## Series Completion

Find The Missing Number

## Increasing order

Example 1. 3, 7, 15, 31, 63, $127 \ldots \ldots$
A. 264
B. 364
C. 355
D. 255

Explanation: The sequence being followed in this question is
$1^{\text {st }}$ Number X $2+1=2^{\text {nd }}$ Number
$2^{\text {nd }}$ Number $\times 2+1=3^{\text {rd }}$ Number
Hence, the series will be completed by $127 \times 2+1=255$.
Therefore ( C ) is the correct answer.
Example 2. 5, 20, 76..... , 448
A. 442
B. 185
C. 232
D. 325
E. 225

Explanation: The sequence being followed in this question is
$5 \times 5-5=20$
$20 \times 4-4=76$
$76 \times 3-3=225$
$225 \times 2-2=448$

Hence the term 225 denoted by (D) complete the series.

Example3. 4, 9, 25, 49, 121, 169....
A. 144
B. 81
C. 196
D. 289
E. 361

Explanations: All numbers are given in series are squares of prime numbers $2,3,5,7,11,13$, Hence after 169 the prime number square 289 will come which is denoted by (D)

Decreasing order

Example 4. $1251201109575 \ldots$.
A. 40
B. 30
C. 25
D. 50

Explanation: The difference between the two numbers is increasing by 5 after each number. Hence the answer is 50 denoted by (D).

Missing two terms
Example 5. 2, 15, 4, 17, $6,19, \ldots ., \ldots$
A. 8,8
B. 8,21
C. 21,10
D. 4,8

Explanations: Thus, the sequence $2,15,4,17,6,19, x 1 \times 2$ is a combination of two series :I.) 2,4 , $6, x 1$ and II.) $15,17,19, x 2$ consists of consecutive even numbers and odd numbers. Hence the answer is (B).

Replace The Wrong Term.

Example 6. 6, 10, 27, 105, 515, 3084
A. 10
B. 27
C. 105
D. 515

Explanation: The sequence being followed in this series is as under
$6 \times 2-2=10$
$10 \times 3-3=27$
$27 \times 4-4=104$
$104 \times 5-5=515$
$515 \times 6-6=3084$. The fourth term 105 is wrong. It should be 104. Hence (C) is the answer.
Find The Missing Alphabet
Example 7. D, H, L, ... ., T, X
A. Q
B. D
C. P
D. F
E. Z

Explanation:

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| A | B | C | D | E | F | G | H | I | J | K | L | M |
| Z | Y | X | W | V | U | T | S | R | Q | P | O | N |
| 26 | 25 | 24 | 23 | 22 | 21 | 20 | 19 | 18 | 17 | 16 | 15 | 14 |

The series follows $4^{\text {rd }}, 8^{\text {th }}, 12^{\text {th }}, 16^{\text {th }}, 20^{\text {th }}$ and $24^{\text {th }}$ letter of alphabet. The missing alphabets, therefore is $16^{\text {th }}$ denoted by (C).

Regular order
Example 8. A, E, J, O, .....

1. C
2. $F$
3. Q
4. T
5. X

Explanation: The difference between each letter is increasing in regular order by 5 letter. Hence the answer is T denoted by (4).

Alphabetically Increasing order
Example 9. C, F, I, L, ...., R, U

1. $B$
2. G
3. $M$
4. $P$
5. O


Explanation: The difference in letter is multiple of 3.
$3 \times 1=3(\mathrm{C})$
$3 \times 2=6(F)$
$3 \times 3=9(1)$
$3 \times 4=12(L)$
$3 \times 5=15(\mathrm{O})$

Hence the answer is (5).
Find The Wrong Group Of Alphabets
Example 10. CBD, IHJ, ONP, UTV, XYZ

1. $C B D$
2. $X Y Z$
3. ONP
4. IJH

Explanation: In each group the first and second letter are consecutive but in reserve order. However, in the last group the letter are not consecutive. The group should be XYZ. Hence (4) is answer.

Example 11. ADG, HKN, ORU, VYC, DGJ

1. ADG
2. HKN
3. VYC
4. DGJ
5. None of these

Explanation: The difference between each word is two letters but option VYC denoted by (c) wrong because the difference between second and third letter is 3 . Hence the answer is c .

The letters and numbers can be mixed to make a series
Find the wrong group
Example 12. A4B, C16D, E25F, G36H, I64J, K100L

1. $A 4 B$
2. E25F
3. G36H
4. 164 J
5. None of these

Explanation: The letters of group is consecutive and square of even number is placed between the letters but option E25F denoted by (b) is wrong group because the 25 is square of odd number. Hence the answer is (b)

