

**Twelfth Grade - Sequences and Series**

1) Which term of the A.P. 3, 8, 13 ... is 78?

- 14
- 12
- 15
- 16

2) Is 150 a term of the series 11, 8, 5, 2, ... ?

- 6th term
- Not a term
- 10th term
- 5th term

3) Find the 31st term of an A.P whose 11th term is 38 and the 16th term is 73.

- 177
- 176
- 178
- 179

4) Which term of the A.P 3, 15, 27, 39 ... will be 132 more than its 54th term?

- 64
- 56
- 65
- 54

5) Find 10th term in the series 1, 3, 5, 7,.....



- 17
- 16
- 15
- 19

6) Find 16th term in the series 7, 13, 19, 25,....

- 100
- 99
- 97
- 98

7) Sum the first 20 terms of the sequence: 1, 3, 5, 7, 9, ..

- 499
- 401
- 402
- 400

8) The taxi fare after each km when the fare is Rs. 15 for the first km and Rs. 8 for each additional km. This statement is

- G.P
- Not an G.P
- A.P
- Not an A.P

9) The cost of digging a well after every meter of digging, when it costs Rs. 150 for the first meter rises by Rs. 50 for each subsequent meter. This statement is

- Not an A.P
- A.P
- G.P
- Not an G.P



10) The amount of money in the account every year when Rs. 10000 is deposited at compound interest at 8% per annum

- Not an G.P
- A.P
- Not an A.P
- G.P

11) Write fourth term of AP, when the first term a and the common difference d are given as follows: $a = 10$, $d = 10$

- 80
- 20
- 70
- 40

12) Write third term of A.P, when the first term 'a' and the common difference 'd' are given as follows: $a = -2$, $d = 0$

- -2
- 1
- 0
- 2

13) Write fourth term of A.P, when the first term 'a' and the common difference 'd' are given as follows: $a = 4$, $d = -3$

- 4
- -5
- 3
- 6



14) Find the third term of A.P, when the first term 'a' and the common difference 'd' are given as follows :
 $a = -1.25, d = -0.25$

- 1.75
- -2.75
- -1.75
- -0.75

15) For the following A.Ps, find the first term and common difference, 3, 1, -1, -3,

- 7
- 6
- 3
- -2

16) For the following A.Ps, find the First term and common difference $-5, -1, 3, 7, \dots$

- 5, -4
- -5, -4
- -5, 4
- 5, 4

17) For the following A.Ps, find the first term and Common difference $0.6, 1.7, 2.8, 3.9, \dots$

- -0.6, -1.1
- -0.6, 1.1
- 0.6, -1.1
- 0.6, 1.1

18) For the following APs, find the sixth term of $0, -4, -8, -12, \dots$

- 9



- -9
- 20
- -20

19) The series $-\frac{1}{2}, -\frac{1}{2}, -\frac{1}{2}, -\frac{1}{2}, \dots$ is

- Not an A.P
- G.P
- Not an G.P
- A.P

20) The series 1, 3, 9, 27, is

- A.P
- Not an A.P
- G.P
- Not an G.P

21) The series $a, a^2, a^3, a^?, \dots$ is

- G.P
- Not an A.P
- A.P
- Not an G.P

22) The series ?2, ?8, ?18, ?32 is

- Not an A.P
- A.P
- G.P
- Not an G.P



23) The series ?3, ?6, ?9, ?12, is

- Not an G.P
- G.P
- A.P
- Not an A.P

24) The series $1^2, 3^2, 5^2, 7^2, \dots$

- Not an G.P
- G.P
- A.P
- Not an A.P

25) If $a = 7$, $d = 3$ and $n = 8$, then $a_n = ?$

- 20
- 28
- 26
- 24

26) If $a = -18$, $n = 10$, $a_n = 0$, then $d = ?$

- 0
- 1
- 2
- 4

27) If $d = -3$, $n = 18$, $a_n = -5$, then $a = ?$

- 46
- 43
- 44
- 45



28) If $a = -18.9$, $d = 2.5$, $a_n = 3.6$, then $n = ?$

- 16
- 19
- 15
- 10

29) If $a = 3.5$, $d = 0$, $n = 105$, $a_n = ?$

- 3.5
- 2.5
- 5.5
- 8.5

30) Find 30th term of the A.P : 10, 7, 4,

- 77
- 66
- -77
- -66