

CHAPTER-5 | Arithmetic Progressions

QUIZ PART-03

1. Which of the following is an A.P.?

- A. 2, 4, 8, 16, ...
B. 5, 7, 9, 11, ...
C. -1.2, -3.2, -5.2, -7.2, ...
D. 3, 6, 9, 12, ... (B)

Explanation : The common difference is 2, making it an arithmetic progression.

2. What is the common difference of the A.P. 5, 7, 9, 11...?

- A. 1
B. 2
C. 3
D. 4 (B)

Explanation : The difference between consecutive terms is 2.

3. What are the next three terms of the A.P. -1.2, -3.2, -5.2...?

- A. -7.2, -9.2, -11.2
B. -7.2, -5.2, -3.2
C. -1.2, 0.2, 2.2
D. -5.2, -3.2, -1.2 (A)

Explanation : The common difference is -2, so the next terms are -7.2, -9.2, -11.2.

4. Which of the following sequences is an A.P.?

- A. -10, -6, -2, 2, ...
B. 3, 5, 7, 9, ...
C. 0.2, 0.22, 0.222, ...
D. 1, 2, 3, 5, ... (A)

Explanation : The common difference is 4, so it forms an arithmetic progression.

5. What is the common difference of the A.P. 0, -4, -8, -12...?

- A. -2
B. -3
C. -4
D. -5 (C)

Explanation : The common difference is -4.

6. What is the common difference of the A.P. 1, 3, 9, 27...?

- A. 2
B. 3
C. 4
D. None (D)

Explanation : The terms are multiplying by 3, so it's not an arithmetic progression.

7. What is the common difference of the A.P. $\frac{1}{2}$, $\frac{3}{2}$, $\frac{5}{2}$, ...?

- A. $\frac{1}{2}$
B. 1
C. 2
D. $\frac{3}{2}$ (A)

Explanation : The common difference is $\frac{1}{2}$.

8. Which of the following is an A.P.?

- A. 2, 8, 18, 32, ...
B. 1, 2, 3, 4, ...
C. 3, 6, 9, 12, ...
D. 5, 10, 15, 20, ... (A)

Explanation : The terms are not increasing by a fixed amount, so it's not an A.P.

9. What is the common difference of the A.P. 3, 6, 9, 12, ...?

- A. 3
B. 2
C. 5
D. 1 (A)

Explanation : The common difference is 3.

10. What is the common difference in the A.P. 1, 2a, 3a, 4a, ...?

- A. a
B. 2a
C. 3a
D. 4a (A)

Explanation : The common difference is a.