

Corner Count Sort

Sort shapes by their sides and vertices.

2.8.A "create two-dimensional shapes based on given attributes, including number of sides and vertices;"

NAME _____

DATE _____

4 SIDES AND 4 VERTICES

These shapes have exactly 4 straight sides and 4 vertices. A vertex is a corner where two sides meet.

Example: a slanted four-sided shape.



NOT 4 SIDES AND 4 VERTICES

These shapes do not have exactly 4 straight sides and 4 vertices. They may have fewer sides, more sides, or no vertices.

Example: a six-sided shape.



1 SORT _____ 8 items

Look at each figure, then circle FOUR SIDES or NOT FOUR.

1.

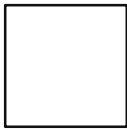


Figure 1

FOUR
SIDES

NOT
FOUR

2.



Figure 2

FOUR
SIDES

NOT
FOUR

3.



Figure 3

FOUR
SIDES

NOT
FOUR

4.

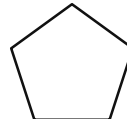


Figure 4

FOUR
SIDES

NOT
FOUR

5.

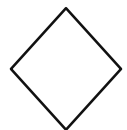


Figure 5

FOUR
SIDES

NOT
FOUR

6.

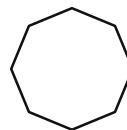


Figure 6

FOUR
SIDES

NOT
FOUR

7.

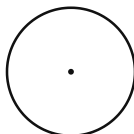


Figure 7

FOUR
SIDES

NOT
FOUR

8.



Figure 8

FOUR
SIDES

NOT
FOUR

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 and draw one new shape for each category. Label the number of sides and vertices on each shape.

FOUR SIDES

NOT FOUR

CHALLENGE

Draw a shape with 4 sides and 4 vertices that is not a square or a rectangle. Label its 4 vertices.

PART 1 • SORT

#	ITEM	CATEGORY	WHY
1	Figure 1 (square)	FOUR SIDES	A square has 4 straight sides and 4 vertices.
2	Figure 2 (rectangle)	FOUR SIDES	A rectangle has 4 straight sides and 4 vertices.
3	Figure 3 (triangle)	NOT FOUR	A triangle has 3 sides and 3 vertices.
4	Figure 4 (pentagon)	NOT FOUR	A pentagon has 5 sides and 5 vertices.
5	Figure 5 (rhombus)	FOUR SIDES	A rhombus has 4 straight sides and 4 vertices.
6	Figure 6 (octagon)	NOT FOUR	An octagon has 8 sides and 8 vertices.
7	Figure 7 (circle)	NOT FOUR	A circle has no straight sides and no vertices.
8	Figure 8 (semicircle)	NOT FOUR	A semicircle does not have 4 straight sides and 4 vertices.

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 trapezoid with 4 sides and 4 vertices.
- **NOT FOUR:** A seven-sided shape with 7 vertices.

Challenge: A right trapezoid labeled A, B, C, and D at its 4 vertices.

Items 1, 2, and 5 are **FOUR SIDES**. Items 3, 4, 6, 7, and 8 are **NOT FOUR**. Accept different student-created shapes when the labeled side and vertex counts are correct.