LESSON MAKER PRO

Rule Match Hunt

Read input-output tables, test rules, and create patterns.

GRADE 4 · 4.PAR.3.2

4.PAR.3.2 "Use input-output rules, tables, and charts to represent and describe patterns, find relationships, and solve problems."

NAME _____ DATE _____

CHECK THE RULE

Follows the Rule: The output is what you get when you use the rule on the input. Check the math. Does Not Follow: The output is not what the rule gives for the input. Find the output it should have.

WORKED EXAMPLE

Rule: Add 11. Input 6, output 17.

1. Add 11 to the input: 6+11=17.
2. Compare with the stated output 17; they agree.

Answer: FOLLOWS

PRACTICE 8 problems

1 Rule: Add 6. Does this pair follow the rule? Write FOLLOWS or DOES NOT.

Input	Output
7	13

ANSWER _____

2 Rule: Double the input. Does this pair follow the rule? Write FOLLOWS or DOES NOT.

Input	Output
9	17

ANSWER _____

3 Rule: Subtract 8. Does this pair follow the rule? Write FOLLOWS or DOES NOT.

Input	Output
20	12

ANSWER _____

4 Rule: Multiply by 4. Does this pair follow the rule? Write FOLLOWS or DOES NOT.

Input	Output
3	12

ANSWER _____

5 Rule: Add 9. Does this pair follow the rule? Write FOLLOWS or DOES NOT.

Input	Output
5	15

ANSWER _____

6 Rule: Divide by 5. Does this pair follow the rule? Write FOLLOWS or DOES NOT.

Input	Output
35	7

ANSWER _____

7 Rule: Subtract 3. Does this pair follow the rule? Write FOLLOWS or DOES NOT.

Input	Output
16	12

ANSWER _____

8 Rule: Multiply by 2. Does this pair follow the rule? Write FOLLOWS or DOES NOT.

Input	Output
11	22

ANSWER _____

APPLY IT Show your work

1 Choose two practice items. Explain each classification with a calculation.

2 Make a two-row input-output table for a rule you choose. Use one correct output and one incorrect output. Label which row follows the rule and explain how to fix the other.

CHALLENGE One step up

Find one rule that maps 4 to 19 and 7 to 28. Use it to complete the table, then describe its repeated steps.

Input	Output
4	19
7	28
10	____

ANSWER KEY

Rule Match Hunt

GRADE 4 · 4.PAR.3.2

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Rule: Add 6. Does this pair follow the rule? Write FOLLOWS or DOES NOT.	**FOLLOWS. 7 + 6 = 13.**
2	Rule: Double the input. Does this pair follow the rule? Write FOLLOWS or DOES NOT.	**DOES NOT. Double 9 is 18, not 17.**
3	Rule: Subtract 8. Does this pair follow the rule? Write FOLLOWS or DOES NOT.	**FOLLOWS. 20 - 8 = 12.**
4	Rule: Multiply by 4. Does this pair follow the rule? Write FOLLOWS or DOES NOT.	**FOLLOWS. 3 × 4 = 12.**
5	Rule: Add 9. Does this pair follow the rule? Write FOLLOWS or DOES NOT.	**DOES NOT. 5 + 9 = 14, not 15.**
6	Rule: Divide by 5. Does this pair follow the rule? Write FOLLOWS or DOES NOT.	**FOLLOWS. 35 ÷ 5 = 7.**
7	Rule: Subtract 3. Does this pair follow the rule? Write FOLLOWS or DOES NOT.	**DOES NOT. 16 - 3 = 13, not 12.**
8	Rule: Multiply by 2. Does this pair follow the rule? Write FOLLOWS or DOES NOT.	**FOLLOWS. 11 × 2 = 22.**

PART 2 · APPLY IT

1. **Any two correct classifications supported by the calculations in the practice key.** Require two identified items and valid calculations.
2. **FOLLOWS: Rule: Multiply by 6. Input 2, output 12. DOES NOT: Rule: Subtract 5. Input 21, output 17.** Accept correct new examples of both categories.

CHALLENGE

Multiply by 3, then add 7; missing output 37. Other rules matching all stated pairs may be valid if applied consistently.

For Part 2, accept explanations that name the operation and show the correct calculation. The challenge rule works because 4 × 3 + 7 = 19 and 7 × 3 + 7 = 28.