

CHAPTER-5 | Arithmetic Progressions

QUIZ
PART-05

1. For $a=7, d=3, n=8$, what is the 8th term?

- A. 30
B. 29
C. 27
D. 25 (A)

Explanation: $a_n = a + (n-1) \cdot d = 7 + (8-1) \cdot 3 = 30$.

2. For $a=-18, d=2.5, n=4$, what is the 4th term?

- A. 3.6 B. 4.6
C. 3.4 D. 4.8 (A)

Explanation: $a_n = a + (n-1) \cdot d = -18 + (4-1) \cdot 2.5 = 3.6$.

3. What is the 30th term of $10, 7, 4, \dots, 10, 7, 4, \dots$?

- A. 97
B. 77
C. -77
D. -87 (D)

Explanation: $a_n = 10 + (30-1) \cdot (-3) = -87$.

4. What is the 11th term of $-3, \dots, 2, -3, \dots, 2$?

- A. 28
B. 22
C. -38
D. -48 (C)

Explanation: $a_n = -3 + (11-1) \cdot 3 = -38$.

5. In $2, \dots, 26, \dots, 26$, what is the missing term?

- A. 12
B. 14
C. 16
D. 18 (B)

Explanation: The missing term is 14.

6. In $\dots, 13, \dots, 3, \dots, 13, \dots, 3$, what are the missing terms?

- A. 9, 8
B. 11, 8
C. 10, 9
D. 12, 9 (C)

Explanation: Missing terms are 10 and 9.

7. In $5, \dots, 95, \dots, 9$, what are the missing terms?

- A. 6, 7
B. 6, 8
C. 7, 8
D. 8, 9 (A)

Explanation: The missing terms are 6 and 7.

8. In $-4, \dots, 6, -4, \dots, 6$, what is the missing term?

- A. -2
B. 0
C. -1
D. 1 (B)

Explanation: The missing terms are 0, 2, and 4.

9. In $\dots, 38, \dots, -22, \dots, 38, \dots, -22$, what are the missing terms?

- A. 26, 14, 2
B. 20, 12, 4
C. 15, 11, 6
D. 10, 5, 0 (A)

Explanation: Missing terms are 26, 14, and 2.

10. If the 10th term is 20 and $d=3$, what is the first term?

- A. 2
B. 4
C. 5
D. 6 (A)

Explanation: First term is $20 - (10-1) \cdot 3 = 2$.