



Patterns and Number Sequences

Name: _____

Date: _____

Grade: Grade 3

Part A: Multiple Choice

Circle the best answer for each question.

1. Inputs are 3, 5, 7, 9 and outputs are 10, 14, 18, 22. What is the rule?

- A) Add 7
- B) Multiply by 2 and add 4
- C) Multiply by 3
- D) Add 9

2. What rule makes the pattern 2, 6, 18, 54?

- A) Add 4
- B) Multiply by 2
- C) Multiply by 3
- D) Add 12

3. In the pattern 1, 2, 4, 7, 11, what comes next?

Hint: the amount added grows by 1 each time.

- A) 14
- B) 16
- C) 15
- D) 13

4. Starting from 3, which rule gives a larger 5th number: add 4 or multiply by 2?

- A) Add 4 gives 19
- B) Multiply by 2 gives 48
- C) They are equal
- D) Add 4 gives 23

Part B: Fill in the Blank

Write the correct answer on each line.

1. In the pattern 4, 8, 16, 32, each number doubles. The next number is _____.
2. An input-output table uses multiply by 5. If the input is 9, the output is _____.
3. The pattern 13, 26, 39, _____, 65 is missing the number _____.
4. In the pattern 200, 100, 50, 25, each number is divided by _____.
5. The 7th number when counting by 9 is _____.

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4. Starting from 3, which rule gives a larger 5th number: add 4 or multiply by 2?

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Part B: Fill in the Blank

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1. In the pattern 4, 8, 16, 32, each number doubles. The next number is 64 .
2. An input-output table uses multiply by 5. If the input is 9, the output is 45 .
3. The pattern 13, 26, 39, 52 , 65 is missing the number 52 .
4. In the pattern 200, 100, 50, 25, each number is divided by 2 .
5. The 7th number when counting by 9 is 63 .