bar over two endpoint letters.
2	$\angle FGH$ in quadrilateral EFGH	ANGLE	It has an angle symbol and three letters.
3	$\angle JKL$ in quadrilateral JKLM	ANGLE	It has an angle symbol and three letters.
4	$\overline{NP}$ in quadrilateral NOPQ	SEGMENT	It has a bar over two endpoint letters.
5	$\overline{RS}$ in quadrilateral RSTU	SEGMENT	It has a bar over two endpoint letters.
6	$\angle VWX$ in quadrilateral UVWX	ANGLE	It has an angle symbol and three letters.
7	$\overline{YZ}$ in quadrilateral YZCD	SEGMENT	It has a bar over two endpoint letters.
8	$\overline{DE}$ in quadrilateral DEFG	SEGMENT	It has a bar over two endpoint letters.

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)

- **SEGMENT:** $\overline{CD}$
- **ANGLE:** $\angle DEF$

Challenge: Sides: $\overline{GH}$, $\overline{HJ}$, $\overline{JK}$, $\overline{KG}$. Angles: $\angle GHJ$, $\angle HJK$, $\angle JKG$, $\angle KGH$.

Accept any correctly named side or diagonal as a line segment and any correctly named interior angle. For an angle, the vertex letter must be the middle letter.