Class 11 Maths Chapter 9 Sequence and Series For Practice

1. In an AP, if mth term is n and the nth term is m, where m≠ n, then the p^{th} term is
(a) m + n - p
(b) m - n + p
(c) m + n - 1
(d) m + n + p

2. If m, n, p are in arithmetic progression, then the value of (m + 2n - p)(2n + p - m)(m + 2n + c) is
(a) 4mnp
(b) 8mnp
(c) 16mnp
(d) 3mnp

3. The r^{th} term of an AP, whose sum of first n terms is $2n + 3n^2$ is given by
(a) 11r - 6
(b) 6r + 1
(c) 6r - 1
(d) 11r + 6

4. If the angles of any quadrilateral are in AP and their common difference is 10, then the angles are
(a) 75°, 85°, 95° and 105°
(b) 75°, 80°, 90° and 100°
(c) 75°, 85°, 90° and 105°
(d) 70°, 85°, 95° and 105°

5. The sum of an infinite GP is 80/9 and its common ratio is −4/5 then its first term is equal to
(a) 10
(b) 14
(c) 15
(d) 16

6. A person has 2 parents, 4 grandparents, 8 great grandparents and so on. Then, the number of ancestors during the ten generations preceding his own is
(a) 1084
(b) 2048
(c) 2250
(d) 1024

7. If x, 2y, 3z are in AP, where the distinct numbers x, y, z are in GP then the common ratio of the GP is
(a) 1/2
(b) 1/3
(c) 1/4
(d) Insufficient information

8. If a be the arithmetic mean of b and c and G_1, G_2 be the two geometric means between them, then $G_1^3 + G_2^3 =$

(a) G_1G_2a

(b) $2G_1G_2a$

(c) $3G_1G_2a$

(d) None of the above

9. The 1025^{th} term of the sequence 1, 22, 4444, 88888888, ... is

(a) 2^9

(b) 2^{10}

(c) 2^{11}

(d) None of the above

10. If $a_1, a_2, a_3 \ldots\ldots a_{10}$ are in A.P. and $h_1, h_2, h_3, \ldots\ldots h_{10}$ are in H.P. If $a_1 = h_1 = 2$ and $a_{10} = h_{10} = 3$, then $a_4 h_7$ is

(a) 6

(b) 7

(c) 18

(d) None of the above

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Q.1 - (a)	Q.2 - (c)	Q.3 - (c)	Q.4. - (a)	Q.5 - (d)
Q.6 - (b)	Q.7 - (b)	Q.8 - (b)	Q.9 - (b)	Q.10 - (a)