



Patterns and Number Sequences

Name: _____

Date: _____

Grade: Grade 3

Part A: Multiple Choice

Circle the best answer for each question.

1. Inputs are 2, 4, 6, 8 and outputs are 7, 9, 11, 13. What is the rule?

- A) Multiply by 3
- B) Add 5
- C) Add 3
- D) Subtract 1

2. What rule makes the pattern 3, 9, 27, 81?

- A) Add 6
- B) Add 18
- C) Multiply by 3
- D) Multiply by 9

3. In the pattern 1, 1, 2, 3, 5, 8, what comes next? Hint: add the last two numbers.

- A) 10
- B) 13
- C) 11
- D) 9

4. Starting from 2, which rule gives a larger 4th number: add 5 or multiply by 2?

- A) Add 5 gives 17
- B) Multiply by 2 gives 16
- C) They are equal
- D) Add 5 gives 20

Part B: Fill in the Blank

Write the correct answer on each line.

1. In the pattern 5, 10, 20, 40, each number doubles. The next number is _____.
2. An input-output table uses multiply by 4. If the input is 7, the output is _____.
3. The pattern 11, 22, 33, _____, 55 is missing the number _____.
4. In the pattern 96, 48, 24, 12, each number is divided by _____.
5. The 9th number when counting by 6 is _____.

Part A: Multiple Choice

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1. Inputs are 2, 4, 6, 8 and outputs are 7, 9, 11, 13. What is the rule?

- A) Multiply by 3
- B) Add 5
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2. What rule makes the pattern 3, 9, 27, 81?

- A) Add 6
- B) Add 18
- C) Multiply by 3
- D) Multiply by 9

3. In the pattern 1, 1, 2, 3, 5, 8, what comes next? Hint: add the last two numbers.

- A) 10
- B) 13
- C) 11
- D) 9

4. Starting from 2, which rule gives a larger 4th number: add 5 or multiply by 2?

- A) Add 5 gives 17
- B) Multiply by 2 gives 16
- C) They are equal
- D) Add 5 gives 20

Part B: Fill in the Blank

Write the correct answer on each line.

1. In the pattern 5, 10, 20, 40, each number doubles. The next number is 80.
2. An input-output table uses multiply by 4. If the input is 7, the output is 28.
3. The pattern 11, 22, 33, 44, 55 is missing the number _____.
4. In the pattern 96, 48, 24, 12, each number is divided by 2.
5. The 9th number when counting by 6 is 54.