Arithmetic Progressions : Worksheet -1

1. The common difference of the A.P. 13,8,3,-2,... is ( )

   A) 5 B) 10 C) –4 D) –5

2. The 10^{th} term of A.P. 13, 8, 3, -2 ,.....is ( )

   A) –32 B) 32 C) –57 D) –54

3. If x,y,z, are in A.P., then 2y = ( )

   A) x + z B) x – z C) $\sqrt{xz}$ D) xz

4. The first term of an A.P. is –1 and the C.D is –3. The 12^{th} term is ( )

   A) 34 B) 32 C) –32 D) –34

5. If $\sum n = 210$, then n = ( )

   A) 10 B) 20 C) 21 D) 15

6. The n^{th} term of an A.P. is 3n +5 , Its common difference is ( )

   A) $\frac{3}{2}$ B) 3 C) 6 D) 8

7. The sum to n terms of an A.P. is $4n^2 + 5n$. Its common difference is ( )

   A) 9 B) 4 C) 8 D) 2

8. In an AP, the first term is 6 and the common difference is -4/3. Find the 4th term ( )

   A) 2/3 B) 2 C) -2/3 D) 14/3

9. The first term of an AP is -50 and the 50th term is 48. Find the common difference. ( )

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

10. Find the first term of an AP whose common difference is 1/3 and the 25th term is 11 ( )

A) 3 B) 5 C) 2/3 D) 4/3

11. In an AP, the first term and the last terms are 50 and -50 respectively. The common difference is -10. Find the number of terms in the series. ( )

A) 9 B) 10 C) 11 D) 12

12. The nth term of a sequence is given by $a_n = 4n + 3$. Check whether the sequence is an AP. If yes, find the common difference ( )

A) Not an A.P. B) 3 C) 4 D) 5

13. The value obtained by subtracting the 10th term of an AP from the 17th term is 56. Find the common difference. ( )

A) 7 B) 16 C) 9 D) 8

14. In an AP, the 9th term is -72. The 10th term is 60 less than the 4th term. Find the first term of the AP ( )

A) 8 B) -8 C) -152 D) 10

15. In an AP, the 4th term is 36. The 21st term is 108 more than the 9th term. Find the common difference. ( )

A) 12 B) 9 C) 4 D) -3