



Class 9 Mathematics | Predicting What Comes Next: Exploring Sequences And Progressions

MCQ WORKSHEET • 15 questions • Choose one correct option • Suggested time: 25 minutes

1. The next term of 4, 9, 14, 19, ... is:

A. 23 B. 24 C. 29 D. 25

2. The common difference of 12, 8, 4, 0, ... is:

A. -4 B. 4 C. -8 D. 0

3. The 10th term of the AP 3, 7, 11, ... is:

A. 36 B. 39 C. 43 D. 40

4. For $a_n = 2n + 1$, the fifth term is:

A. 13 B. 11 C. 10 D. 9

5. The next term of 2, 6, 18, 54, ... is:

A. 216 B. 108 C. 162 D. 72

6. The common ratio of 81, 27, 9, 3, ... is:

A. 3 B. $1/9$ C. -54 D. $1/3$

7. The sixth term of GP 5, 10, 20, ... is:

A. 160 B. 320 C. 80 D. 60

8. A sequence starts at 2 and each next term is twice the previous plus 1. Its third term is:

A. 11 B. 9 C. 7 D. 13

9. The sum $1 + 2 + \dots + 20$ is:

A. 190 B. 210 C. 420 D. 200

10. Which sequence is an AP?

A. 2, 4, 8, 16

B. 7, 11, 15, 19

C. 1, 4, 9, 16

D. $1, 1/2, 1/4, 1/8$

11. Which sequence is a GP?

A. 3, 6, 9, 12

B. 1, 4, 7, 10

C. 2, 5, 10, 17

D. 3, 6, 12, 24

12. A theatre row has 18 seats; each next row has 2 more. Row 12 has:

A. 36 seats B. 42 seats C. 38 seats D. 40 seats

13. A culture doubles each hour from 7 cells. After 4 hours it has:

A. 112 cells B. 56 cells C. 224 cells D. 28 cells

14. Minimum moves for a Tower of Hanoi with 4 discs are:

A. 15 B. 16 C. 7 D. 8

15. A fractal retains $2/3$ of its area each step. Starting from 81 cm^2 , after 3 steps area is:

A. 24 cm^2 B. 54 cm^2 C. 18 cm^2 D. 36 cm^2

ANSWER KEY — check after completing all 15 questions

1.B 2.A 3.B 4.B 5.C 6.D 7.A 8.A 9.B 10.B 11.D 12.D 13.A 14.A 15.A

Original exam-style practice • Reference notes: www.physics.guru/cbse-practice-papers/ • Not an official paper

Plot No. 15, Second Floor, Jaisingh Chowk, Sector 85, Gurgaon - 122004

8800 8800 28 | www.goodmarksclasses.com