Spot the Jump

Read the marked points from left to right. For this sort, the rule is add 5 each time.

4.OA.C.5 "Generate and analyze a number or shape pattern that follows a given rule."

NAME _____ DATE _____

FOLLOWS THE RULE

Every jump between marked points matches the given rule. In this example, the rule is add 3.

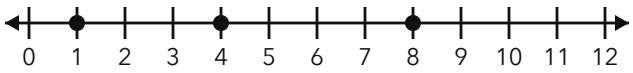
1, 4, 7



BREAKS THE RULE

At least one jump between marked points does not match the given rule. In this example, the rule is add 3.

1, 4, 8



1 SORT

8 items

For each figure, circle FOLLOWS or BREAKS, then choose one figure from each category and explain how you know.

1.

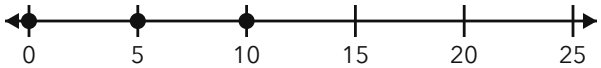


Figure 1

FOLLOWS BREAKS

2.

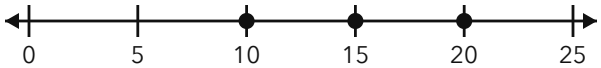


Figure 2

FOLLOWS BREAKS

3.

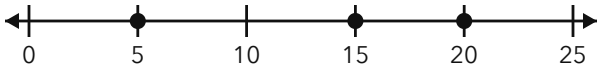


Figure 3

FOLLOWS BREAKS

4.

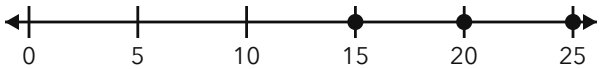


Figure 4

FOLLOWS BREAKS

5.

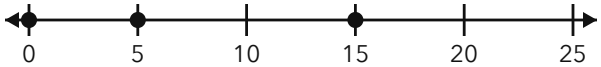


Figure 5

FOLLOWS BREAKS

6.

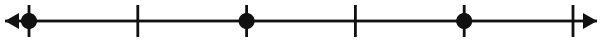


Figure 6

FOLLOWS **BREAKS**

7.

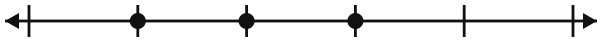


Figure 7

FOLLOWS **BREAKS**

8.

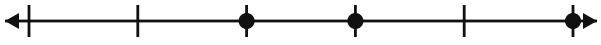


Figure 8

FOLLOWS **BREAKS**

2 PROVE IT

Explain your thinking

Choose one figure from each category and explain how you know.

ITEM # _____ **HOW I KNEW** _____

ITEM # _____ **HOW I KNEW** _____

3 MAKE YOUR OWN

One of each

Write three numbers greater than 25 that FOLLOW the add 5 rule. Then write three numbers greater than 25 that BREAK it.

FOLLOWS _____

BREAKS _____

CHALLENGE

Write four numbers greater than 25 with exactly one jump of 5. Name the jump that follows the rule.

ANSWER KEY # Spot the Jump

PART 1 · SORT

#	ITEM	CATEGORY	WHY
1	Figure 1 (numberline)	**FOLLOWS**	Both jumps are 5.
2	Figure 2 (numberline)	**FOLLOWS**	Both jumps are 5.
3	Figure 3 (numberline)	**BREAKS**	The jump from 5 to 15 is 10.
4	Figure 4 (numberline)	**FOLLOWS**	Both jumps are 5.
5	Figure 5 (numberline)	**BREAKS**	The jump from 5 to 15 is 10.
6	Figure 6 (numberline)	**BREAKS**	Both jumps are 10, not 5.
7	Figure 7 (numberline)	**FOLLOWS**	Both jumps are 5.
8	Figure 8 (numberline)	**BREAKS**	The jump from 15 to 25 is 10.

PART 2 · PROVE IT

Task: Choose one figure from each category and explain how you know.
Accept any explanation that names the deciding feature from the rule box for the chosen item.

PART 3 · MAKE YOUR OWN (SAMPLE ANSWERS)

- **FOLLOWS**: 30, 35, 40
- **BREAKS**: 30, 35, 41

Challenge: 30, 35, 42, 48. The jump from 30 to 35 follows the rule.

For Part 2, a student might explain that Figure 1 follows because both jumps are 5, while Figure 3 breaks because its first jump is 10. Accept other choices supported by the jumps shown.