PLANIT TEACHERS

Introduction

This worksheet is designed to evaluate students' understanding of basic arithmetic operations, number sequences, and patterns, as well as their ability to recognize and write numbers in standard form.

Section 1: Multiple Choice Questions

Choose the correct answer for each question.

1. What is the value of x in the equation $2x + 5 = 11$?

2. Which of the following numbers is a multiple of 3?

3. What is the next number in the pattern: 2, 5, 8, 11, 14?

4. What is the sum of 456 and 279?

5. What is the product of 4 and 9?

Section 2: Short Answer Questions

Answer each question in complete sentences.

1. Write the number 456 in standard form.

2. Identify the pattern in the sequence: 1, 2, 4, 8, 16.

3. Solve the equation: x - 3 = 7.

Section 3: Performance Task

Create a number sequence using the following rules:

- Start with the number 5
- Each subsequent number is obtained by adding 2 to the previous number
- The sequence should have 6 terms

Explain the pattern in your sequence.

Section 4: Additional Activities

Complete each activity.

1. Create your own pattern using a different set of rules. Write the sequence and explain the pattern.

2. Solve the following equations:
   - $2x + 2 = 10$
   - $x - 2 = 5$

3. Write the following numbers in standard form:
   - 456
   - 279
   - 123

Answer Key

For teacher reference only.

Multiple Choice Questions:

1. 1. B) 3
2. 2. D) All of the above
3. 3. A) 17
4. 4. B) 645
5. 5. B) 36

Short Answer Questions:

1. 1. 456 in standard form is 4 x 100 + 5 x 10 + 6 x 1
2. 2. The pattern is obtained by multiplying the previous term by 2.
3. 3. x = 10

Performance Task:

The sequence is: 5, 7, 9, 11, 13, 15

The pattern is obtained by adding 2 to the previous term.

The sequence is: 5, 7, 9, 11, 13, 15

The pattern is obtained by adding 2 to the previous term.

Conclusion

Review your work and make sure you have completed all sections.

Reflection

Reflect on what you have learned.