



NUMBER SERIES

2, 4, 6, 8, 10, 12, 14, 16, 18, 20
+2

संख्या

श्रृंखला



SERIES

(I) Basic Classification based :-

- Even, odd, prime number, consecutive Number etc.

Eg:→ 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21...

→ સામ 4, 6, 8, 10, 12, 14...

→ પ્રાઇમ 7, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47

અનુક્રમ

સાદી સુધારા 2, 3, 4, 5, 6, 7, 8...



(II) Basic Operations:-

संक्रियाएँ

Square :- $x^2, x^2 \pm P$

1, 4, 9, 16, 25, 36...

Cube:- $x^3, x^3 \pm P$

1, 8, 27, 64, 125, 216, 343, 512, 729, 1000

Mix series :- both square and cube

1, 8, 9, 64, 25, 216, 49, 512

Increasing/ Decreasing order of the power **of given number**

1, 2, 4, 8, 16, 32, 64, 128, 256, 512, 1024

$2^0, 2^1, 2^2, 2^3, 2^4, 2^5, 2^6, 2^7, 2^8, 2^9, 2^{10}$

1 = नालायक

Examples:-

✓ → 1, 9, 25, 49, 81, 121, 169
 $1^2, 3^2, 5^2, 7^2, 9^2, 11^2, 13^2$

1 ≠ prime

2 = सबसे छोटा prime

→ 1, 27, 125, 343,
 $1^3, 3^3, 5^3, 7^3$

Number Vision



✓ $2^2-2, 3^2-2, 4^2-2, 5^2-2, 6^2-2, 7^2-2, 8^2-2, 9^2-2, 10^2-2$
 → 2, 7, 14, 23, 34, 47, 62, 79, 98

Number Vision

Logic

↓ 5, 7, 9, 11, 13, 15, 17, 19

Vision

$$\checkmark 5^3+1, 6^3+1, 7^3+1, 8^3+1, 9^3+1$$

$$\rightarrow 126, 217, 344, 513, \dots, 730$$

Approach

$$\begin{array}{cccc} 91 & 127 & 169 & 217 \\ \hline 36 & 42 & 48 & \end{array}$$

आम जिंदगी

Alternate
एकानर

$$\rightarrow 16, 125, 36, 343, \dots, 64, 729$$

$$\underline{4^2} \quad \underline{5^3} \quad \underline{6^2} \quad \underline{7^3} \quad 8^2, 9^3$$

$$\begin{array}{ccccccc} 2^8 & 2^7 & 2^6 & 2^5 & 2^4 & 2^3 & 2^2 & 2^1 & 2^0 \\ \rightarrow 256, 128, 64, 32, \dots, 16, 8, 4, 2, 1 \end{array}$$

$$\div 2 \quad \div 2 \quad \div 2 \quad \div 2 \quad \div 2$$

$$\checkmark 5^1 \quad 5^2 \quad 5^3 \quad 5^4 \quad 5^5 \quad 5^6$$

$$\rightarrow 5, 25, 125, 625, \dots, 3125, 15625$$

$$\checkmark \times 5 \quad \times 5 \quad \times 5 \quad \times 5$$

(III) Addition/ Subtraction

logic

समिती (A.P.)
शुद्ध

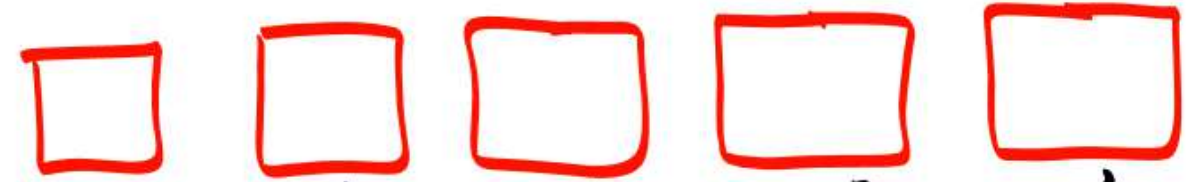
Constant number

Prime number series

Square/ cube of the numbers

Consecutive Series

Odd/ even number series



diff

3

3

3

3

3

2

3

5

7

11

9
1

16
8

25
27

36
64

49
125

1

2

3

4

5

3
6

5
8

7
10

9
12

11
14

✓

✓

✓

✓

✓

✓

✓

✓

*** समान श्रेणी

Examples:-

→ 37, 61, 85, 109, 133, 157, ...
 24 24 24 24 24

$$A = 37$$

$$D = 24$$

A, A+D, A+2D, A+3D

nवा पद

T_n

$$A + (n-1)D$$

अभाज्य
prime

→ 41, 43, 46, 51, 58,
 ← 2 3 5 7

$$T_6 = A + (6-1)D$$

$$37 + 5 \times 24 = 37 + 120$$

$$= 157$$

→ 63, 79, 104, 140, 189,
 16 25 36 49
 4² 5² 6² 7²



$$\rightarrow 74, 199, 415, 758, \dots, 1270$$

$$\begin{array}{cccc} 125 & 216 & 343 & 512 \\ 5^3 & 6^3 & 7^3 & 8^3 \end{array}$$

$$\rightarrow 35, 36, 44, 53, 117, \dots, 142, 358$$

$$\begin{array}{cccccc} 1 & 8 & 9 & 64 & 25 & 216 \\ 1^2 & 2^3 & 3^2 & 4^3 & 5^2 & 6^3 \end{array}$$

$$\rightarrow 23, 24, 27, 36, 63, 144, 387$$

$$\begin{array}{cccccc} 1 & 3 & 9 & 27 & 81 & 243 \\ \textcircled{1} & & & & & \\ \times 3 & \times 3 & \times 3 & \times 3 & \times 3 & \end{array}$$

G.P
गुणोत्तर श्रेणी

← फिख गुणोत्तर →

☆ गुणोत्तर श्रेणी

$$A, AR, AR^2, AR^3, AR^4, \dots, T_n$$

$$\begin{array}{cccccc} 1 & 2 & 3 & 4 & 5 & \dots \end{array}$$

$$T_n = AR^{n-1}$$

$$T_6 = AR^{6-1} = AR^5$$

$$1 \times 3^5 = 243$$

Examples:-

fix multiplication

→ 7, 7, 14, 42, 168, ? **840**.....
 $\times 1$ $\times 2$ $\times 3$ $\times 4$ $\times 5$



(V) Fabonacci series

फेबोनासी

a, b, c, d, e, f, g

Logics $\rightarrow c = a \times b$

$$c = a + b$$

Example: $\rightarrow 1, 1, 2, 3, 5, 8, 13, 21, 34, \dots, 55, 89, 144$

$\rightarrow 2, 3, 6, 18, 108, \dots, 1944$

$$a \times b = c$$

त्रिकोण

(VI) Dhadkan (धड़कन)

There must be 2 logics. (कम से कम दो तर्क जरूर होंगे।) ✓ धड़कन

साथ से
ज्यादा

(i) (+, -)

Example: $\rightarrow 7, 12, 9, 14, 11, 16, 13, \dots$
 $+5 -3 +5 -3 +5 -3$

→ दो तर्क जरूर होंगे।

(ii) (+, $\times$)

Example: $\rightarrow 2, 3, 6, 9, 36, 41, 246, 253, 2024, \dots$
 $\times 2 \times 4 \times 6 \times 8$

(iii) (+, ÷)

Example: $\rightarrow 3, 4, 2, 5, \frac{5}{4}, \frac{25}{4}, \dots, \frac{25}{4}, \frac{25}{4}$
 $+1 \div 2 +3 \div 4 +5 \div 6$

ਉਤਰ

ਦੀ ਸਤ

(iv) (-, ×)

Example: $\rightarrow 7, 5, 15, 11, 55, 49, \dots, 343$
 $-2 \times 3 -4 \times 5 -6 \times 7$

(v) (square, +)

Example: $\rightarrow 37, 40, 56, 61, 97, 104, 168$
 $+3 +16 +5 36 +7 82$
 $4^2 6^2 8^2$

(v) (square, -)

Example: $\rightarrow 47, 46, 44, 35, 31, \dots$

$\underbrace{\quad\quad\quad}_{-1} \quad \underbrace{\quad\quad\quad}_{-2} \quad \underbrace{\quad\quad\quad}_{-9} \quad \underbrace{\quad\quad\quad}_{-4} \quad \underbrace{\quad\quad\quad}_{-25}$

$\quad\quad\quad 1^2 \quad\quad\quad 3^2 \quad\quad\quad 5^2$



Theory
Basic & logic Example