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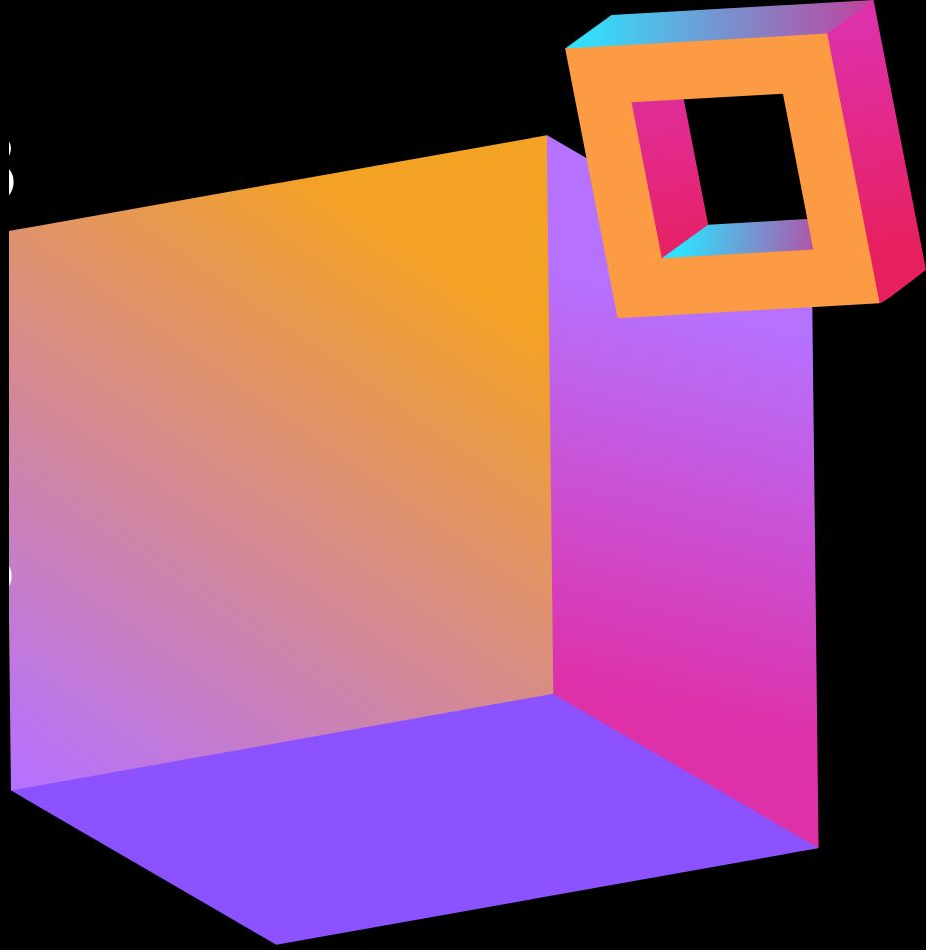

By Shivani Sharma

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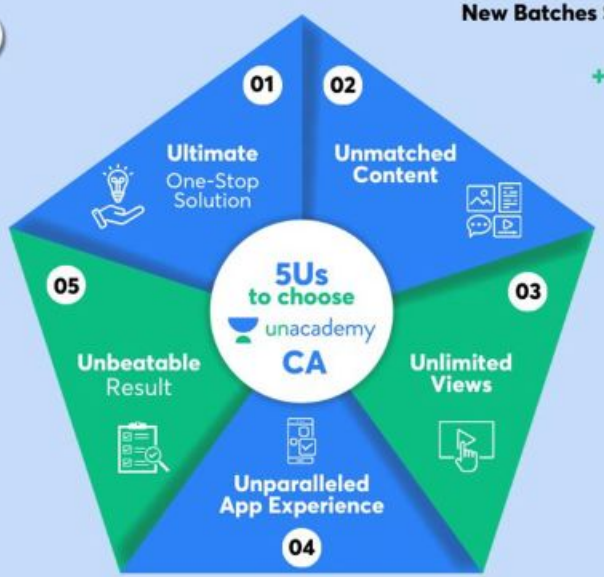

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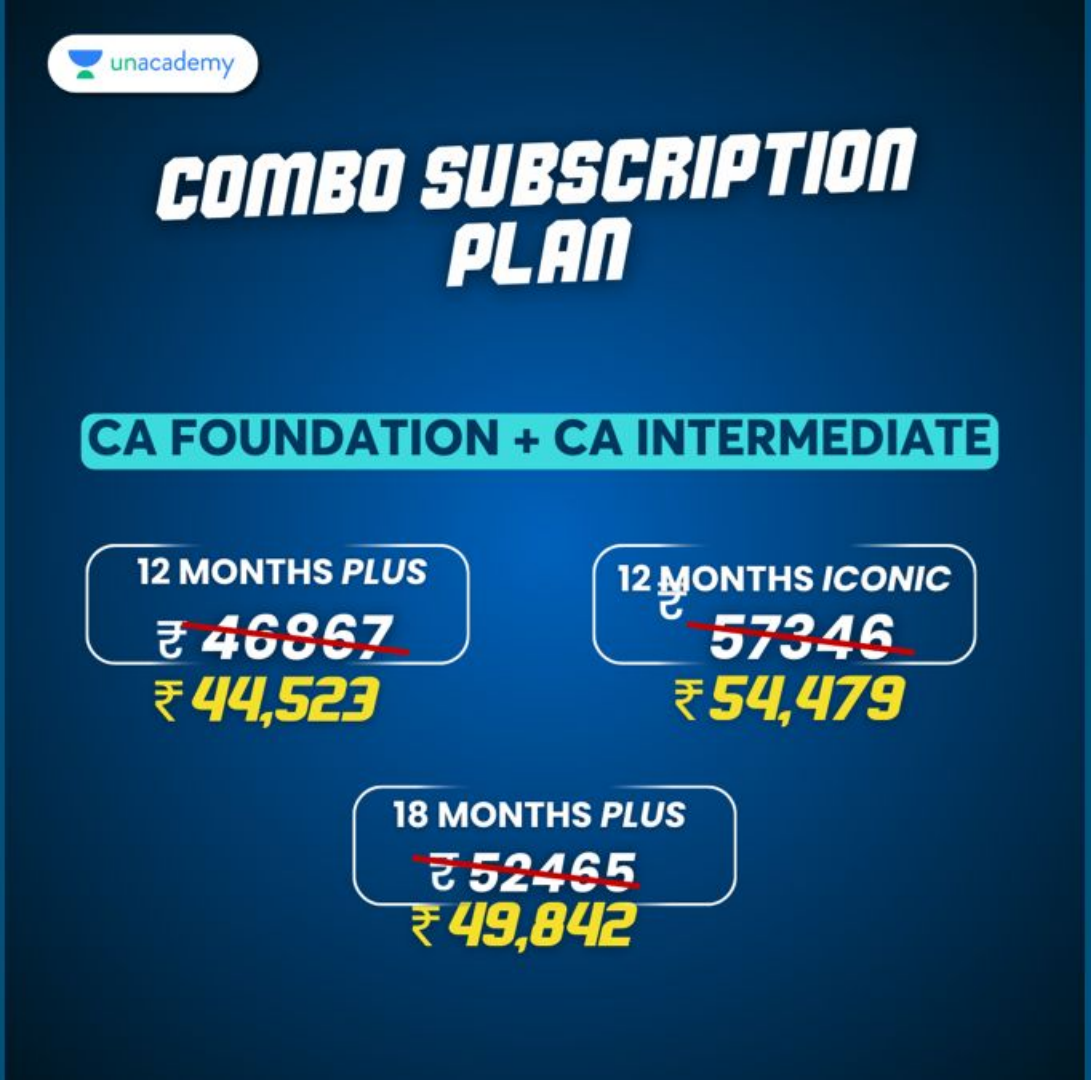

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Que. If in an A.P., Tn represents nth term.

If $t_7 : t_{10} = 5 : 7$ then $t_8 : t_{11}$ = _____

(a) 13 : 16

(b) 17 : 23

(c) 14 : 17

(d) 15 : 19

MATHS

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Sharma

Que. Divide 144 into three parts which are in AP and such that the largest is twice the smallest, the smallest of three numbers will be:

(a) 48

(b) 36

(c) 13

(d) 32

MATHS

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Sharma

Que. If G be Geometric Mean between two numbers a and b, then the value of $\frac{1}{G^2-a^2}+\frac{1}{G^2-b^2}$ is equal to

(a) G^2

(b) $3G^2$

(c) $1/G^2$

(d) $2/G^2$

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Que. If Sum (S_n) of 'n'- terms of an Arithmetic Progression is ($2n^2 + n$). What is the difference of its 10^{th} & 1^{st} term?

(a) 207

(b) 36

(c) 90

(d) 63

MATHS

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Sharma

Que. Find the product of :

$(243), (243)^{1/6}, (243)^{1/36}, ...$

(a) 1,024

(b) 27

(c) 729

(d) 246

MATHS

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Que. Insert two Arithmetic means between 68 and 260

(a) 132,196

(b) 130,194

(c) 70,258

(d) None of the above

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Sharma

Que. Geometric Mean of P, P^2, P^3 ....., P^n will be:

(a) P^{n+1}

(b) $P^{\frac{1+n}{2}}$

(c) $P^{\frac{n(n+1)}{2}}$

(d) None of the above

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Que. Find the numbers whose arithmetic mean is 12.5 and geometric mean is 10.

(a) 20 and 5

(b) 10 and 5

(c) 5 and 4

(d) None of these

MATHS

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Sharma

Que. If sum of 3 arithmetic means between "a" and 22 is 42, then "a" = _____.

(a) 14

(b) 11

(c) 10

(d) 6

MATHS

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Sharma

Que. If each month ₹ 100 increases in any sum then find out the total sum after 10 months, if the sum of first month is ₹ 2,000.

(a) ₹ 24,500

(b) ₹ 24,000

(c) ₹ 50,000

(d) ₹ 60,000

MATHS

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Sharma

Que. The sum of all two Digit odd numbers is

(a) 2475

(b) 2575

(c) 4950

(d) 5049

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Sharma

Que. If 5^{th} term of a G.P. is $\sqrt[3]{3}$, then the product of first nine terms is

(a) 8

(b) 27

(c) 243

(d) 9

MATHS

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Sharma

Que. The sum of the third and ninth term of an A.P. is 8. Find the sum of the first 11 terms of the progression.

(a) 44

(b) 22

(c) 19

(d) 11

MATHS

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Que. If 8^{th} term of an A.P is 15, then sum of its 15 terms is

(a) 15

(b) 0

(c) 225

(d) 225/2

MATHS

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Sharma

Que. The 4^{th} term of an A.P. is three times the first and the 7^{th} term exceeds twice the third term by 1. Find the first term ‘a’ and common difference 'd'.

(a) a = 3,d = 2

(b) a = 4, d = 3

(c) a = 5, d = 4

(d) a = 6, d = 5

MATHS

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Que. If arithmetic mean between roots of a quadratic equation is 8 and the geometric mean between them is 5, the equation is _____.

(a) $x^2 - 16x - 25 = 0$

(b) $x^2 - 16x + 25 = 0$

(c) $x^2 - 16x + 5 = 0$

(d) None of these

MATHS

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Que. In an A.P., if common difference is 2, Sum of n terms is 49, 7^{th} term is 13 then n = _____.

(a) 0

(b) 5

(c) 7

(d) 13

MATHS

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Que. The first term of a G.P. where second term is 2 and sum of infinite term is 8 will be:

(a) 6

(b) 3

(c) 4

(d) 1

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Que. If the sum of n terms of an A.P be $2n^2 + 5n$, then its n^{th} term is:

(a) 4n – 2

(b) 3n – 4

(c) 4n + 3

(d) 3n + 4

MATHS

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Sharma

Que. If the sum of n terms of an A.P be $3n^2 - n$ and its common difference is 6, then its first term is:

(a) 2

(b) 3

(c) 4

(d) 5

MATHS

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Sharma

Que. If the sum of the 4^{th} term and the 12^{th} term of an A.P. is 8, what is the sum of the first 15 terms of the progression?

(a) 60

(b) 120

(c) 110

(d) 150

MATHS

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Shivani
Sharma

Que. If ‘n’ arithmetic means are inserted between 7 & 71 and 5^{th} arithmetic mean is 27, then ‘n’ is equal to:

(a) 15

(b) 16

(c) 17

(d) 18

MATHS

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Sharma

Que. An Arithmetic progression has 13 terms whose sum is 143. The third term is 5 so the first term is:

(a) 4

(b) 7

(c) 9

(d) 2

MATHS

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Sharma

Que. If Geometric mean (G.M.) of a, b, c, d is 3, then G.M. of $\frac{1}{a}, \frac{1}{b}, \frac{1}{c}, \frac{1}{d}$ will be:

(a) 1/3

(b) 3

(c) 81

(d) 1/81

MATHS

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Sharma

Que. The sum to m terms of the series 1 + 11 + 111 + ···. upto m terms, is equal to:

(a) $\frac{1}{81}(10^{m+1} - 9m - 10)$

(b) $\frac{1}{27}(10^{m+1} - 9m - 10)$

(c) $10^{m+1} - 9m - 10$

(d) None of these

MATHS

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Sharma

Que. The sum of the infinite G.P. $1 + \frac{1}{3} + \frac{1}{9} + \frac{1}{27} + \ldots\ldots\ldots$ is equal to

(a) 1.95

(b) 1.5

(c) 1.75

(d) None of these

MATHS

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Sharma

Que. The value of $1^3 + 2^3 + 3^3 + 4^3 + \ldots\ldots + m^3$ is equal to:

(a) $\left[\frac{m(m+1)}{2}\right]^3$

(b) $\frac{m(m+1)(2m+1)}{6}$

(c) $\left[\frac{m(m+1)}{2}\right]^2$

(d) None of these

MATHS

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Sharma

Que. If x, y, z are the terms in G.P. then the terms $x^2 + y^2$, $xy + yz$, $y^2 + z^2$ are in

(a) A.P.

(b) G.P.

(c) H.P.

(d) None of these.

MATHS

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Sharma

Que. If a, b, c are in Arithmetic Progression (A.P.), then the value of a − b + c is:

(a) a

(b) −b

(c) b

(d) c

MATHS

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Sharma

Que. If $\frac{1}{b+c}, \frac{1}{c+a}, \frac{1}{a+b}$ are in arithmetic progression then a^2, b^2, c^2, are in

(a) Arithmetic Progression

(b) Geometric Progression

(c) Both in arithmetic and geometric Progression

(d) None of these

MATHS

CA FOUNDATION

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Shivani
Sharma

Que. If the Sum 50 + 45 + 40 + 35 + _____ is zero, then the number of terms is:

(a) 22

(b) 20

(c) 21

(d) 25

MATHS

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Sharma

Que. The sum of n terms of the series 1 + (1 + 3) + (1 + 3 + 5) + ... is

(a) $\frac{n(n+1)(2n+1)}{6}$

(b) $\frac{n(n+1)(n+2)}{6}$

(c) $\frac{n(n+1)(2n+1)}{3}$

(d) None of these

MATHS

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Shivani
Sharma

Que. The sum of all numbers between 100 and 1000 which are divisible by 11 will be:

(a) 44550

(b) 66770

(c) 55440

(d) 33440

MATHS

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Shivani
Sharma

Que. A person pays ₹ 975 in monthly instalments, each instalment is less than former by ₹ 5. The amount of 1st instalment is ₹ 100. In what time will the entire amount be paid?

(a) 26 months

(b) 15 months

(c) Both (a) & (b)

(d) 18 months

MATHS

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Sharma

Que. The 3rd term of a G.P. is 2/3 and the 6th term is 2/81, then the 1st term is

(a) 6

(b) 1/3

(c) 9

(d) 2

MATHS

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Sharma

Que. If the ratio of sum of n terms of two APs is (n + 1) : (n – 1), then the ratio of their m^{th} terms is:

(a) (m + 1) : 2m

(b) (m + 1) : (m – 1)

(c) (2m – 1) : (m + 1)

(d) m : (m – 1)

MATHS

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Sharma

Que. The n^{th} terms of the series 3 + 7 + 13 + 21 + 31 + ... is

(a) $4n - 1$

(b) $n^2 + 2n$

(c) $n^2 + n + 1$

(d) $n^3 + 2$

MATHS

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Shivani
Sharma

Que. If the sum and product of three numbers in G.P. are 7 and 8 respectively, then 4^{th} term of the series is

(a) 6

(b) 4

(c) 8

(d) 16

MATHS

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Shivani
Sharma

Que. The sum of first n terms an AP is $3n^2 + 5n$. The series is:

(a) 8, 14, 20, 26, ...

(b) 8, 22, 42, 68,.....

(c) 22, 68, 114, ...

(d) 8, 14, 28, 44, ...

MATHS

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Sharma

Que. The n^{th} term of the series 9, 7, 5, ... and 15, 12, 9, ... are same. Find the n^{th} term?

(a) 7

(b) 8

(c) 9

(d) 10

MATHS

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Sharma

Que. If p^{th} term of an AP is q and its q^{th} term is p, then what will be the value of $(p + q)^{th}$ term?

(a) 0

(b) 1

(c) p + q – 1

(d) 2(p + q – 1)

MATHS

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Sharma

Que. If 9^{th} and 19^{th} term of an Arithmetic Progression are 35 and 75, respectively, then its 20^{th} term is:

(a) 78

(b) 79

(c) 80

(d) 81

MATHS

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Que. If 4^{th}, 7^{th} and 10^{th} terms of a Geometric Progression are p, q and r, respectively, then:

(a) $p^2 = q^2 + 2^r$

(b) $p^2 = qr$

(c) $q^2 = pr$

(d) $pqr + pq + 1 = 0$

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