



Patterns and Number Sequences

Name: _____

Date: _____

Grade: Grade 3

Part A: Multiple Choice

Circle the best answer for each question.

1. What is the rule for the pattern 2, 5, 11, 23?

- A) Add 3 each time
- B) Double and add 1
- C) Multiply by 2
- D) Add 6 each time

2. An input-output table uses multiply by 4.

Which input gives an output of 36?

- A) 8
- B) 9
- C) 7
- D) 6

3. What comes next in the pattern 243, 81, 27, 9?

- A) 1
- B) 6
- C) 3
- D) 0

4. In the pattern 4, 8, 12, 16, 20, 24, what is the 9th number?

- A) 32
- B) 40
- C) 36
- D) 28

Part B: Fill in the Blank

Write the correct answer on each line.

1. In the pattern 3, 6, 12, 24, 48, each number doubles. The next number is _____.
2. If the rule is subtract 9 and the input is 63, the output is _____.
3. In the multiplication table, the row for 7 shows 7, 14, 21, 28. The next number is _____.
4. The pattern 90, 78, 66, 54, 42 follows the rule subtract _____.
5. In the pattern 5, 15, _____, 135, the missing number is _____.

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1. What is the rule for the pattern 2, 5, 11, 23?

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- B) Double and add 1**
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- B) 6
- C) 3**
- D) 0

4. In the pattern 4, 8, 12, 16, 20, 24, what is the 9th number?

- A) 32
- B) 40
- C) 36**
- D) 28

Part B: Fill in the Blank

Write the correct answer on each line.

1. In the pattern 3, 6, 12, 24, 48, each number doubles. The next number is 96 .
2. If the rule is subtract 9 and the input is 63, the output is 54 .
3. In the multiplication table, the row for 7 shows 7, 14, 21, 28. The next number is 35 .
4. The pattern 90, 78, 66, 54, 42 follows the rule subtract 12 .
5. In the pattern 5, 15, 45 , 135, the missing number is _____ .