Parallel Pair Hunt

Sort figures by their parallel sides.

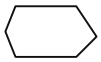
CCSS.Math.Content.5.G.B "Classify two-dimensional figures into categories based on their properties."

NAME _____ DATE _____

HAS PARALLEL SIDES

These figures have at least one pair of sides that stay the same distance apart and never meet.

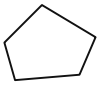
A six-sided figure with its top and bottom sides parallel.



NO PARALLEL SIDES

These figures do not have any pair of sides that stay the same distance apart and never meet.

An irregular five-sided figure with no parallel sides.



1 SORT

8 items

Part 1: For each figure, circle its category; Part 2: Choose two figures and explain which sides are parallel or why no pair is parallel.

1. 

Figure 1

PARALLEL NO PAIRS

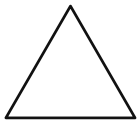
2. 

Figure 2

PARALLEL NO PAIRS

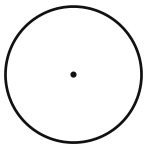
3. 

Figure 3

PARALLEL NO PAIRS

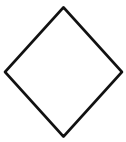
4. 

Figure 4

PARALLEL NO PAIRS

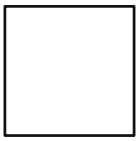
5. 

Figure 5

PARALLEL NO PAIRS

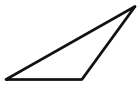
6. 

Figure 6

PARALLEL NO PAIRS

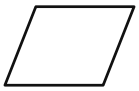
7. 

Figure 7

PARALLEL NO PAIRS

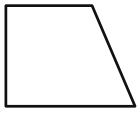
8. 

Figure 8

PARALLEL NO PAIRS

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: Draw one new two-dimensional figure that has parallel sides and one that has no parallel sides.

PARALLEL

NO PAIRS

CHALLENGE

Challenge: Draw a quadrilateral with exactly one pair of parallel sides. Mark the parallel pair with matching arrows.

ANSWER KEY

Parallel Pair Hunt

GRADE 5 · 5.G.B

PART 1 · SORT

#	ITEM	CATEGORY	WHY
1	Figure 1 (rectangle)	**PARALLEL**	A rectangle has two pairs of parallel opposite sides.
2	Figure 2 (equilateral)	**NO PAIRS**	A triangle has no parallel sides.
3	Figure 3 (circle)	**NO PAIRS**	A circle has no sides, so it has no pair of parallel sides.
4	Figure 4 (rhombus)	**PARALLEL**	A rhombus has two pairs of parallel opposite sides.
5	Figure 5 (square)	**PARALLEL**	A square has two pairs of parallel opposite sides.
6	Figure 6 (obtuse_triangle)	**NO PAIRS**	A triangle has no parallel sides.
7	Figure 7 (parallelogram)	**PARALLEL**	A parallelogram has two pairs of parallel opposite sides.
8	Figure 8 (right_trapezoid)	**PARALLEL**	A right trapezoid has one pair of parallel 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)

- **PARALLEL**: A regular hexagon.
- **NO PAIRS**: A scalene triangle.

Challenge: Draw a quadrilateral with vertices at (0,0), (8,0), (6,4), and (2,4). Mark the top and bottom sides with matching arrows.

Accept any accurate explanation that identifies at least one parallel pair or correctly states that no parallel pair exists. For the challenge, check that only one pair of opposite sides is parallel.