



Patterns and Input/Output Tables

Name: _____

Date: _____

Grade: Grade 4

Part A: Multiple Choice

Circle the best answer for each question.

1. If inputs 1, 2, 3 give outputs 5, 9, 13, what Grade 4 rule fits?

- A) Multiply by 4 add 1
- B) Multiply by 3 add 2
- C) Add 4 each time
- D) Multiply by 5 minus 1

2. Inputs 2, 3, 4 produce outputs 7, 10, 13. The Grade 4 rule is:

- A) Multiply by 2 plus 3
- B) Multiply by 3 plus 1
- C) Add 5 each time
- D) Multiply by 4 minus 3

3. If inputs 0, 1, 2 give outputs 3, 8, 13 in a Grade 4 table, what is the rule?

- A) Multiply by 5 plus 3
- B) Multiply by 4 plus 4
- C) Add 5 each time
- D) Multiply by 3 plus 5

4. For Grade 4 inputs 4, 5, 6 with outputs 9, 11, 13, the rule is:

- A) Multiply by 2 plus 1
- B) Multiply by 3 minus 3
- C) Add 5 each time
- D) Multiply by 2 minus 1

Part B: Fill in the Blank

Write the correct answer on each line.

1. If the Grade 4 rule is multiply by 4 plus 2 and the input is 6, the output is _____.
2. Inputs 1, 2, 3 give Grade 4 outputs 4, 7, 10, so the rule is multiply by 3 plus _____.
3. If the Grade 4 rule is multiply by 5 minus 3 and the output is 22, the input was _____.
4. Using the Grade 4 rule add 4 then multiply by 2, input 7 gives output _____.
5. If the Grade 4 rule is multiply by 6 plus 1 and the input is 3, the output is _____.

Part A: Multiple Choice

Circle the best answer for each question.

1. If inputs 1, 2, 3 give outputs 5, 9, 13, what Grade 4 rule fits?

- A) Multiply by 4 add 1
- B) Multiply by 3 add 2
- C) Add 4 each time
- D) Multiply by 5 minus 1

2. Inputs 2, 3, 4 produce outputs 7, 10, 13. The Grade 4 rule is:

- A) Multiply by 2 plus 3
- B) Multiply by 3 plus 1
- C) Add 5 each time
- D) Multiply by 4 minus 3

3. If inputs 0, 1, 2 give outputs 3, 8, 13 in a Grade 4 table, what is the rule?

- A) Multiply by 5 plus 3
- B) Multiply by 4 plus 4
- C) Add 5 each time
- D) Multiply by 3 plus 5

4. For Grade 4 inputs 4, 5, 6 with outputs 9, 11, 13, the rule is:

- A) Multiply by 2 plus 1
- B) Multiply by 3 minus 3
- C) Add 5 each time
- D) Multiply by 2 minus 1

Part B: Fill in the Blank

Write the correct answer on each line.

1. If the Grade 4 rule is multiply by 4 plus 2 and the input is 6, the output is 26 .
2. Inputs 1, 2, 3 give Grade 4 outputs 4, 7, 10, so the rule is multiply by 3 plus 1 .
3. If the Grade 4 rule is multiply by 5 minus 3 and the output is 22, the input was 5 .
4. Using the Grade 4 rule add 4 then multiply by 2, input 7 gives output 22 .
5. If the Grade 4 rule is multiply by 6 plus 1 and the input is 3, the output is 19 .