

CHAPTER-1 | Patterns in Mathematics

QUIZ
PART-05

1. The sequence 1, 2, 3, 4, 5 is an example of:
- Square numbers
 - Triangular numbers
 - Counting numbers
 - Odd numbers (C)

Explanation: This sequence represents counting numbers, starting from 1 and increasing by 1.

2. The sequence 1, 3, 5, 7, 9 is an example of:
- Even numbers
 - Triangular numbers
 - Odd numbers (C)
 - Square numbers

Explanation: This is a sequence of odd numbers, which are numbers that are not divisible by 2.

3. The sequence 1, 2, 4, 6, 8 is an example of:
- Powers of 2
 - Odd numbers
 - Even numbers (C)
 - Fibonacci sequence

Explanation: The sequence represents even numbers, which increase by 2.

4. The sequence 1, 3, 6, 10, 15 is known as:
- Triangular numbers (A)
 - Cube numbers
 - Square numbers
 - Powers of 2

Explanation: This sequence represents triangular numbers, where each number is the sum of the previous integers.

5. The sequence 1, 4, 9, 16, 25 is an example of:
- Fibonacci sequence
 - Powers of 3
 - Cube numbers
 - Square numbers (D)

Explanation: This sequence represents square numbers, where each number is the square of an integer.

6. The sequence 1, 8, 27, 64, 125 is an example of:
- Triangular numbers
 - Cube numbers (B)
 - Fibonacci numbers
 - Powers of 3

Explanation: These are cube numbers, where each number is the cube of an integer (e.g., 1^3 , 2^3 , 3^3).

7. The sequence 1, 3, 6, 10, 15 is made up of dots that form:
- | | |
|---------------|------------------|
| A. Squares | B. Triangles (B) |
| C. Rectangles | D. Circles |

Explanation: The triangular numbers can be represented as dots arranged in the shape of a triangle.

8. Which of the following represents powers of 2?
- | | |
|----------------|---------------------|
| A. 1, 3, 6, 10 | B. 1, 2, 4, 8, 16 |
| C. 1, 2, 3, 4 | D. 1, 8, 27, 64 (B) |

Explanation: The sequence 1, 2, 4, 8, 16 is a series of powers of 2, where each number is double the previous one.

9. The sequence 1, 3, 9, 27, 81 represents:
- Powers of 2
 - Powers of 3 (B)
 - Triangular numbers
 - Cube numbers

Explanation: The sequence represents powers of 3, where each number is 3 raised to a successive power.

10. What does the cube number sequence 1, 8, 27, 64 represent pictorially?
- A square formation
 - A triangular formation
 - A cube shape (C)
 - A rectangular formation

Explanation: Cube numbers are visualized as cubes, with each number representing a cube of a natural number.