Edge Count Check

Decide whether each perimeter label matches the rectangle.

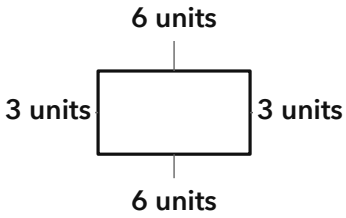
MA.2.GR.2.1 "Explore perimeter as an attribute of a figure by placing unit segments along the boundary without gaps or overlaps. Find perimeters of rectangles by counting unit segments."

NAME _____ DATE _____

PERIMETER MATCHES

The P number equals all the unit segments around the outside edge. Count both long sides and both short sides.

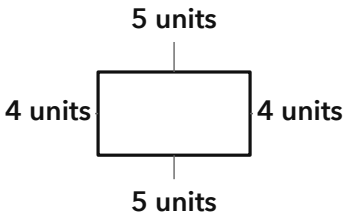
P = 18 units



PERIMETER DOES NOT MATCH

The P number is not the total number of unit segments around the outside edge. A side may have been missed or counted wrong.

P = 16 units



1 SORT

8 items

Circle MATCHES or NO MATCH for each figure, then pick two figures and tell how you counted every outside edge.

1.

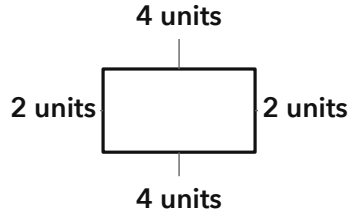


Figure 1: P = 12 units

MATCHES NO MATCH

2.

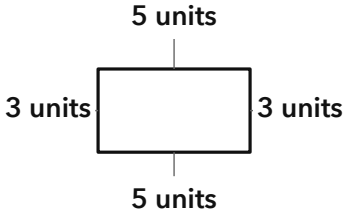


Figure 2: P = 14 units

MATCHES NO MATCH

3.

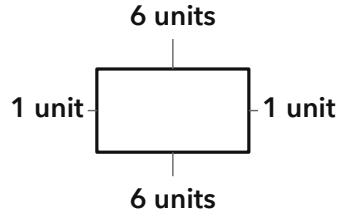


Figure 3: P = 12 units

MATCHES NO MATCH

4.

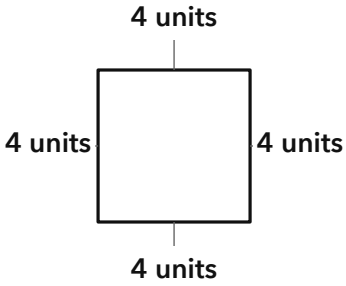


Figure 4: P = 16 units

MATCHES NO MATCH

5.

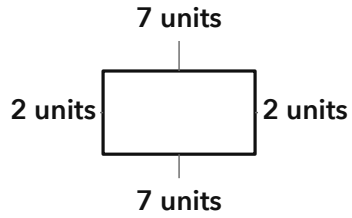


Figure 5: P = 18 units

MATCHES NO MATCH

6.

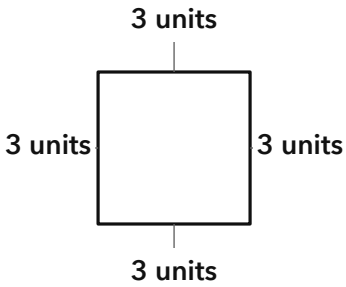


Figure 6: P = 10 units

MATCHES NO MATCH

7.

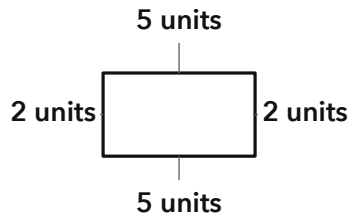


Figure 7: P = 14 units

MATCHES NO MATCH

8.

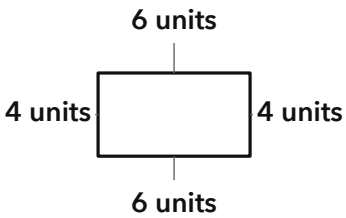


Figure 8: P = 18 units

MATCHES NO MATCH

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

Draw one new rectangle for MATCHES and one new rectangle for NO MATCH. Label the side lengths and write a P number on each drawing.

MATCHES

NO MATCH

CHALLENGE

Use a ruler and let 1 centimeter stand for 1 unit. Draw a rectangle 8 units long and 3 units wide. Mark each 1-unit segment along all four edges without gaps or overlaps. Count the unit segments around the whole boundary. Write its perimeter and the four side counts.

ANSWER KEY

Edge Count Check

GRADE 2 · MA.2.GR.2.1

PART 1 · SORT

#	ITEM	CATEGORY	WHY
1	Figure 1: P = 12 units (rectangle)	**MATCHES**	4 + 2 + 4 + 2 = 12 unit segments.
2	Figure 2: P = 14 units (rectangle)	**NO MATCH**	The perimeter is 16 units, not 14 units.
3	Figure 3: P = 12 units (rectangle)	**NO MATCH**	The perimeter is 14 units, not 12 units.
4	Figure 4: P = 16 units (square)	**MATCHES**	4 + 4 + 4 + 4 = 16 unit segments.
5	Figure 5: P = 18 units (rectangle)	**MATCHES**	7 + 2 + 7 + 2 = 18 unit segments.
6	Figure 6: P = 10 units (square)	**NO MATCH**	The perimeter is 12 units, not 10 units.
7	Figure 7: P = 14 units (rectangle)	**MATCHES**	5 + 2 + 5 + 2 = 14 unit segments.
8	Figure 8: P = 18 units (rectangle)	**NO MATCH**	The perimeter is 20 units, not 18 units.

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)

- **MATCHES**: A 2-unit by 8-unit rectangle with P = 20 units.
- **NO MATCH**: A 6-unit by 7-unit rectangle with P = 24 units.

Challenge: Draw an 8 cm by 3 cm rectangle with 1 cm marks around its boundary. Count 8, 3, 8, and 3 unit segments on its sides: 8 + 3 + 8 + 3 = 22. P = 22 units.

Accept equivalent explanations that count all four sides around the boundary without gaps or overlaps. In Part 3, the NO MATCH drawing must have a perimeter label that differs from the total of its four side lengths.