NUMBER SERIES SHORT TRICKS & QUESTIONS WITH SOLUTIONS

BY

GOVERNMENTADDA.COM

PLEASE SUPPORT US BY JOINING BELOW GROUPS AND LIKE OUR PAGES WE WILL BE VERY THANKFUL TO YOU.

1. ***Facebook Page :*** *https://www.facebook.com/governmentadda/*
2. ***Facebook Group :*** *https://www.facebook.com/groups/governmentadda/*
3. ***Telegram Channels :***
    1. ***Official Channel :*** *https://telegram.me/GovtAdda*
    2. ***Job Alert Channel :*** *https://telegram.me/jobalert*
    3. ***English Novels Channel :*** *https://telegram.me/EnglishNovelsZone*
    4. ***English Learning Channel :*** *https://telegram.me/EnglishDose*
    5. ***Gk Gs Channel :*** *https://telegram.me/GA_Buzz*
4. ***Telegram Groups :***
    1. ***Banking -*** *https://telegram.me/IbpsZone*
    2. ***SSC -*** *https://telegram.me/SscAdda*
    3. ***RBI -*** *https://telegram.me/RbiZone*
    4. ***Railways -*** *https://telegram.me/RailwayZone*
    5. ***IT Officer -*** *https://telegram.me/IT_Officer*
    6. ***Insurance -*** *https://telegram.me/InsuranceZone*
    7. ***SBI -*** *https://telegram.me/SbiZone*
    8. ***Official Group-*** *https://telegram.me/GovernmentAdda*
    9. ***Quiz Group-*** *https://telegram.me/Quiz4Exam*
5. ***Twitter Page -*** *https://twitter.com/GovtAdda*
6. ***Instagram Page -*** *https://www.instagram.com/governmentadda/*
7. ***Google Group -*** *https://plus.google.com/communities/101179260272404032205*
8. ***Pinterest Page -*** *https://www.pinterest.com/governmentadda/*

Website - *https://www.GovernmentAdda.com*

Questions on number series are prevalent in most of the exams. Almost 4-5 Questions comes in exam from this topic. These questions are based on numerical sequences that follow a logical rule/ pattern based on elementary arithmetic concepts. A particular series is given from which the pattern must be analyzed. You are then asked to predict the next number in the sequence following the same rule.

Number series is a arrangement of numbers in a certain order, where some numbers are wrongly put into the series of numbers and some number is missing in that series, we need to observe and find the accurate number to the series of numbers.

Tips For Number Series

1) Try to observe if there are any familiar numbers in the given series.
2) Familiar numbers are the numbers which which are easy to identify like primes numbers, perfect squares, cubes.
3) If you are unable to find familiar number, Calculate the differences between the numbers and observe the pattern in the differences.
4) If the differences are growing slowly it might be an addition or subtraction series or If the differences are growing rapidly it might be a square series, cube series, or multiplicative series.
5) If the differences also are not having any pattern then observe every alternate number (ie every 3rd number form a series) for any pattern.
6) The possible cases may be like sum or the average of two consecutive numbers gives 3rd number.
7)If still you do not find any pattern, it signifies that the series follows a complex pattern. Check for cases like multiplying the number and adding/subtracting a constant number from it to reach the pattern.

Below are the common pattern of questions usually asked in numbers series:

I. Fibonnaci Series

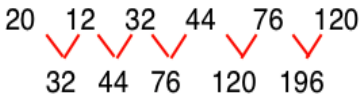
The Fibonnaci sequence is a series of numbers where a no. is found by adding up the nos. before it. Let us understand the series with the help of an example:

Example 1:

0,1,1,2,3,5,8,13,21,___.

Example 2:

20, 12, 32, 44, 76, 120,____.



II. Addition series

There can be 2 types of pattern in addition series.

(A) Same number Addition series

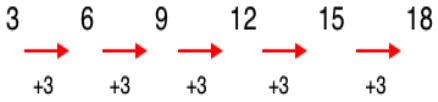
In this type of series, the difference between 2 consecutive elements is same i.e. same digit is to be added to the previous element to obtain the next element.

Example 3:

3, 6, 9, 15, 18,___.

Sol. In the given series, the difference between the two consecutive elements is same i.e 3.

In this type of series, the number added to each term is in increasing order.



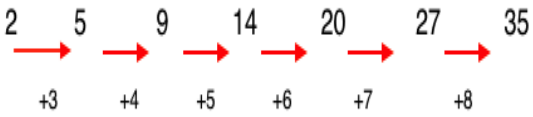
(B) Increasing order Addition series

In the given series, the difference between 2 consecutive numbers is in increasing order.

Example 4:

2, 5, 9, 14, 20, 27,____.

Sol. *In the given series, the difference between 2 consecutive numbers is in increasing order i.e 3,4,5,6,7 and 8 respectively.*



III. Subtraction series

(A) Same Number Subtraction Series

In this type of series, each time the same number is subtracted from the previous element to obtain the next element.

Example 5:

52, 49, 46, 43, 40,____.

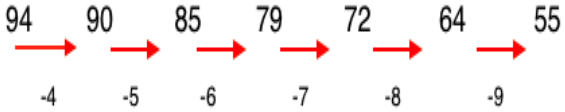
Sol. *Here the difference between 2 consecutive nos. is 3.*

(B) Increasing order Subtraction Series

Example 6:

94, 90, 85, 79, 72, 64,___.

Sol. *Here the difference between 2 consecutive elements is in increasing order.*



IV. Multiplication Series

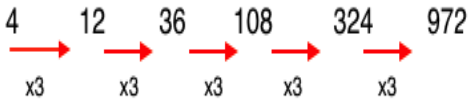
(A) Same number multiplication Series

In this series, the ratio between 2 consecutive elements is same.

Example 7:

4, 12, 36, 108, 324,____.

In the given series, previous element is multiplied by 3 to obtain the next element and therefore the ratio between 2 consecutive elements is same.



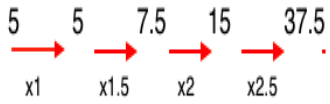
(B) Increasing order of Multiplication Series

In this type of series, elements are multiplied in increasing order to find the next element.

Example 8:

5, 5, 7.5, 15,___.

In the given series, the ratio between 2 consecutive elements is in increasing order and elements are multiplied by the numbers in increasing order.



V. Division series

(A) Same number division series

In this type, each time the previous element is divided by same digit to obtain the next element.

Example 9:

1600, 400, 100, 25,___.

Sol. *In the given series, previous element is divided by 4 to get the next element.*

1600/4 = 400

400/4 = 100

100/4 = 25

25 /4 = 6.25

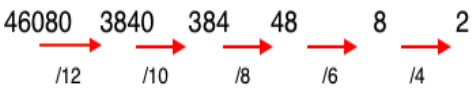
Therefore, the correct answer = 6.25

(B) Increasing/Decreasing order division series

Example 10:

46080, 3840, 384, 48, 8, 2,____.

Sol. *In the given series, elements are divided by 12, 10, 8, 6 and 4 respectively to obtain the next elements.*

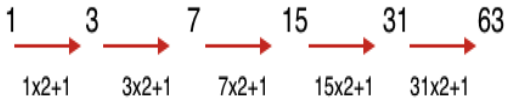


VI. Addition & Multiplication together

Example 11:

1, 3, 7, 15, 31,____.

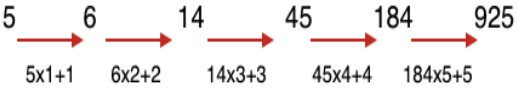
Sol. *In such a series , addition and multiplication is used together.*



Example 12:

5, 6, 14, 45, 184,____.

Sol. *In this series, the previous elements are multiplied respectively by numbers in increasing order & numbers in increasing order respectively added in such multiplication to obtain the next element.*

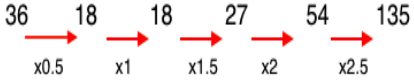


VII. Decimal Fraction

Example 13:

36, 18, 18, 27, 54,___.

Sol. *In this series, following pattern is used:*



VIII. Difference of difference series

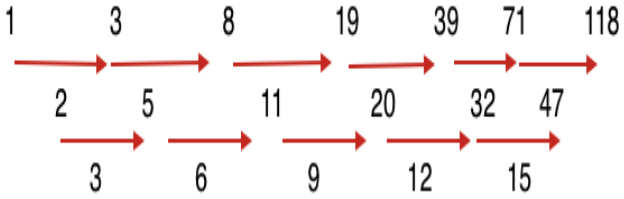
Calculate the differences between the numbers given in the series provided in the question. Then try to observe the pattern in the new set of

numbers that you have obtained after taking out the difference.

Example 14:

1, 3, 8, 19, 39, 71,_____.

Sol. *The following pattern is observed in the given series*



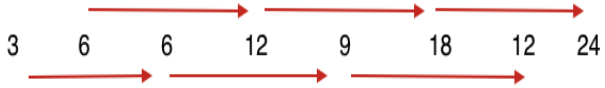
IX. Twin series

In this type of series, odd place element males one series while the even place elements make another series.

Example 15:

3, 6, 6, 12, 9, 18,_____.

Sol. *In this series, following pattern is used:*

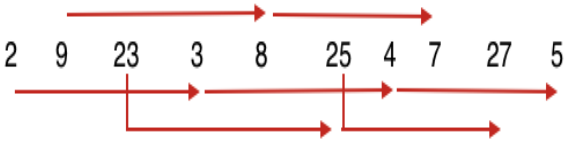


X. Tri-series

Example 16:

2, 9, 23, 3, 8, 25, 4,_____.

Sol. *Following pattern is used in the given series*



XI. Square series & Cube series

Example 17:

4, 9, 16, 25, 36, 49,____.

Sol. *In the given series, the following pattern is used*

$2^2, 3^2, 4^2, 5^2, 6^2, 7^2, 8^2$

Example 18:

Sol. *In the given series, the following pattern is used*

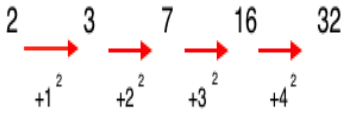
$1^3, 2^3, 3^3, 4^3, 5^3, 6^3$

XII. Square & Cube addition

Example 19:

2, 3, 7, 16,_____.

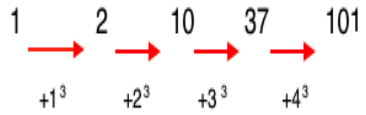
Sol. *In the given series, the following pattern is used*



Example 20:

1, 2, 10, 37,____.

Sol. *In the given series, the following pattern is used*



XIII. Digital Operation of Numbers

In this type of series, the digits of each number are operated in a certain way to obtain the next element of the series.

Example 21:

94, 36, 18,_____.

Sol. *In the given series, the following pattern is used*

*9 *4 = 36*

*3 * 6 = 18*

*1 * 8 = 8*

Correct answer - 8

- ***Prime Series :*** *IN which the terms are the prime numbers in Order*
  - ***Ex : 2, 3, 5, 7, 11, 13, _ , 19***
    - *Here the terms of the series are the prime numbers in order. The prime number after 13 is 17. So the answer to this question is 17.*
- ***Alternate Primes :***
  - ***Ex: 2, 5, 11, 17, 23, _, 41***
    - *Here the series is framed by taking the alternative prime numbers. After 23, the prime numbers are 29 and 31. So the answer is 31.*
- ***Every Third number can be the sum of the preceding two numbers:***
  - ***Ex : 3, 5, 8, 13, 21***
    - *Here starting from third number*
      - *3 + 5 = 8*
      - *5 + 8 = 13*
      - *8 + 13 = 21*
        - *So, the answer is 13 + 21 = 34*
- ***Every Third number can be the product of the preceeding two numbers***
  - ***Ex : 1, 2, 2, 4, 8, 32. _***
    - *Here starting from the third number*
      - *1 X 2 = 2*
      - *2 X 2 = 4*
      - *2 X 4 = 8*
      - *4 X 8 = 32*
        - *So, the answer is 8 X 32 = 256*
- ***The difference of any term from its succeding term is constant (either increasing series or decreasing series :***
  - ***Ex : 4, 7, 10, 13, 16, 19, _, 25***
    - *Here the difference of any term from its succeding term is 3.*
      - *7 - 4 = 3*
      - *10 - 7 = 3*
        - *So, the answer is 19 + 3 = 22*
- ***The difference between two consecutive terms will be either increasing or decreasing by a constant number :***
  - ***Ex : 2, 10, 26, 50, 82, _***
    - *Here, The difference between two consecutive terms are*
      - *10 - 2 = 8*
      - *26 - 10 = 16*
      - *50 - 26 = 24*
      - *82 - 50 = 32*
        - *Here, the difference is increased by 8 (or you can say the multiples of 8). So the next difference will be 40 (32 + 8). So, the answer is 82 + 40 = 122*
  - ***Ex : 63, 48, 35, 24, 15, _***
    - *Here, the difference between the two terms are*
      - *63 - 48 = 15*
      - *48 - 35 = 13*
      - *35 - 24 = 11*
      - *24 - 15 = 9*
        - *Here, the difference is decreased by 2. So, the next difference will be 7.*

- *So, the answer is 15 - 7 = 8.*
- ***The difference between two numbers can be multiplied by a constant number :***
  - ***Ex : 15, 16, 19, 28, 55, _***
    - *Here, the differences between two numbers are*
      - *16 - 15 = 1*
      - *19 - 16 = 3*
      - *28 - 19 = 9*
      - *55 - 28 = 27*
        - *Here, the difference is multiplied by 3. So, the next difference will be 81. So, the answer is 55 + 81 = 136*
- ***The difference can be multiplied by numbers which will be increasing by a constant number :***
  - ***Ex : 2, 3, 5, 11, 35, _***
    - *The difference between two numbers are*
      - *3 - 2 = 1*
      - *5 - 3 = 2*
      - *11 - 5 = 6*
      - *35 - 11 = 24*
        - *Here, the differences are multiplied by numbers which are in increasing order.*
        - *Differences are*
          - *1*
          - *1 x 2 = 2*
          - *2 x 3 = 6*
          - *6 x 4 = 24*
          - *So, the next difference will be 24 x 5 = 120. So, the answer is 35 + 120 = 155.*
- ***Every succeeding term is got by multiplying the previous term by a constant number or numbers which follow a special pattern.***
  - ***Ex : 5, 15, 45, 135, _***
    - *Here, 5 x 3 = 15*
      - *15 x 3 = 45*
      - *45 x 3 = 135*
        - *So, the answer is 135 x 3 = 405.*
  - ***Ex : 2, 10, 40, 120, 240, _***
    - *Here, 2 x 5 = 10*
      - *10 x 4 = 40*
      - *40 x 3 = 120*
      - *120 x 2 = 240*
        - *So, the answer is 240 x 1 = 240*
- ***In certain series the terms are formed by various rule (miscellaneous rules). By keen observation you have to find out the rule and the appropriate answer.***
  - ***Ex : 4, 11, 31, 90, _***
    - *Terms are,*
      - *4 x 3 - 1 = 11*
      - *11 x 3 - 2 = 31*
      - *31 x 3 - 3 = 90*
        - *So, the answer will be 90 x 3 - 4 = 266*
  - ***Ex : 3, 5, 14, 55, _***
    - *Terms are,*
      - *3 x 2 - 1 = 5*
      - *5 x 3 - 1 = 14*
      - *14 x 4 - 1 = 55*
        - *So, the answer will be 55 x 5 - 1 = 274*
  - ***Ex : 3, 7, 23, 95, _***
    - *Terms are,*
      - *3 x 2 + 1 = 7*
      - *7 x 3 + 2 = 23*
      - *23 x 4 + 3 = 95*
        - *So, the answer will be 95 x 5 + 4 = 479*
  - ***Ex : 6, 17, 38, 79, _***
    - *Terms are,*
      - *6 x 2 + 5 = 17*
      - *17 x 2 + 4 = 38*
      - *38 x 2 + 3 = 79*
        - *So, the answer is 79 x 2 + 2 = 160*

Number Series Questions

1. 16, 8.5, 9.5, 21, 88, ?
(A) 512 (B) 624
(C) 712 (D) 848
(E) 976

2. 28, 32, 23, 39, 14, 50, ?
(A) 1 (B) 5
(C) 14 (D) 24
(E) 62

3. 4, 9, 17, ? , 69, 139, 277
(A) 28 (B) 35
(C) 42 (D) 51
(E) None of these

4. 5, 6, 16, ?, 244, 1245
(A) 28 (B) 55
(C) 57 (D) 61
(E) None of these

5. 3, 14, 39, ?, 155 , 258
(A) 84 (B) 88
(C) 92 (D) 96
(E) 104

6. 8, 9, 15, 32, ? , 250.5
(A) 61 (B) 65.5
(C) 82.5 (D) 87
(E) 99

7. 4, 6, 16, 56, 240, ?
(A) 680 (B) 840
(C) 960 (D) 1020
(E) 1232

8. 1, 2, 10, 37, ? , 226.
(A) 75 (B) 84
(C) 95 (D) 101
(E) 111

9. 5, 11, 20, 43, 82,?
(A) 135 (B) 147
(C) 155 (D) 169
(E) 234

10. 4, 5, 8, 28, 104, ?
(A) 425 (B) 484
(C) 504 (D) 522
(E) 536

11. 2, 4, 10, 22, 42, 72, ?
(A) 102 (B) 106
(C) 114 (D) 124
(E) 132

12. 4, 2, 2, 4, 16, ?
(A) 64 (B) 72
(C) 96 (D) 128
(E) 156

13. 15, 15, 30, 10, 40, ?, 48
(A) 8 (B) 20
(C) 24 (D) 40
(E) 60

14. 2, 3, 8, 27, 112, ?
(A) 156 (B) 224
(C) 375 (D) 480
(E) 565

15. 5, 6, 10, 33, 128, ?
(A) 375 (B) 445
(C) 565 (D) 645
(E) 675

16. 27, 50, 192, 1140, 9104, ?
(A) 90400 (B) 91020
(C) 92040 (D) 94060
(E) None of these

17. *4, 7, 13, 23, 38, 59, ?*
(A) 72 *(B) 80*
(C) 87 *(D) 95*
(E) None of these

18. *6, 11, 32, 111, 464, ?*
(A) 2345 *(B) 2475*
(C) 2525 *(D) 3050*
(E) None of these

19. *2, 12, 36, 80, ?, 252, 392*
(A) 80 *(B) 100*
(C) 120 *(D) 150*
(E) None of these

20. *2, 6, 33, 49, 174, 210, ?*
(A) 275 *(B) 387*
(C) 464 *(D) 553*
(E) None of these

21. *6, 8, 14, 26, 46, 76, ?*
(A) 84 *(B) 96*
(C) 112 *(D) 118*
(E) 124

22. *4, 4, 6, 12, 30, ?, 315*
(A) 60 *(B) 75*
(C) 90 *(D) 115*
(E) 120

23. *3, 4, 10, 33, ?, 645, 4116*
(A) 84 *(B) 112*
(C) 136 *(D) 156*
(E) 224

24. *2, 3, 4, 15, 56, ?, 1704*
(A) 112 *(B) 156*
(C) 192 *(D) 234*
(E) 285

25. *6, 7, 12, 26, 67.5, ?*
(A) 125 *(B) 145.5*
(C) 175 *(D) 205.5*
(E) 230

26. *8, 10, 24, 78, 320, ? , 9672*
(A) 740 *(B) 960*
(C) 1240 *(D) 1440*
(E) 1610

27. *2, 10, 37, 101, 226, ?*
(A) 324 *(B) 442*
(C) 526 *(D) 636*
(E) 784

28. *3, 7, 17, 39, 79, 143, ?*
(A) 178 *(B) 237*
(C) 264 *(D) 301*
(E) 336

29. *4, 5, 8, 28, 104, ?*
(A) 208 *(B) 312*
(C) 424 *(D) 536*
(E) 576

30. *12, 15, 25, 42, 66, 97, ?*
(A) 135 *(B) 144*
(C) 156 *(D) 167*
(E) 182

31. *1, 3, 10, 38, 168, ?*
(A) 540 *(B) 654*
(C) 724 *(D) 872*
(E) None of these

32. *1, 2, 10, 37, ? , 226*
(A) 75 *(B) 84*
(C) 95 *(D) 101*
(E) 111

33. *4, 7, 13, 23, 38, 59, ?*
(A) 72 *(B) 80*
(C) 87 *(D) 95*
(E) None of these

34. *5, 3, 4, 7.5, 17,?*
(A) 35 *(B) 42*

(C) 45 (D) 50
(E) 56

35. 9, 11, 20, 31, 51, 82, (?)
(A) 133 (B) 142
(C) 156 (D) 164
(E) None of these

36. 5, 6, 10, 19, 35, 60, ?
(A) 84 (B) 96
(C) 112 (D) 125
(E) 144

37. 24, 28, 19, 35, 10, ?
(A) 45 (B) 44
(C) 46 (D) 42
(E) 47

38. 2, 5, 9, 19, 37, ?
(A) 72 (B) 75
(C) 80 (D) 84
(E) None of these

39. 4, 9, 17,? , 69, 139, 277
(A) 28 (B) 35
(C) 42 (D) 51
(E) None of these

40. 5, 6, 16, ?, 244, 1245
(A) 34 (B) 48
(C) 57 (D) 72
(E) None of these

41. 2, 7, 15, 27, 44, 67, ?
(A) 75 (B) 84
(C) 97 (D) 108
(E) 119

42. 2, 6, 11, 20, ?, 36, 56
(A) 24 (B) 26
(C) 28 (D) 30
(E) None of these

43. 12, 25, 48, 99, 194, 393, ?
(A) 715 (B) 730
(C) 750 (D) 780
(E) None of these

44. 7, 14, 25, 40, 59, 82, ?
(A) 99 (B) 109
(C) 120 (D) 135
(E) None of these

45. 9, 15, 25, 41, 65, 99, ?
(A) 125 (B) 135
(C) 145 (D) 155
(E) None of these

46. 2, 2, 3, 6, 15, 45, 157.5, ?
(A) 250 (B) 320
(C) 450 (D) 630
(E) None of these

47. 9, 5, 6, 10.5, 23, 60, ?
(A) 132 (B) 148
(C) 164 (D) 183
(E) None of these

48. 16, 20, 29, 45, 70, 106, ?
(A) 155 (B) 172
(C) 184 (D) 196
(E) None of these

49. 7, 12, 29, 92, 373, ?
(A) 1442 (B) 1654
(C) 1870 (D) 1966
(E) None of these

50. 4, 9, 20, 37, 60, 89, ?
(A) 124 (B) 132
(C) 144 (D) 156
(E) None of these

Solutions

1.Answer is option C

Explanation:

$16 \times 0.5 + 0.5 = 4.5$
$8.5 \times 1 + 1 = 9.5$
$9.5 \times 2 + 2 = 21$
$21 \times 4 + 4 = 84$
$84 \quad 8 + 8 = 712$

2.Answer is option A

Explanation:

$28 + 2^2 = 28 + 4 = 32$
$32 - 3^2 = 32 - 9 = 23$
$23 + 4^2 = 23 + 16 = 39$
$39 - 5^2 = 39 - 25 = 14$
$14 + 6^2 = 14 + 36 = 50$
$50 - 7^2 = 50 - 49 = 1$

3. Answer is option B

Explanation:

4
$9 = 4 \times 2 + 1$
$17 = 9 \times 2 - 1$
$35 = 17 \times 2 + 1$
$69 = 35 \times 2 - 1$
$139 = 69 \times 2 + 1$
$277139 \times 2 - 1$

4.Answer is option C

Explanation:

5
$5 \times 1 + 1^2 = 5 + 1 = 6$
$6 \times 2 + 2^2 = 12 + 4 = 16$
$16 \times 3 + 3^2 = 48 + 9 = 57$
$57 \times 4 + 4^2 = 228 + 16 = 244$
$2445 + 5^2 = 1245$

5.Answer is option A

Explanation:

$1 + 1^2 + 1^3 = 3$
$2 + 2^2 + 2^3 = 14$
$3 + 3^2 + 3^3 = 39$
$4 + 4^2 + 4^3 = 84$
$5 + 5^2 + 5^3 = 155$
$6 + 6^2 + 6^3 = 258$

6.Answer is option C

Explanation:

$8*1+1 = 9$
$9*1.5+1.5 = 15$
$15*2+2 = 32$
$32*2.5+2.5 = 82.5$
$82.5*3+3 = 250.5$

7.Answer is option E

Explanation:

$4*1+2 = 6$
$6*2+4 = 16$
$16*3+8 = 56$
$56*4+16 = 240$
$240*5+32 = 1232$

8.Answer is option D

Explanation:

$1+13 = 2$
$2+23 = 10$
$10+33 = 37$
$37+43 = 101$
$101+53 = 226$

9.Answer is option D

Explanation:

$5*2+1 = 11$
$11*2-2 = 20$
$20*2+3 = 43$
$43*2-4 = 82$
$82*2+5 = 169$

10.Answer is option E

Explanation:

$4*1+1 = 5$
$5*2-2 = 8$
$8*3+4 = 28$

28*4-8 = 104
104*5+16 = 536

11.Answer is option C
Explanation:
$2+1^2+1=4$
$4+2^2+2=10$
$10+3^2+3=22$
$22+4^2+4=42$
$42+5^2+5=72$
$72+6^2+6=114$

12.Answer is option D
Explanation:
4* .5 = 2
2*1 = 2
2*2 = 4
4*4 = 16
16*8 = 128

13. Answer is option A

Explanation:
15/1 = 15
15*2 = 30
30/3 = 10
10*4 = 40
40/5 = 8
8*6 = 48

14.Answer is option D

Explanation:
2*1+1 = 3
3*2+2 = 8
8*3+3 = 27
27*4+4 = 112
112*5+5 = 565

15.Answer is option D
Explanation:
5*1+1 = 6
6*2-2 = 10
10*3+3 = 33
33*4-4 = 128
128*5+5 = 645

16. Answer is option B
Explanation:
27, 50, 192, 1140, 9104, ?
27*2-4 = 50
50*4-8 = 192
192*6-12 = 1140
1140*8-16 = 9104
9104*10-20 = 91020

17. Answer is Option C
Explanation:
4, 7, 13, 23, 38, 59, ?
V V V V V V
3 6 10 15 21 28
V V V V V
3 4 5 6 7
There should be 59+28 = 87

18.Answer is option A
Explanation:
6, 11, 32, 111, 464, ?
6*1+5 = 11
11*2+10 = 32
32*3+15 = 111
111*4+20 = 464
464*5+25 = 2345

19. Answer is option D Explanation:
2, 12, 36, 80, ?, 252, 392
$1^2+1^3=2$
$2^2+2^3=12$
$3^2+3^3=36$
$4^2+4^3=80$
$5^2+5^3=150$
$6^2+6^3=252$
$7^2+7^3=392$

20. Answer is option D
Explanation:
2, 6, 33, 49, 174, 210, ?
$1+1^3=2$
$2+2^2=6$
$6+3^3=33$
$33+4^2=49$
$49+5^3=174$
$174+6^2=210$

$210+7^3 = 553$

21. Answer is Option D

Explanation:

6, 8, 14, 26, 46, 76, ?

V V V V V V

2 6 12 20 30 42

V V V V V

4 6 8 10 12

There should be 76+42 = 118

22. Answer is option C Explanation:

4*1 = 4

4*1.5 = 6

6*2 = 12

12*2.5 = 30

30*3 = 90

90*3.5 = 315

23.Answer is option C Explanation:

3*1+1 = 4

4*2+2 = 10

10*3+3 = 33

33*4+4 = 136

136*5+5 = 685

685*6+6 = 4116

24.Answer is option E Explanation:

2*1+1 = 3

3*2-2 = 4

4*3+3 = 15

15*4-4 = 56

56*5+5 = 285

285*6-6 = 1704

25.Answer is option D Explanation:

6*1+1 = 7

7*1.5+1.5 = 12

12*2+2 = 26

26*2.5+2.5 = 67.5

67.5*3+3 = 205.5

26.Answer is option E Explanation:

8*1+2 = 10

10*2+4 = 24

24*3+6 = 78

78*4+8 = 320

320*5+10 = 1610

1610*6+12 = 9672

27.Answer is option B Explanation:

$1+1^3 = 2$

$2+2^3 = 10$

$10+3^3 = 37$

$37+4^3 = 101$

$101+5^3 = 226$

$226+6^3 = 442$

28. Answer is Option B

Explanation:

3, 7, 17, 39, 79, 143, ?

V V V V V V

4 10 22 40 64 94

V V V V V

6 12 18 24 30

There should be 143+94 = 237

29.Answer is option D Explanation:

4*1+1 = 5

5*2-2 = 8

8*3+4 = 28

28*4-8 = 104

104*5+16 = 536

30. Answer is option A

Explanation:

12, 15, 25, 42, 66, 97, ?

V V V V V V

3 10 17 24 31 38

V V V V V

7 7 7 7 7

There should be 97+38 = 135

31. Answer is option D

Explanation:

1*1+2 = 3

3*2+4 = 10

*10*3+8 = 38*
*38*4+16 = 168*
*168*5+32 = 872*

32.Answer is option D Explanation:
$1+1^3 = 2$
$2+2^3 = 10$
$10+3^3 = 37$
$37+4^3 = 101$
$101+5^3 = 226$

33. Answer is option C
Explanation:
4, 7, 13, 23, 38, 59, ?
\/ \/ \/ \/ \/ \/
3 6 10 15 21 28
\/ \/ \/ \/ \/
3 4 5 6 7
There should be 59+28 = 87

34. Answer is option C
Explanation:
5 x 0.5 + 0.5 = 3
3 x 1+ 1 = 4
4 x 1.5 + 1.5 = 7.5
7.5 x 2 + 2 = 17
17 x 2.5 + 2.5 = 45

*35. **Answer is option A***
Explanation:

9+11 = 20

11+20= 31

31+51= 82

82+51= 133

*36. **Answer is option B***
$5 + (1^2) = 5 + 1 = 6$
$6 + (2^2) = 6 + 4 = 10$

$10 + (3^2) = 10 + 9 = 19$

$19 + (4^2) = 19 + 16 = 35$

$35 + (5^2) = 35 + 25 = 60$

$60 + (6^2) = 60 + 36 = 96$

37. Answer is option C
Explanation:
$24 + 2^2 = 24 + 4 = 28$

$28 - 3^2 = 28 - 9 = 19$

$19 + 4^2 = 19 + 16 = 35$

$35 - 5^2 = 35 - 25 = 10$

$10 + 6^2 = 10 + 36 = 46$

38. Answer is option B
Explanation
2, 5, 9, 19, 37, ...
The pattern is: every number is arrived at previous number multiplied by 2 and then alternate addition and subtraction by 1 i.e.
2
5=2×2+1
9=5×2-1
19=9×2+1
37=19×2-1
the next term 37×2+1 = 75

39. Answer is option B
Explanation:
9 = 4×2+1
17 = 9×2–1
35 = 17×2+1
69 = 35×2–1
139 = 69×2+1
277 = 139×2–1

40. Answer is option C
Explanation:
5 × 1+12 =5+1=6
6 × 2 + 22 = 12 + 4 = 16
16 × 3 + 32 = 48 + 9 = 57
57 × 4 + 42 = 228 + 16= 244
244 × 5 + 52 = 1245

Q41. Answer is option C

Explanation:

2, 7, 15, 27, 44, 67, 97

V V V V V V

5 8 12 17 23 30

V V V V V

3 4 5 6 7

There should be 67+30 = 97

Q42. Answer is option D

Explanation:

2, 6, 12, 20, ?, 36, 56

$1+1^2 = 2$

$2+2^2 = 6$

$3+3^2 = 12$

$4+4^2 = 20$

$5+5^2 = 30$

$6+6^2 = 36$

$7+7^2 = 56$

Q43. Answer is option D

Explanation:

*12*2+1 = 25*

*25*2–2 = 48*

*48*2+3 = 99*

*99*2–4 = 194*

*194*2+5 = 393*

*393*2–6 = 780*

Q44.Answer is option B

Explanation:

7, 14, 25, 40, 59, 82, 109

V V V V V V

7 11 15 19 23 27

V V V V V

4 4 4 4 4

There should be 82+27 = 109

Q45.Answer is option C

Explanation:

9, 15, 25, 41, 65, 99, ?

V V V V V V

6 10 16 24 34 46

V V V V V

4 6 8 10 12

There should be 99+46 = 145

Q46. Answer is option D Explanation:

2, 2, 3, 6, 15, 45, 157.5, ?

*2*1 = 2*

*2*1.5 = 3*

*3*2 = 6*

*6*2.5 = 15*

*15*3 = 45*

*45*3.5 = 157.5*

*157.5*4 = 630*

Q47.Answer is option D Explanation:

9.5+.5 = 5*

*5*1+1 = 6*

*6*1.5+1.5 = 10.5*

*10.5*2+2 = 23*

*23*2.5+2.5 = 60*

*60*3+3 = 183*

Q48. Answer is option A

Explanation:

16, 20, 29, 45, 70, 106, ?

V V V V V V

4 9 16 25 36 49

Squares of consecutive numbers, the next term should be 106+49 = 155

Q49. Answer is option C

Explanation:

*7*1+5 = 12*

*12*2+5 = 29*

*29*3+5 = 92*

*93*4+5 = 373*

*373*5+5 = 1870*

Q50. Answer is option A

Explanation:

4, 9, 20, 37, 60, 89, ?

V V V V V V

5 11 17 23 29 35

V V V V V

6 6 6 6 6

There should be 89+35 = 124

Number Series Questions

1) 4,3,5,24,55,?
2) 16,13.9,18.1,11.8,?
3) 2160,?,72,18,6,3
4) 6,3,3,4.5,9,?
5) 24,?,44,80,144,244
6) 1440,?,48,12,4,2
7) 22,19.7,24.3,17.4,?,15.1
8) 5, 4, 7, 20, 79, ?
9) 32, ?, 52, 88, 152, 252
10) 21, 37, 40.2, 88.2, 94.6, ?
11) 142, 70, 34, 16, ?, 2.5
12) 17, 9, 10, 16.5, 35, ?
13) 89, 86, 78, 63, 41 , ?
14) 1, 3, 4, 8, 15, 27, ?
15) 5760, ?, 1440, 160, 10, 0.4
16) 8, 5, 6, 10, 21, ?
17) 339, ?, 345, 353, 369
18) 38, ?, 25.2, 18.8, 22
19) 0.5, 1, 5 ,40 ,440 ,?
20) 0.1, 0.2, 1, 8, 88, ?
21) 9, 31.4, 20.2, 25.8, 23, ?
22) 10, 6, 7, 11.5, 24, ?
23) 2880, ?, 720, 80, 5, 0.2
24) 259, ?, 253, 245, 229, 197
25) 8, 4, 4, 6, 12, 32
26) 7, 16, 45, 184, 915, ?
27) 11, 20, 38, 74, ? 290
28) 15, 21, 38, 65, 101, ?
29) 24, 28, 19, 35, 10, ?
30) 14, 6, 4, 4, 8, ?

Solution

Q1) 4 × 1 – 1 = 3
3 × 2 – 1 = 5
5 × 3 – 1 = 14
14 × 4 – 1 = 55
55 × 5 – 1 = 274
Answer: 274

Q2) 16 – 2.1 = 13.9
13.9 + 2.1 × 2 = 18.1
18.1 – 2.1 × 3 = 11.8
11.8 + 2.1 × 4 = 20.2
Answer: 20.2

Q3) 3 × 2 = 6
6 × 3 = 18
18 × 4 = 72
72 × 5 = 360
360 × 6 = 2160
Answer: 360

Q4) 6 × 0.5 = 3
3 × 1 = 3
3 × 1.5 = 4.5
4.5 × 2 = 9
9 × 2.5 = 22.5
Answer: 22.5

Q5) 24 + 2^2 = 28
28 + 4^2 = 44
44 + 6^2 = 80
80 + 8^2 = 144
144 + 10^2 = 244
Answer: 28

Q6) 2*2 =4
4*3 =12
12*4 =48
48*5 =240
240*6 =1440
Answer: 240

Q7) 22 – (2.3*1) =19.7
19.7 + (2.3*2) =24.3
24.3 – (2.3*3) = 17.4
17.4 +(2.3*4) =26.6
26.6 – (2.3*5) =15.1
Answer: 26.6

Q8) 5*1 -1 = 4
4*2 -1 =7
7*3 -1 =20
20*4 -1 =79
79*5 -1 =394
Answer: 364

Q9) 32 + 2^2 = 36
36 + 4^2 =52
52 + 6^2 = 88
88 + 8^2 = 152
152 +10^2 = 252
Answer: 36

Q10) 21+16 =37
37+3.2 =40.2
40.2+ (16*3) = 88.2
88.2 + (3.2*2) =94.6
94.6 + (48 *3) =238.6
Answer: 238.6

Q11) (142/2) -1 =70
(70/2)-1 =34
(34/2)-1 = 16
(16/2) -1 =7
(7/2) -1 =2.5
Answer: 7

Q12) 17*0.5 +0.5 = 9

9*1 +1= 10
10*1.5 +1.5 =16.5
16.5 *2 +2 =35
35 *2.5 +2.5 = 90
Answer: 90

Q13) The differences are: 2^2 -1, 3^2 -1, 4^2 -1, 5^2 -1…
Answer: 76

Q14) 1+3 =4
1+3+4 =8
3+4+8 =15
4+8+15 =27
8+15+27 =50
Answer: 50

Q15) $5760/1^2 = 5760$
$5760/2^2 = 1440$
$1440/3^2 = 160$
$160/4^2 = 10$
$10/ 5^2 = 0.4$
Answer:5760

Q16) 8 × 0.5 + 1 = 5
5 × 1 + 1 = 6
6 × 1.5 + 1 = 10
10 × 2 + 1 = 21
21 × 2.5 + 1 = 53.5
Answer: 53.5

Q17) $339 + 2^1 = 341$
$341 + 2^2 = 345$
$345 + 2^3 = 353$
$353 + 2^4 = 369$
Answer: 341

Q18) 38 – 25.6/1 = 12.4
12.4 + 25.6/2 = 25.2
25.2 – 25.6/4 = 18.8
18.8 + 25.6/8 = 22
Answer: 12.4

Q19) 0.5 × 2 = 1
1 × (2 + 3) = 5
5 × (2 + 3 + 3) = 40
40 × (2 + 3 + 3 + 3) = 440
440 × (2 + 3 + 3 + 3 + 3) = 6160
Answer: 6160

Q20) 0.1×2 = 0.2
0.2×(2+3) = 1
1×(2+3+3) = 8
8×(2+3+3+3) = 88
88×(2+3+3+3+3) = 1232
Answer: 1232

Q21) 9 + 22.4 = 31.4
31.4 – 22.4/2 = 20.2
20.2 + 22.4/4 = 25.8
25.8 – 22.4/8 = 23
23 + 22.4/16 = 24.4
Answer: 24.4

Q22) 10×0.5 + 1 = 6
6×1 + 1 = 7
7×1.5 + 1 = 11.5
11.5×2 + 1 = 24
24×2.5 + 1 = 61
Answer: 61

Q23) $2880/1^2 = 2880$
$2880/2^2 = 720$
$720/3^2 = 80$
$80/4^2 = 5$
$5/5^2 = 0.2$
Answer: 720

Q24) 259 – 2 = 257
257 – 2 = 253
253 – 2 = 245
245 – 2 = 229
229 – 2 = 197
Answer: 257

Q25) 8*0.5 =4

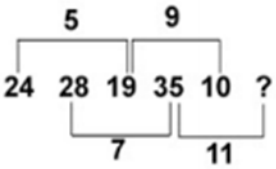
4* 1 =4
4*1.5 =6
6*2 =12
12*2.5 =30
So the wrong term is 32

Q26) x2+2, x3-3, x4+4…
Answer: 5496

Q27) +9+18+36+72+
Answer= 146

Q28) Difference (6+17+27+36+44..)
6+11=17
17+10= 27
27+9 = 36
36+8=44
Answer= 145

Q29)



Answer: 46

Q30) X1-8, x2-8, x3-8, x4-8 …
Answer: 32

Wrong Number Series

1). 50 51 47 56 42 65 29

a) 51
b) 47
c) 56
d) 42
e) 65

2). 3 9 23 99 479 2881 20159

a) 9
b) 23
c) 99
d) 479
e) 2881

3). 7 4 6 9 20 52.5 160.5

a) 6
b) 4
c) 20
d) 9
e) 52.5

4). 1 3 6 11 20 39 70

a) 3
b) 39
c) 11
d) 20
e) 6

5). 2 13 27 113 561 3369 23581

a) 27
b) 13
c) 113
d) 561
e) 3369

6). 7 16 27 40 46

a) 7
b) 16
c) 27
d) 40
e) 46

7). 729 1331 2497 3375 4913

a) 729
b) 1331
c) 3375
d) 2497
e) 4913

8). 80 119 166 221 223

a) 80
b) 119
c) 166
d) 192
e) 223

9). 8 8.5 11.5 14 17

a) 8
b) 8.5
c) 11.5
d) 14
e) 17

10). 439 778 1456 2812 5624

a) 439
b) 778
c) 1456
d) 2812
e) 5624

11). 17, 36, 132, 635, 3500, 21750, 153762

a) 635
b) 17
c) 132
d) 3500

e) 36

12). 17, 20, 46, 147, 599, 3015, 18018

a) 20
b) 46
c) 599
d) 147
e) 3015

13). 90, 135, 286, 750, 2160, 6405, 19155

a) 90
b) 750
c) 6405
d) 286
e) 2160

14). 9, 14, 40, 129, 536, 2705, 16260

a) 14
b) 40
c) 536
d) 9
e) 129

15). 8, 18, 64, 272, 1395, 8424, 59045

a) 18
b) 8
c) 272
d) 1395
e) 64

16). 32, 39, 65, 128, 253, 467, 809, 1320

a) 39
b) 65
c) 253
d) 467
e) 32

17). 38, 49, 62, 72, 77, 91, 101

a) 49
b) 72
c) 77
d) 91
e) 38

18).19, 22, 32, 46, 73, 108, 158

a) 22
b) 46
c) 73
d) 19
e) 158

19). 47, 44, 45, 46, 33, 57, 3, 88

a) 44
b) 57
c) 46
d) 3
e) 47

20). 45, 131, 228, 338, 466, 619, 800

a) 131
b) 466
c) 619
d) 45
e) 800

Solution

1). The series is 50 + 1^2 = 51, 51 – 2^2 = 47, 47 + 3^2 = 56, 56 – 4^2 = 40, 40 + 5^2 = 65, 65 – 6^2 = 29.
Hence, there should be 40 in place of 42.
Answer is: D

2). The series is 3 × 2 + 3 = 9, 9 × 3 – 4 = 23, 23 × 4 + 5 = 97, 97 × 5 – 6 = 479, 479 × 6 + 7 = 2881,
2881 × 7 – 8 = 20159
Hence, there should be 97 in place of 99.
Answer is: C

3). The series is x0.5 + 0.5, x1 + 1, x 1.5 + 1.5, x 2 + 2, x 2.5 + 2.5, x 3 + 3...
Hence, there should be 5 in place of 6.
Answer is: A

4).The series is 1 × 2 + 1 = 3, 3 × 2 + 0 = 6, 6 × 2 – 1 = 11, 11 × 2 – 2 = 20, 20 × 2 – 3 = 37, 37 × 2 – 4 = 70.
Hence, there should be 37 in place of 39.
Answer is: B

5). The series is 2 × 2 + 7 = 11, 11 × 3 – 6 = 27, 27 × 4 + 5, = 113, 113 × 5 – 4 = 561, 561 × 6 + 3 =3369, 3369 × 7 – 2 = 23581.
Hence, there should be 11 in place of 13.
Answer is: B

6). The series is 5 × 1 + 2 = 7, 6 × 2 + 4 = 16, 7 × 3 + 6 = 27, 8 × 4 + 8 = 40, 9 × 5 + 10 = 55.
Hence, there should be 55 in place of 46.
Alternate Method: +9, +11, +13, +15
Answer is: E

7). The series is 9^3, 11^3, 13^3, 15^3, 17^3,
Hence, there should be 2197 in place of 2497.
Answer is: D

8). The series is 9^2 – 1, 11^2 – 2, 13^2 – 3, 15^2 – 4, 17^2 – 5,
Hence, there should be 284 in place of 223.
Answer is: E

9). The series is 8 + 1.5 = 9.5, 9.5 + 2 = 11.5, 11.5 + 2.5 = 14, 14 + 3 = 17
Hence, there should be 9.5 in place of 8.5.
Answer is: B

10). The series is +339, +678, +1356, +2712,
Hence, there should be 5524 in place of 5624.
Answer is: E

11). The number series should be 636 in the place of 635.
The series is (17 + 1^3) × 2, (36 + 2^3) × 3, (132 + 3^3) × 4, (636 + 4^3) × 5
Answer is: a)

12). The number series should be 600 in the place of 599.
The series is ×1 + 3, ×2 + 6, ×3 + 9, ×4 + 12, ×5 + 15
Answer is: c)

13). The number series should be 285 in the place of 286.
The series is (90-45) × 3, (135-40) × 3, (285-35) × 3, (750-30) × 3, (2160-25) × 3,...

Answer is: d)

14). The number series should be 38 in the place of 40.

The series is ×1 + 5, ×2 + 10, ×3 + 15, ×4 + 20, ×5 + 25

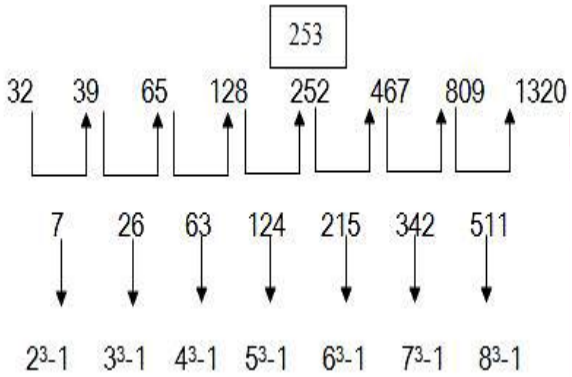
Answer is: b)

15). The number series should be 63 in the place of 64.

The series is (8+1) × 2, (18+3) × 3, (63+5) × 4, (272+7) × 5

Answer is: e)

16).The series is…



Hence, 253 is a wrong number.

Answer: C

17).The series is,

38 = 3+8 = 11 = 38 +11 = 49

49 = 4+9 = 13 = 49 +13 = 62

62 = 6+2 = 8 = 62 + 8 = 70 ≠ 72

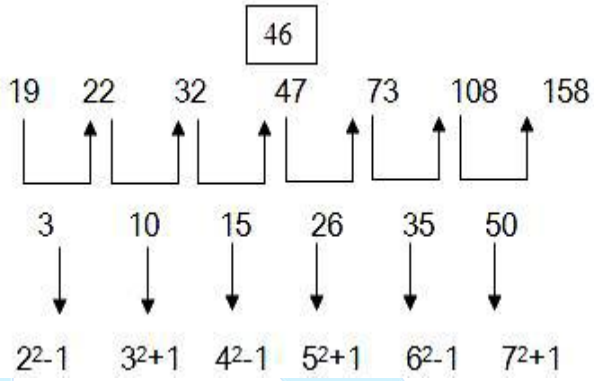
70 = 7+0 = 7 = 70+ 7 = 77

77 = 7+7 = 14 = 77+14 = 91

91 = 9+1 = 10 = 91+10 = 101

Hence, 72 is the wrong number.

18) The series,



Hence, 46 is the wrong number

Answer: B

19). First series 47, 45, 33, 3

47-(1×2) = 45

45-(3×4) = 33

33- (5×6) = 3

Second series 44, 46, 57, 88

44 + (1×2) = 46

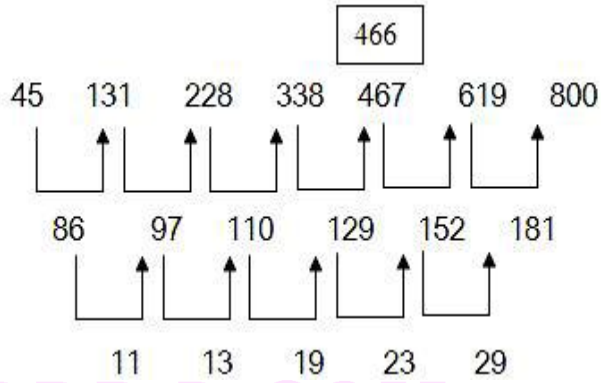
46 + (3×4) = 58 ≠ 57

58 + (5×6) = 88

Hence, 57 is the wrong answer.

Answer: B

20).The series is,



11, 13, 19, 23 and 29 are the prime numbers

Hence, 466 is the wrong number.

Answer: B

Wrong Number Series

1). 1, 8, 66, 460, 2758, 13785, 55146

a) 460
b) 2758
c) 66
d) 8
e) 55146

2). 56, 57, 48, 73, 24, 105, -10

a) 57
b) 73
c) 105
d) -10
e) 24

3). 2, 2, 13, 59, 363, 2519, 20161

a) 13
b) 20161
c) 2519
d) 59
e) 363

4). 3, 1, 3, 0.7, 3, 0.6, 3, 0.5, 3

a) 1
b) 0.7
c) 0.6
d) 3
e) 0.5

5). 2, 6, 13, 26, 54, 100, 197

a) 26
b) 100
c) 54
d) 197
e) 13

6). 3, 7.5, 15, 37.5, 75, 167.5, 375

a) 167.5
b) 75
c) 37.5
d) 15
e) 7.5

7). 0, 1, 9, 36, 99, 225, 441

a) 9
b) 36
c) 99
d) 225
e) 441

8). 2, 3, 5, 8, 14, 23, 41, 69

a) 5
b) 8
c) 14
d) 41
e) 69

9). 5, 10, 17, 27, 37, 50, 65

a) 10
b) 17
c) 37
d) 27
e) 50

10). 108, 54, 36, 18, 9, 6, 4

a) 54
b) 36
c) 18
d) 9
e) 6

11). 4, 12, 42, 196, 1005, 6066, 42511

a) 12
b) 42
c) 196
d) 1005

e) 6066

12). 7, 13, 25, 49, 97, 194, 385

a) 13
b) 25
c) 49
d) 194
e) 385

13). 10, 15, 24, 35, 54, 75, 100

a) 10
b) 24
c) 35
d) 54
e) 100

14). 2, 8, 32, 148, 765, 4626, 32431

a) 32431
b) 765
c) 148
d) 32
e) 2

15). 73, 57, 49, 44, 43, 42

a) 73
b) 57
c) 49
d) 44
e) 42

16). 1527, 1185, 985, 865, 823, 817

a) 985
b) 865
c) 823
d) 817
e) 1185

17). 110, 106, 204, 608, 2384, 11900

a) 2384
b) 106
c) 11900
d) 608
e) 204

18). 71, 90, 128, 185, 261, 365

a) 365
b) 128
c) 185
d) 90
e) 261

19). 8, 17.5, 64.75, 157.375, 561.3125, 1400.78125

a) 17.5
b) 64.75
c) 157.375
d) 561.3125
e) 1400.78125

20). 18, 36, 144, 864, 6912, 691020

a) 691020
b) 144
c) 864
d) 6912
e) 36

21). 76, 75, 142, 399, 1530, 7535

a) 399
b) 142
c) 75
d) 1530
e) 7535

22). 84, 138, 192, 270, 348, 434

a) 192
b) 138
c) 84
d) 348

e) 434

23). 88, 88, 176, 530, 2112, 10560

a) 88
b) 176
c) 2112
d) 105602
e) 530

24). 2400, 1295, 625, 255, 80, 15

a) 2400
b) 1295
c) 625
d) 80
e) 15

25). 45, 62, 81, 102, 123, 150

a) 45
b) 62
c) 102
d) 81
e) 123

26). 127 470 686 811 875 885

a) 470
b) 686
c) 811
d) 885
e) 875

27). 1296 652 328 169 88.5 48.25

a) 328
b) 169
c) 88.5
d) 1296
e) 652

28). 2 5 15 131 530 13257

a) 5
b) 15
c) 131
d) 530
e) 13257

29). 508 640 776 925 1092 1283

a) 640
b) 508
c) 925
d) 1092
e) 1283

30). 1325 714 318 90 -18 -54

a) 714
b) 318
c) 90
d) -18
e) 1325

Solution

1). 1 8 66 460 2758 13785 55146
Here 1 × 9 - 1 = 8; 8 × 8 + 2 = 66; 66 × 7 - 3 = 459;
459 × 6 + 4 = 2758; 2758 × 5 - 5 = 13785;
13785 × 4 + 6 = 55146
Answer: a)

2). 56 57 48 73 24 105 -10
Here 56 +1^2 = 57;
57 – 3^2 = 48; 48+ 5^2 = 73; 73- 7^2 = 24; 24 + 9^2 = 105; 105 -11^2 = -16
Answer: d)

3). 2 2 13 59 363 2519 20161
Here 2 × 3 - 4 = 2; 2 × 4 + 5 = 13;
13 × 5 - 6 = 59; 59 × 6 + 7 = 361; 361 × 7 - 8 = 2519; 2519 × 8 + 9 = 20161
Answer: e)

4). 3 1 3 0.7 3 0.6 3
3 × 1/3 = 1;
1 × 3 = 3;
3 × 1/4 = 0.75;
0.75 × 4 = 3;
3 × 1/5 = 0.6;
0.6 × 5 = 3;
3 × 1/6 = 0.5;
0.5 × 6 = 3.
Answer: b)

5). 2 6 13 26 54 100 197
Here 2 × 2 + 2 = 6; 6 × 2 + 1 = 13;
13 × 2 + 0 = 26; 26 × 2 - 1 = 51;
51 × 2 - 2 = 100; 100 × 2 - 3 = 197
Answer: c)

6). The series is ×2.5, ×2 alternately
Answer: a)

7). The differences are
0 1 9 36 99 225 441
0^2 1^2 3^2 6^2 10^2 15^2 21^2
Answer: c)

8). The series is an alternate series, having
S 1 = 2 5 14 41; ×3 – 1 in each term
S 2 = 3 8 23 69; ×3 – 1 in each term
Answer: e)

9). The series is +5, +7, +9, +11, ...
Answer: d)

10). The series is ÷2, ÷1.5 alternately.
Answer: d)

11). b)
4, 12, 42, 196, 1005, 6066, 42511
$4 \times 2+(2)^2 = 12$
$12\times 3+(3)^2 = 45$
$45\times 4+(4)^2 = 196$
$196\times 5+(5)^2 = 1005$
$1005\times 6+(6)^2 = 6066$
$6066\times 7+(7)^2 = 42511$
Hence, 42 is the wrong number

12). d)
7, 13, 25, 49, 97, 194, 385
7× 2 -1= 13
13× 2 -1= 25
25× 2 -1= 49
49× 2 -1= 97
97× 2 -1= 193
193× 2 -1= 385
Hence, 194 is the wrong number

13). c)
10, 15, 24, 35, 54, 75, 100
Hence, 35 is the wrong number

14). d)
2, 8, 32, 148, 765, 4626, 32431
$2 \times 2+2^2= 8$
$3 \times 8+3^2= 33$
$4 \times 33+4^2= 148$
$5 \times 148+5^2= 765$
$6 \times 765+6^2= 4626$
$7 \times 4626+7^2=32431$
Hence, 32 is the wrong number.
15). d)
73, 57, 49, 44, 43,42
73-57= 16
57-49=8
49-45= 4
45-43= 2
43-42=1
Differences between the consecutive numbers are in Geometric Progression (G.P)
Hence, 44 is the wrong number.

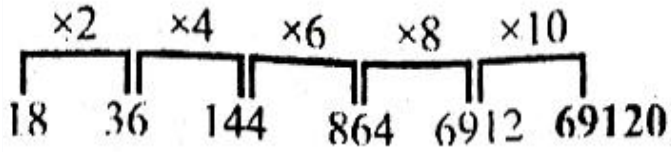
16). A) The series is
$1527 - (19^2 - 19) = 1185$,
$1185 - (15^2 - 15) = 975$,
$975 - (11^2 - 11) = 865$,
$865 - (7^2 - 7) = 823$,
$823 - (3^2 - 3) = 817$
There should be 975 in place of 985.

17). D) The series is $110 \times 1 - 4 = 106$, $106 \times 2 - 8 = 204$, $204 \times 3 - 12 = 600$, $600 \times 4 - 16 = 2384$, $2384 \times 5 - 20 = 11900$
There should be 600 in place of 608.

18). A) The series is
$71 + 19 = 90$, $90 + 38 = .128$, $128 + 57 = 185$, $185 + 76 = 261$, $261 + 95 = 356$ Hence there should be 356 in place of 365.

19). C) The series is
$8 \times 2.5 - 2.5 = 17.5$,
$17.5 \times 3.5 + 3.5 = 64.75$,
$64.75 \times 2.5 - 2.5 = 159.375$,
$159.375 \times 3.5 + 3.5 = 561.3125$,
$561.3125 \times 2.5 - 2.5 = 1400.78125$, ...
Hence there should be 159.375 in place of 157.375.

20). A) The series is...

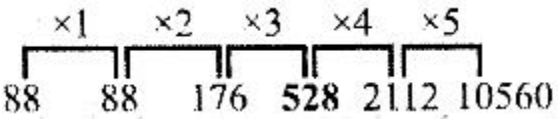


Hence there should be 69120 in place of 691020.

21). D) The series is
$76 \times 1 - 1^3= 75$,
$75 \times 2 - 2^3 = 142$,
$142 \times 3 - 3^3 = 399$,
$399 \times 4 - 4^3 = 1532$,
$1532 \times 5 - 5^3 = 7535$, ...
Hence there should be 1532 in place of 1530.

22). A) The series is
$21 \times 4 = 84$,
$23 \times 6 = 138$,
$25 \times 8= 200$,
$27 \times 10 = 270$,
$29 \times 12 = 348$,
$31 \times 14 = 434$, ...
Hence there should be 200 in place, of 192.
Therefore the wrong number is 192.

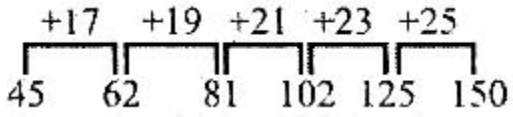
23). E) The series is



Hence there should be 528 in .place of 530.
Therefore the wrong number is 530.

24). C) The series is 7^4 — 1 = 2400, 6^4 — 1 = 1295, 5^4— 1 = 624, 4^4 - 1 = 255, 3^4— 1 = 80, 2^4 — 1 = 15, ...
Hence there should be 624 in place of 625.
Therefore, the wrong number is 625.

25). E) The series is



Hence there should be 125 in place of 123.
Therefore the wrong number is 123.

26). The series is $+7^3$, $+6^3$, $+5^3$, $+4^3$, $+3^3$, $+2^3$, ...
The series is 127 + 343 = 470, 470 + 216 = 686, 686 + 125 = 811, 811 + 64 = 875, 875 + 27 =902,
Therefore it should be 902 in place of 885.
Answer: d)
27). The series is ÷2 + 4 (repeated)
1296 ÷ 2 + 4 = 652, 652 ÷ 2 + 4 = 330, 330 ÷ 2 + 4 = 169, 169 ÷ 2 + 4 = 88.5, 88.5 ÷ 2 + 4 = 48.75, ...
Therefore it should be 330 in place of 328.
Answer: a)

28). The series is 2 x 12 + 3= 5, 5 × 2 + 4 = 14, 14 x 32 + 5 = 131, 131 x 4 + 6 = 530, 530 x 52 + 7 =
13257,……
Therefore it should be 14 in place of 15.
Answer: b)

29). The series is 508 + 131 = 639, 639 + 137 = 776, 776 + 149 = 925, 925 + 167 = 1092, 1092 + 191 =
1283, ...
Hence it 'should be 639 in place of 640.
Answer: a)

30). The series is (11)3 - 5 = 1326, $(9)^3$ - 15 = 714, $(7)^3$ - 25 = 318, $(5)^3$ - 35 = 90, $(3)^3$ - 45 = -18, $(1)^3$ - 55 = -54
Hence it should be 1326 in place of 1325.
Answer: e)

NUMBER SERIES

NATIONALISED BANKS & IBPS SO/MT/SO

Directions (1-5): In the following number series, a wrong number is given. Find out that wrong number.

(Canara Bank PO Exam. 09.02.2003)

1. 2 11 38 197 1172 8227 65806
(1) 11 (2) 38
(3) 197 (4) 1172
(5) 8227

2. 16 19 21 30 46 71 107
(1) 19 (2) 21
(3) 30 (4) 46
(5) 71

3. 7 9 16 25 41 68 107 173
(1) 107 (2) 16
(3) 41 (4) 68
(5) 25

4. 4 2 3.5 7.5 26.25 118.125
(1) 118.125 (2) 26.25
(3) 3.5 (4) 2
(5) 7.5

5. 16 4 2 1.5 1.75 1.875
(1) 1.875 (2) 1.75
(3) 1.5 (4) 2
(5) 4

Directions (6-10): What will come in place of the question mark (?) in the following number series ?

(Syndicate Bank PO Exam. 10.10.2004)

6. 3 10 32 100 ?
(1) 345 (2) 460
(3) 308 (4) 440
(5) None of these

7. 5 3 4 ? 38
(1) 8.5 (2) 6
(3) 7.5 (4) 8
(5) None of these

8. 5 6 ? 57 244
(1) 21 (2) 16
(3) 17 (4) 15
(5) None of these

9. 3 10 21 ? 51
(1) 34 (2) 32
(3) 33 (4) 37
(5) None of these

10. 5 11 ? 55 117
(1) 21 (2) 27
(3) 23 (4) 25
(5) None of these

Directions (11-15): In each of the following questions a number series is given. After the series a number is given followed by (a), (b), (c), (d) and (e). You have to complete the series starting with the number given, following the sequence of the original series and answer the questions that follow the series.

(Union Bank of India PO Exam. 27.11.2005)

11. 12 30 120 460 1368 2730
16 (a) (b) (c) (d) (e)
What will come in place of (d) ?
(1) 1384 (2) 2642
(3) 2808 (4) 1988
(5) None of these

12. 154 462 231 693 346.5 1039.5
276 (a) (b) (c) (d) (e)
What will come in place of (e) ?
(1) 1746 (2) 621
(3) 1242 (4) 983
(5) None of these

13. 7 91 1001 7007 35035 105
14.5 (a) (b) (c) (d) (e)
What will come in place of (c) ?
(1) 21132.5 (2) 14514.5
(3) 20020.5 (4) 13864.5
(5) None of these

14. 582 574 601 537 662 446
204 (a) (b) (c) (d) (e)
What will come in place of (d) ?
(1) 284 (2) 68
(3) 174 (4) 331
(5) None of these

15. 85 43 44 67.5 137 345
125 (a) (b) (c) (d) (e)
What will come in place of (c) ?
(1) 86 (2) 107.5
(3) 112.5 (4) 97.5
(5) None of these

Directions (16-22) : What will come in place of the question mark (?) in the following number series ?

(Corporation Bank Po Exam. 29.07.2006)

16. 1 ? 27 64 125
(1) 8 (2) 4
(3) 6 (4) 9
(5) None of these

17. 25 16 ? 4 1
(1) 3 (2) 6
(3) 12 (4) 18
(5) None of these

18. 1 6 36 240 1960 ?
(1) 19660 (2) 3680
(3) 36800 (4) 19600
(5) None of these

19. 12 14 17 13 8 14 21 13 4 ?

(1) 14 (2) 13
(3) 15 (4) 2
(5) None of these

20. 2 5 7 12 19 31 50 ?
(1) 53 (2) 81
(3) 69 (4) 74
(5) None of these

21. 15 12 17 10 ? 8 21 6
(1) 3 (2) 7
(3) 21 (4) 19
(5) None of these

22. 4 6 12 30 90 315 ?
(1) 945 (2) 1102
(3) 1260 (4) 1417.5
(5) None of these

Directions (16-22) : What should come in place of the question mark (?) in the following number series ?

(Bank Of Maharashtra PO Exam. 29.07.2006)

23. 1548 516 129 43 ?
(1) 11 (2) 10.75
(3) 9.5 (4) 12
(5) None of these

24. 949 189.8 ? 22.776 11.388 6.8328
(1) 48.24 (2) 53.86
(3) 74.26 (4) 56.94
(5) None of these

25. 121 144 190 259 ? 466
(1) 351 (2) 349
(3) 374 (4) 328
(5) None of these

26. 14 43.5 264 ? 76188
(1) 3168 (2) 3176
(3) 1587 (4) 1590
(5) None of these

27. 41 164 2624 ? 6045696
(1) 104244 (2) 94644
(3) 94464 (4) 102444
(5) None of these

Directions (28-32): What should come In place of question mark (?) in the following number series ?

(Indian Overseas Bank PO Exam. 15.06.2008)

28. 12 12 18 45 180 1170 ?
(1) 12285 (2) 10530
(3) 11700 (4) 12870
(5) 7605

29. 444 467 513 582 674 789 ?
(1) 950 (2) 904
(3) 927 (4) 881
(5) 973

30. 1 16 81 256 625 1296 ?
(1) 4096 (2) 2401
(3) 1764 (4) 3136
(5) 6561

31. 23 25 53 163 657 3291 ?
(1) 16461 (2) 13169
(3) 9877 (4) 23045
(5) 19753

32. 13 13 65 585 7605 129285 ?
(1) 2456415 (2) 2235675
(3) 2980565 (4) 2714985
(5) 2197845

Directions (33-37) : What should come in place of question mark (?) in the following number series ?

(Andhra Bank PO Exam. 14.09.2008)

33. 40280625 732375 16275 465 18.6 1.24 ?
(1) 0.248 (2) 0.336
(3) 0.424 (4) 0.512
(5) 0.639

34. 14 12 21 59 231 1149 ?
(1) 6987 (2) 6787
(3) 6887 (4) 6687
(5) 6587

35. 1728 2744 4096 5832 8000 10648 ?
(1) 12167 (2) 13824
(3) 15625 (4) 9261
(5) 17576

36. 120 15 105 17.5 87.5 ?
(1) 18.5 (2) 19.5
(3) 21.875 (4) 17.5
(5) 90

37. 3 6 21 28 55 66 ? 120
(1) 103 (2) 104
(3) 108 (4) 106
(5) 105

Directions (38-42) : In each of the following questions a number se-ries is given which has only one **wrong** number. You have to find out the **wrong** number.

(Bank Of Baroda Specialist Officer Exam. 05.10.2008)

38. 7.25 47.5 87.5 157.5 247.5 357.5 487.5
(1) 357.5 (2) 87.5
(3) 157.5 (4) 7.5
(5) 47.5

39. 13 16 21 27 39 52 69
(1) 21 (2) 39
(3) 27 (4) 52
(5) 16

40. 1500 1581 1664 1749 1833 1925 2016
(1) 1581 (2) 1664
(3) 1833 (4) 1925 (5) 1749

41. 66 91 120 153 190 233 276

(1) 120 (2) 233
(3) 153 (4) 276
(5) 190

42. 1331 2197 3375 4914 6859 9261 12167
(1) 4914 (2) 6859
(3) 9261 (4) 2197
(5) 12167

Directions (43-47): What should come in place of the question mark (?) in the following number series ?

(Oriental Bank of Commerce PO Exam. 21.12.2008)

43. 20 24 33 49 74 110 ?
(1) 133 (2) 147
(3) 159 (4) 163
(5) 171

44. 529 841 961 1369 1681 1849 ?
(1) 2809 (2) 2601
(3) 3249 (4) 3481
(5) 2209

45. 16 24 48 120 360 1260 ?
(1) 3780 (2) 4725
(3) 5355 (4) 5040
(5) 4410

46. 8 31 122 485 1936 7739 ?
(1) 30950 (2) 46430
(3) 34650 (4) 42850
(5) 38540

47. 499 622 868 1237 1729 2344 ?
(1) 3205 (2) 3082
(3) 2959 (4) 3462
(5) 2876

Directions (48-52) : In the following number series only one number is **wrong.** Find out the **wrong** number.

(PNB Agriculture Officer Exam. 04.01.2009)

48. 1 4 27 256 3125 46658
(1) 46658 (2) 4
(3) 27 (4) 3125
(5) None of these

49. 18000 3600 720 142.2 28.8 5.76
(1) 28.8 (2) 3600
(3) 5.76 (4) 142.2
(5) None of these

50. 12 237 406 527 604 657
(1) 237 (2) 406
(3) 527 (4) 657
(5) None of these

51. 3 35 226 1160 4660 13998
(1) 13998 (2) 4660
(3) 226 (4) 1160
(5) None of these

52. 18 119 708 3534 14136 42405
(1) 708 (2) 3534
(3) 14136 (4) 42405
(5) None of these

Directions (53-57): What should come in place of question mark (?) in the following number series ?

(Canara Bank PO Exam. 15.03.2009)

53. 5 9 18 34 59 95 ?
(1) 272 (2) 168
(3) 116 (4) 148
(5) 144

54. 1200 480 192 76.8 30.72 12.288 ?
(1) 4.9152 (2) 5.8192
(3) 6.7112 (4) 7.6132
(5) 8.5172

55. 963 927 855 747 603 423 ?
(1) 209 (2) 208
(3) 207 (4) 206
(5) 205

56. 841 961 1089 1225 1369 1521 ?
(1) 1581 (2) 1681
(3) 1781 (4) 1881
(5) 1981

57. 18 20 44 138 560 2810 ?
(1) 16818 (2) 16836
(3) 16854 (4) 16872
(5) 16890

Directions (58-62) : In the following number series only one number is **wrong.** Find out the **wrong** number.

(UCO Bank PO Exam. 22.03.2009)

58. 4 6 18 49 201 1011
(1) 1011 (2) 201
(3) 18 (4) 49
(5) None of these

59. 48 72 108 162 243 366
(1) 72 (2) 108
(3) 162 (4) 243
(5) None of these

60. 2 54 300 1220 3674 7350
(1) 3674 (2) 1220
(3) 300 (4) 54
(5) None of these

61. 8 27 64 125 218 343
(1) 27 (2) 218
(3) 125 (4) 343
(5) None of these

62. 19 68 102 129 145 154
(1) 154 (2) 129
(3) 145 (4) 102
(5) None of these

Directions (63-67): What should come in place of the question mark (?) in the following number series ?

(Indian Overseas Bank PO Exam. 05.04.2009)

63. 0 5 18 43 84 145 ?
(1) 220 (2) 240
(3) 260 (4) 280
(5) None of these

64. 10 17 48 165 688 3475 ?
(1) 27584 (2) 25670
(3) 21369 (4) 20892
(5) None of these

65. 1 3 24 360 8640 302400 ?
(1) 14525100 (2) 154152000
(3) 14515200 (4) 15425100
(5) None of these

66. 12 14 32 102 416 2090 ?
(1) 15522 (2) 12552
(3) 13525 (4) 17552
(5) None of these

67. 10 15 15 12.5 9.375 6.5625 ?
(1) 4.375 (2) 3.2375
(3) 4.6275 (4) 3.575
(5) None of these

Directions (68-72) : What will come in place of the question mark (?) in each of the following series ?

68. 17 52 158 477 ? 4310
(1) 1433 (2) 1432
(3) 1435 (4) 1434
(5) None of these

69. 3 22 ? 673 2696 8093
(1) 133 (2) 155
(3) 156 (4) 134
(5) None of these

70. 6 13 38 ? 532 2675
(1) 129 (2) 123
(3) 172 (4) 164
(5) None of these

71. 286 142 ? 34 16 7
(1) 66 (2) 72
(3) 64 (4) 74
(5) None of these

72. 17 9 ? 16.5 35 90
(1) 5 (2) 15
(3) 10 (4) 20
(5) None of these

Directions (73-77): What will come in place of the question mark (?) in each of the following rtamber series ?

(Andhra Bank PO Exam 05.07.2009)

73. 2 8 26 ? 242
(1) 78 (2) 72
(3) 82 (4) 84
(5) None of these

74. 3 4 12 ? 196
(1) 45 (2) 40
(3) 41 (4) 49
(5) None of these

75. 9 17 ? 65 129
(1) 32 (2) 24
(3) 35 (4) 33
(5) None of these

76. 7 13 ? 49 97
(1) 27 (2) 25
(3) 23 (4) 29
(5) None of these

77. 5 3 6 ? 64.75
(1) 15 (2) 15.5
(3) 17.5 (4) 17.25
(5) None of these

Directions (78-82) : What will come in place of the question mark (?) in each of the following number series ?

(PNB Specialist Officer's Exam. 16.08.2009)

78. 16 8 12 30 ?
(1) 75 (2) 105
(3) 95 (4) 115
(5) None of these

(United Bank of India PO Exam. 21.06.2009)

79. 5 6 14 45 ?
(1) 138 (2) 154
(3) 118 (4) 184
(5) None of these

80. 7 12 32 105 ?
(1) 428 (2) 214
(3) 218 (4) 416
(5) None of these

81. 11 23 47 95 ?
(1) 189 (2) 193
(3) 181 (4) 195
(5) None of these

82. 9 17 33 65 ?
(1) 113 (2) 131
(3) 129 (4) 118
(5) None of these

Directions (83-84) : In the following number series only one number is **wrong.** Find out the **wrong** number.

(Corporation Bank PO Exam. 22.11.2009)

83. 8 11 17 47 128 371 1100
(1)11 (2)47
(3) 17 (4) 371
(5) 128

84. 1 5 13 31 61 125 253
(1) 1 (2) 5
(3)31 (4)61
(5) 125

Directions (85-89) : In the following number series a **wrong** number is given. Find out the **wrong** number.

(Indian Bank Rural Marketing Officer Exam. 03.01.2010)

85. 150 290 560 1120 2140 4230 8400
(1) 2140 (2) 560
(3) 1120 (4) 4230
(5) 290

86. 10 8 13 35 135 671 4007
(1) 8 (2) 671
(3) 135 (4) 13
(5) 35

87. 80 42 24 13.5 8.75 6.375 5.1875
(1) 8.75 (2) 13.5
(3) 24 (4) 6.375
(5) 42

88. 125 75 45 25 16.2 9.72 5.832
(1) 25 (2) 45
(3) 9.72 (4) 16.2
(5) 75

89. 29 37 21 43 13 53 5
(1) 37 (2) 53
(3) 13 (4) 21
(5) 43

Directions (90-9 4): I n the following number series only one number is **wrong.** Find out the **wrong** number.

(Indian Bank PO Exam. 17.10.2010)

90. 13 25 40 57 79 103 130
(1) 25 (2) 40
(3) 57 (4) 79
(5) None of these

91. 850 600 550 500 475 462.5 456.25
(1) 600 (2) 550
(3) 500 (4) 462.5
(5) None of these

92. 2 10 18 54 162 486 1458
(1) 18 (2) 54
(3) 162 (4) 10
(5) None of these

93. 8 12 24 46 72 108 152
(1) 12 (2) 24
(3) 46 (4) 72
(5) None of these

94. 142 119 100 83 65 59 52
(1) 65 (2) 100
(3) 59 (4) 119
(5) None of these

Directions (95-99) : What should come in place of the question mark in the following number series ?

(Bank Of India Banking Officer Exam. 24.01.2010)

95. 5 54 90 115 131 140 ?
(1) 149 (2) 146
(3) 142 (4) 152
(5) None of these

96. 7 4 5 9 ? 52.5 160.5
(1) 32 (2) 16
(3) 14 (4) 20
(5) None of these

97. 6 42 ? 1260 5040 15120 30240
(1) 546 (2) 424
(3) 252 (4) 328
(5) None of these

98. 4 10 40 190 940 ? 23440
(1) 4690 (2) 2930
(3) 5140 (4) 3680
(5) None of these

99. 2 9 30 ? 436 2195 13182
(1) 216 (2) 105
(3) 178 (4) 324
(5) None of these

Directions (100-104): In each question below, a number series is given in which one number is **wrong.** Find out the **wrong** number.

(Allahabad Bank PO Exam. 21.02.2010)

100. 484 240 120 57 26.5 11.25 3.625
(1) 240 (2) 120
(3) 57 (4) 26.5
(5) 11.25

101. 3 5 13 43 176 891 5352
(1) 5 (2) 13
(3) 43 (4) 176
(5) 891

102. 6 7 16 41 90 154 292
(1) 7 (2) 16
(3) 41 (4) 90
(5) 154

103. 5 7 16 57 244 1245 7506
(1) 7 (2) 16
(3) 57 (4) 244
(5) 1245

104. 4 2.5 3.5 6.5 15.5 41.25 126.75
(1) 2.5 (2) 3.5
(3) 6.5 (4) 15.5
(5) 41.25

Directions (105-109) : What should come in place of the question mark (?) in the following number series.

(Corporation Bank PO Exam. 09.05.2010)

105. 325 314 292 259 215 ?
(1) 126 (2) 116
(3) 130 (4) 160
(5) None of these

106. 45 46 70 141 ? 1061.5
(1) 353 (2) 353.5
(3) 352.5 (4) 352
(5) None of these

107. 620 632 608 644 596 ?
(1) 536 (2) 556
(3) 656 (4) 646
(5) None of these

108. 15 25 40 65 ? 195
(1) 115 (2) 90
(3) 105 (4) 120
(5) None of these

109. 120 320 ? 2070 5195 13007.5
(1) 800 (2) 920
(3) 850 (4) 900
(5) None of these

Directions (110-114): In the following number series only one number is **wrong.** Find out the wrong number.

(Punjab & Sind Bank PO Exam. 16.05.2010)

110. 32 34 37 46 62 87 123
(1) 34 (2) 37
(3) 62 (4) 87
(5) 46

111. 7 18 40 106 183 282 403
(1) 18 (2) 282
(3) 40 (4) 106
(5) 183

112. 850 843 829 808 788 745 703
(1) 843 (2) 829
(3) 808 (4) 788
(5) 745

113. 33 321 465 537 573 590 600
(1) 321 (2) 465
(3) 573 (4) 537
(5) 590

114. 37 47 52 67 87 112 142
(1) 47 (2) 52
(3) 67 (4) 87
(5) 112

Directions (115-119) : What will come in place of the question mark (?) in the following number series ?

(Bank Of Baroda PO Exam. 30.05.2010)

115. 13 16 22 33 51 (?)
(1) 89 (2) 78
(3) 102 (4) 69
(5) None of these

116. 39 52 78 117 169 (?)
(1) 246 (2) 182
(3) 234 (4) 256
(5) None of these

117. 62 87 187 412 812 (?)
(1) 1012 (2) 1437
(3) 1337 (4) 1457
(5) None of these

118. 7 8 24 105 361 (?)
(1) 986 (2) 617
(3) 486 (4) 1657
(5) None of these

119. 656 432 320 264 236 (?)
(1) 222 (2) 229
(3) 232 (4) 223
(5) None of these

Directions (120-124): What will come in place of the question mark (?) in the following number series ?

(Central Bank Of India PO Exam. 25.07.2010)

120. 7 20 46 98 202 (?)
(1) 420 (2) 410
(3) 310 (4) 320
(5) None of these

121. 210 209 213 186 202 (?)
(1) 138 (2) 77
(3) 177 (4) 327
(5) None of these

122. 27 38 71 126 203 (?)
(1) 212 (2) 202
(3) 301 (4) 312
(5) None of these

123. 435 354 282 219 165 (?)
(1) 103 (2) 112
(3) 120 (4) 130
(5) None of these

124. 4 200 369 513 634 (?)
(1) 788 (2) 715
(3) 734 (4) 755
(5) None of these

Directions (125-129) : What will come in place of the question mark (?) in the following number series ?

(Syndicate Bank PO Exam. 29.08.2010)

125. 495 485 465 425 345 ?
(1) 195 (2) 165
(3) 185 (4) 175
(5) None of these

126. 16 22 33 49 70 ?
(1) 95 (2) 96
(3) 85 (4) 91
(5) None of these

127. 32 36 52 88 152 ?
(1) 266 (2) 232
(3) 242 (4) 256
(5) None of theses

128. 17 289 425 493 527 ?
(1) 534 (2) 542
(3) 544 (4) 594
(5) None of these

129. 13 27 55 97 153 ?
(1) 243 (2) 265
(3) 215 (4) 223
(5) None of these

Directions (130-134) : What should come in place of the question mark (?) in the following number series ?

(Punjab National Bank Specialist Officer Exam. 24.10.2010)

130. 50 60 75 97.5 ? 184.275 267.19875
(1) 120.50 (2) 130.50
(3) 131.625 (4) 124.25
(5) None of these

131. 12 15 36 ? 480 2415 14508
(1) 115 (2) 109
(3) 117 (4) 121
(5) None of these

132. 1 2 6 21 88 445 ?
(1) 2230 (2) 2676
(3) 2580 (4) 2670
(5) None of these

133. 20 21 25 34 50 ? 111
(1) 70 (2) 65
(3) 60 (4) 75
(5) None of these

134. 600 125 30 ? 7.2 6.44 6.288
(1) 6 (2) 10
(3) 15 (4) 12
(5) None of these

Directions (135-139): What will come in the place of the question mark (?) in the following number series ?

(Bank Of India PO Exam. 31.10.2010)

135. 11 15 31 67 131 (?)
(1) 233 (2) 221
(3) 243 (4) 231
(5) None of these

136. 483 471 435 375 291 (?)
(1) 183 (2) 184
(3) 185 (4) 186
(5) None of these

137. 5 7 13 25 45 (?)
(1) 67 (2) 75
(3) 65 (4) 55
(5) None of these

138. 4 11 25 53 109 (?)
(1) 221 (2) 234
(3) 212 (4) 222
(5) None of these

139. 15 21 33 51 75 (?)
(1) 113 (2) 103
(3) 105 (4) 115
(5) None of these

Directions (140-144): In the following number series only one number is **wrong.** Find out the **wrong** number.

(United Bank Of India PO Exam. 14.11.2010)

140. 5 348 564 689 716 780 788
(1) 716 (2) 788
(3) 348 (4) 689
(5) 780

141. 4444 2224 1114 556 281.5 142.75 73.375
(1) 2224 (2) 281.5
(3) 1114 (4) 556
(5) 142.75

142. 4.5 16 25 33 38.5 42 43.5
(1) 33 (2) 38.5
(3) 42 (4) 43.5
(5) 25

143. 6 49 305 1545 6196 18603 37218
(1) 6196 (2) 49
(3) 305 (4) 1545
(5) 18603

144. 8 5 6.5 11 26 68 207.5
(1) 68 (2) 6.5
(3) 11 (4) 26
(5) 207.5

Directions (145-149) : What should come in place of the question mark (?) in the following number series ?

(PNB Management Trainee Exam. 28.11.2010)

145. 586 587 586 581 570 ? 522
(1) 545 (2) 543
(3) 551 (4) 557
(5) None of these

146. 64 54 69 49 74 44 ?
(1) 89 (2) 69
(3) 59 (4) 99
(5) None of these

147. 4000 2008 1012 ? 265 140.5 78.25
(1) 506 (2) 514
(3) 520 (4) 512
(5) None of these

148. 5 5 15 75 ? 4725 51975
(1) 520 (2) 450
(3) 525 (4) 300
(5) None of these

149. 52 26 26 39 78 ? 585
(1) 195 (2) 156
(3)234 (4)117
(5) None of these

Directions (150-154) .-What will come in place of question mark (?) in the following number series ?

(Bank Of Maharashtra Exam. 19.12.2010)

150. 10 14 25 55 140 (?)
(1) 386 (2) 398
(3) 388 (4) 396
(5) None of these

151. 119 131 155 191 239 (?)

(1) 289 (2) 290
(3) 279 (4) 280
(5) None of these

152. 11 57 149 333 701 (?)
(1) 1447 (2) 1347
(3) 1368 (4) 1437
(5) None of these

153. 697 553 453 389 353 (?)
(1) 328 (2) 337
(3) 362 (4) 338
(5) None of these

154. 336 224 168 140 126 (?)
(1) 119 (2) 118
(3) 116 (4) 121
(5) None of these ,

Directions (155-159): What will come in place of the question mark (?) in the following number series ?

(Oriental Bank Of Commerce PO Exam. 26.12.2010 (1st Sitting)

155. 9 15 27 51 99 ?
(1) 165 (2) 195
(3) 180 (4) 190
(5) None of these

156. 13 21 36 58 87 ?
(1) 122 (2) 128
(3) 133 (4) 123
(5) None of these

157. 7 9 19 45 95 ?
(1) 150 (2) 160
(3) 145 (4) 177
(5) None of these

158. 14 15 23 32 96 ?
(1) 121 (2) 124
(3) 152 (4) 111
(5) None of these

159. 20 24 36 56 84 ?
(1) 116 (2) 124
(3) 120 (4) 128
(5) None of these

Directions (160-164) : What should come in place of the question mark (?) In the following number series ?

(Indian Bank PO Exam. 02.01.2011)

160. 3 732 1244 1587 1803 1928 ?
(1) 2144 (2) 1992
(3) 1955 (4) 2053
(5) None of these

161. 16 24 ? 210 945 5197.5 33783.75
(1) 40 (2) 36
(3) 58 (4) 60
(5) None of these

162. 45030 9000 1795 355 68 ? 1.32
(1) 11.6 (2) 12.2
(3) 10.4 (4) 9.8
(5) None of these

163. 5 12 36 123 ? 2555 15342
(1) 508 (2) 381
(3) 504 (4) 635
(5) None of these

164. 8 11 17 ? 65 165.5 498.5
(1) 27.5 (2) 32
(3) 28 (4) 30.5
(5) None of these

Directions (165-169) :What will come in place of the question mark (?) in the following number series ?

(Union Bank Of India PO Exam. 09.01.2001)

165. 117 389 525 593 627 (?)
(1) 654 (2) 640
(3) 634 (4) 630
(5) None of these

166. 7 11 23 51 103 (?)
(1) 186 (2) 188
(3) 185 (4) 187
(5) None of these

167. 18 27 49 84 132 (?)
(1) 190 (2) 183
(3) 180 (4) 193
(5) None of these

168. 33 43 65 99 145 (?)
(1) 201 (2) 203
(3) 205 (4) 211
(5) None of these

169. 655 439 314 250 223 (?)
(1) 205 (2) 210
(3) 195 (4) 190
(5) None of these

Directions (170-174): What will come in place of the question mark (?) in the following number series ?

(Corporation Bank PO Exam. 16.01.2011)

170. 15 21 39 77 143 (?)
(1) 243 (2) 240
(3) 253 (4) 245
(5) None of these

171. 33 39 57 87 129 (?)
(1) 183 (2) 177
(3) 189 (4) 199
(5) None of these

172. 15 19 83 119 631 (?)
(1) 731 (2) 693
(3) 712 (4) 683
(5) None of these

173. 19 26 40 68 124 (?)
(1) 246 (2) 238
(3) 236 (4) 256
(5) None of these

174. 43 69 58 84 73 (?)
(1) 62 (2) 98
(3) 109 (4) 63
(5) None of these

Directions (175-179): What should come in place of the question mark (?) in the following number series ?

(Punjab & Sind Bank PO Exam. 23.01.2011)

175. 15 18 16 19 17 20 ?
(1) 23 (2) 22
(3) 16 (4) 18
(5) None of these

176. 1050 420 168 67.2 26.88 10.752 ?
(1) 4.3008 (2) 6.5038
(3) 4.4015 (4) 5.6002
(5) None of these

177. 0 6 24 60 120 210 ?
(1) 343 (2) 280
(3) 335 (4) 295
(5) None of these

178. 32 49 83 151 287 559 ?
(1) 1118 (2) 979
(3) 1103 (4) 1120
(5) None of these

179. 462 552 650 756 870 992 ?
(1) 1040 (2) 1122
(3) 1132 (4) 1050
(5) None of these

Directions (180-184): What will come in place of the question mark (?) in the following number series ?

(UCO Bank PO Exam. 30.01.2011)

180. 28 39 63 102 158 (?)
(1) 232 (2) 242
(3) 233 (4) 244
(5) None of these

181. 7 16 141 190 919 (?)
(1) 1029 (2) 1019
(3) 1020 (4) 1030
(5) None of these

182. 12 17 32 57 92 (?)
(1) 198 (2) 195
(3) 137 (4) 205
(5) None of these

183. 19 25 45 87 159 (?)
(1) 254 (2) 279
(3) 284 (4) 269
(5) None of these

184. 83 124 206 370 698 (?)
(1) 1344 (2) 1324
(3) 1364 (4) 1334
(5) None of these

Directions (185-189): What will come in place of the question mark (?) in the following number series.

(Bank Of Baroda PO Exam.13.03.2011)

185. 1 7 49 343 (?)
(1) 16807 (2) 1227
(3) 2058 (4) 2401
(5) None of these

186. 13 20 39 78 145 (?)
(1) 234 (2) 244
(3) 236 (4) 248
(5) None of these

187. 12 35 81 173 357 (?)
(1) 725 (2) 715
(3) 726 (4) 736
(5) None of these

188. 3 100 297 594 991 (?)
(1) 1489 (2) 1479
(3) 1478 (4) 1498
(5) None of these

189. 112 119 140 175 224 (?)
(1) 277 (2) 276
(3) 287 (4) 266
(5) None of these

Directions (190-194): What will come in place of the question mark (?) in the following number series ?

(Allahabad Bank PO Exam.17.04.2011)

190. 958 833 733 658 608 (?)
(1) 577 (2) 583
(3) 567 (4) 573
(5) None of these

191. 11 10 18 51 200 (?)
(1) 885 (2) 1025
(3) 865 (4) 995
(5) None of these

192. 25 48 94 186 370 (?)
(1) 738 (2) 744
(3) 746 (4) 724
(5) None of these

193. 14 24 43 71 108 (?)
(1) 194 (2) 154
(3) 145 (4) 155
(5) None of these

194. 144 173 140 169 136 (?)
(1) 157 (2) 148
(3) 164 (4) 132
(5) None of these

Directions (195-199): What will come in place of the question mark (?) in the following number series ?

(Indian Overseas Bank PO Exam. 22.05.2011)

195. 8 10 18 44 124 (?)
(1) 344 (2) 366

(3) 354 (4) 356
(5) None of these

196. 13 25 61 121 205 (?)
(1) 323 (2) 326
(3) 324 (4) 313
(5) None of these

197. 656 352 200 124 86 (?)
(1) 67 (2) 59
(3) 62 (4) 57
(5) None of these

198. 454 472 445 463 436 (?)
(1) 436 (2) 456
(3) 454 (4) 434
(5) None of these

199. 12 18 36 102 360 (?)
(1) 1364 (2) 1386
(3) 1384 (4) 1376
(5) None of these

Directions (200-204): In the following number series only one number is **wrong.** Find out the wrong number.

(IBPS Bank PO/MT CWE Exam. 18.09.2011)

200. 7 12 40 222 1742 17390 208608
(1) 222 (2) 12
(3)40 (4) 1742
(5) 208608

201. 6 91 584 2935 11756 35277 70558
(1) 6 (2) 70558
(3) 584 (4) 2935
(5) 35277

202. 9050 5675 3478 2147 1418 1077 950
(1) 950 (2) 1418
(3) 5675 (4) 2147
(5) 1077

203. 1 4 25 256 3125 46656 823543
(1) 4 (2) 823543
(3) 46656 (4) 25
(5) 256

204. 8424 4212 2106 1051 526.5 263.25 131.625
(1) 526.5 (2) 1051
(3) 4212 (4) 8424
(5) 263.25

Directions (205-209): In each of these questions a number series is given. In each series **only one** number is wrong. Find out the **wrong** number.

(IBPS Bank PO/MT CWE 17.06.2012)

205. 5531 5506 5425 5304 5135 4910 4621
(1) 5531 (2) 5425
(3) 4621 (4) 5135
(5) 5506

206. 6 7 9 13 26 37 69
(1) 7 (2) 26
(3) 69 (4) 37
(5) 9

207. 1 3 10 36 152 760 4632
(1) 3 (2) 36
(3) 4632 (4) 760
(5) 152

208. 4 5 13 40 105 229 445
(1) 4 (2) 13
(3) 105 (4) 445
(5) 229

209. 157.5 45 15 6 3 2 1
(1) 1 (2) 2
(3) 6 (4) 157.5
(5) 45

Directions (210-215): What will come in place of the question mark (?) in the following number series ?

(IDBI Bank Officer Exam. 16.09.2012)

210. 123 277 459 669 907 ?
(1) 1179 (2) 1173
(3) 1167 (4) 1169
(5) None of these

211. 456.5 407 368.5 341 324.5 ?
(1) 321 (2) 319
(3) 317 (4) 323
(5) None of these

212. 23 42.2 80.6 157.4 311 ?
(1) 618.2 (2) 623.2
(3) 624.2 (4) 616.6
(5) None of these

213. 36 154 232 278 300 ?
(1) 304 (2) 313
(3) 308 (4) 307
(5) None of these

214. 24 536 487 703 678 ?
(1) 768 (2) 748
(3) 764 (4) 742
(5) None of these

215. 224 576 752 840 884 ?
(1) 960 (2) 890
(3) 906 (4) 908
(5) None of these

Directions (216-220) : What should come in place of the question mark (?) in the following series ?

(IBPS RRBs Office Assistant CWE Exam. 09.09.2012)

216. 5 6 16 57 ? 1245
(1) 244 (2) 148
(3) 296 (4) 271
(5) None of these

217. 12 ? 168 504 1260 2520

(1) 96 (2) 59
(3) 61 (4) 48
(5) None of these

218. 4 9 29 ? 599 3599
(1) 117 (2) 347
(3) 258 (4)174
(5) None of these

219. 177 170 159 146 ? 110
(1) 132 (2) 106
(3) 129 (4) 127
(5) None of these

220. 2 3 11 38 102 ?
(1) 402 (2) 182
(3) 227 (4) 168
(5) None of these

Directions (221-225): What will come in place of the question mark (?) in the following number series ?

(Indian Overseas Bank PO Online Exam. 01.09.2013)

221. 21 10.5 ? 15.75 31.5 78.75
(1) 10.5 (2) 11.5
(3) 12.5 (4) 10.25
(5) None of these

222. 6 19 58 ? 214 331
(1) 113 (2) 123
(3) 133 (4) 143
(5) None of these

223. ? 16 28 58 114 204
(1) 7 (2) 9
(3) 14 (4) 6
(5) 10

224. 13. 76 14.91 17.21 20.66 ? 31.01
(1) 25.66 (2) 24.36
(3) 24.26 (4) 25.26
(5) 25.36

225. 15 ? 24 33 97 122
(1) 20 (2) 19
(3) 17 (4) 18
(5) 16

Directions (226-230) : In each of the following number series, a number is **wrong.** Find out that wrong number.

(Corporation Bank Specialist Officer (Marketing) Exam 22.12.2014)

226. 2 6 15 30 45 43.5 22.5
(1) 6 (2) 30
(3) 45 (4) 15
(5) 43.5

227. 950 661 436 269 146 65 16
(1) 436 (2) 65
(3) 269 (4) 661
(5) 146

228. 6.5 11.8 22.4 38.3 59.5 87.3 117.8
(1) 22.4 (2) 59.5
(3) 11.8 (4) 38.3
(5) 87.3

229. 1 2 4 9 23 69 186
(1) 2 (2) 9
(3) 23 (4) 4
(5) 69

230. 250 239 216 181 136 75 4
(1) 239 (2) 181
(3) 75 (4) 216
(5) 136

SBI PO EXAMS

Directions (1-5): One number is wrong in each of the number series given in each of the following questions. You have to identify that number and assuming that a new series starts with that number following the same logic as in the given series, which of the numbers given in (1), (2), (3), (4) and (5) given below each series will be the **third** number in the new series ?

(SBI Associate Banks PO Exam. 14.02.1999)

1. 3 5 12 38 154 914 4634
(1) 1636 (2) 1222
(3) 1834 (4) 3312
(5) 1488

2. 3 4 10 34 136 685 4116
(1) 22 (2) 276
(3) 72 (4) 1374
(5) 12

3. 214 18 162 62 143 90 106
(1) 34 (2) 110
(3) 10 (4) 91
(5)38

4. 160 80 120 180 1050 4725 25987.5
(1) 60 (2) 90
(3) 3564 (4) 787.5
(5) 135

5. 2 3 7 13 25 47 78
(1) 11 (2) 13
(3) 15 (4) 18
(5) 20

Directions (6-8): In each of the following questions, a number **series** is given. After the series, below it, a number alongwith (a), (b), (c), (d) and (e) is given. You have to complete the series following the same sequence as that of the given series. Then answer the question that follows.

(SBI Associate Banks PO Exam. 16.07.2000)

6. 2 3 10 29 172 885
1 (a) (b) (c) (d) (e)
What will come in place of (b) ?

(1) 11 (2) 7
(3) 9 (4) 8
(5) None of these

7. 5 7 10 36 136 690
2 (a) (b) (c) (d) (e)
What will come in place of (e) ?
(1) 310 (2) 330
(3) 110 (4) 64
(5) None of these

8. 8 4 6 15 52.5 236.25
4 (a) (b) (c) (d) (e)
Which of the following will come in place of (d) ?
(1) 36.25 (2) 33.25
(3) 26.75 (4) 32.75
(5) None of these

Directions (9-10) : In each of the following questions, a number series is established if the positions of two out of the five marked numbers are in te rchange d . The posit ion of the first unmarked number remains the same and it is the beginning of the series. The earlier of the two marked numbers whose positions are interchanged is the answer. For example, if an interchange of number marked ' 1' and the number marked '4' is required to establish the series, your answer is T. If it is not necessary to interchange the position of the numbers to establish the series, give 5 as your answe r. Reme mbe r that whe n the se rie s is established, the numbers change from left to right (i.e. from the unmarked number to the last marked number) in a specific order.

(SBI Banks PO Exam. 20.08.2000)

9. 40 14 60 24 80 19
(1) (2) (3) (4) (5)

10. 120 15 105 21.875 87.5 17.5
(1) (2) (3) (4) (5)

Directions (11-15) : In each of the following number-series only one number is **wrong.** If the wrong numbe r is corre cte d, the serie s gets established following a certain logic. Below the series a number is given followed by (a), (b), (c), (d), (e) and (f). You have to complete the series following the same logic as in the given series after correcting the **wrong** number, now answer the following questions giving the correct values for the letter in the questions.

(SBI Banks PO Exam. 11.02.2001)

11. 2 3 2 15 76 254 1434
3 (a) (b) (c) (d) (e) (f)
What will come in place of (c) ?
(1) 18 (2) 22
(3) 24 (4) 21
(5) None of these

12. 1 2 8 33 148 740 4626
2 (a) (b) (c) (d) (e) (f)
What will come in place of (d) ?
(1) 156 (2) 164
(3) 168 (4) 152
(5) None of these

13. 2 4.5 11 30 93 312 1136
1 (a) (b) (c) (d) (e) (i)
What will come in place of (b) ?
(1) 6 (2) 81
(3) 16.75 (4) 18.75
(5) None of these

14. 2 14 18 46 82 176 338
4 (a) (b) (c) (d) (e) (i)
What will come in place of (e) ?
(1) 238 (2) 338
(3) 218 (4) 318
(5) None of these

15. 1 3 7 11 21 43 85
4 (a) (b) (c) (d) (e) (f)
What will come in place of (f) ?
(1) 275 (2) 279
(3) 277 (4) 273
(5) None of these

Directions (16-20) : Find out the wrong number in the following given sequence.

(SBI Associate Banks PO Exam. 21.07.2002

16. 7 4 6 9 20 52.5 160.5
(1) 6 (2) 4
(3) 20 (4) 9
(5) 52.5

17. 4 6 12 30 75 315 1260
(1) 315 (2) 75
(3) 12 (4) 6
(5) 30

18. 3 4 13 38 87 166 289
(1) 38 (2) 13
(3) 87 (4) 166
(5) 4

19. 4 5 9 29 111 556 3325
(1) 5 (2) 9
(3) 29 (4)111
(5) 556

20. 2 6 16 38 84 176 368
(1) 6 (2) 16
(3) 38 (4) 84
(5) 176

Directions (21-26): In each of thefollowing number series, a **wrong** number is given. Find out the **wrong** number.

(SBI Banks PO Exam. 18.05.2003)

21. 2 3 6 18 109 194 209952
(1) 3 (2) 6
(3) 18 (4) 109
(5) 1944

22. 1 3 6 11 20 39 70

(1) 3 (2) 39
(3) 11 (4) 20
(5) 6

23. 2 13 27 113 561 3369 23581
(1) 13 (2) 27
(3) 113 (4) 561
(5) 3369

24. 50 51 47 56 42 65 29
(1) 51 (2) 47
(3) 56 (4) 42
(5) 65

25. 3 9 23 99 479 2881 20159
(1) 9 (2) 23
(3) 99 (4) 479
(5) 2881

26. 2 4 5 8 13 21 34
(1) 4 (2) 5
(3) 8 (4) 13
(5) 21

Directions (27-31) : In each of the following questions a number series is given. After the **series** a number is given followed by (a), (b), (c), (d) and (e). You have to complete the series starting with the given number, following the sequence of original series and answer the questions that follow the series.

(SBI PO Exam. 09.01.2005)

27. 3 19 103 439 1381 2887
5 (a) (b) (c) (d) (e)
What will come in place of (b) ?
(1) 139 (2) 163
(3) 161 (4) 157
(5) None of these

28. 4 13 40 135 552 2765
2 (a) (b) (c) (d) (e)
What will come in place of (c) ?
(1) 123 (2) 133
(3) 127 (4) 131
(5) None of these

29. 5 12 4 10 3 8
6 (a) (b) (C) (d) (e)
What will come in place of (d) ?
(1) 3 (2) 5
(3) 4 (4) 7
(5) None of these

30. 3 13 37 87 191 401
1 (a) (b) (c) (d) (e)
What will come in place of (d) ?
(1) 169 (2) 161
(3) 171 (4) 159
(5) None of these

31. 8 4 6 15 52.5 236.25
12 (a) (b) (c) (d) (e)
What will come in place of (c) ?
(1) 18.25 (2) 19
(3) 22.5 (4) 20.75
(5) None of these

Directions (32-36): In each of the following questions a number series is given. After the **series,** a number is given followed by (a), (b), (c), (d) and (e). You have to complete the series starting with the number given following the sequence of the given series. Then answer the question given below it.

(SBI PO Exam. 26.11.2006)

32. 9 19.5 41 84.5
12 (a) (b) (c) (d) (e)
Which of the following numbers will come in place of (c) ?
(1) 111.5 (2) 118.5
(3) 108.25 (4) 106.75
(5) None of these

33. 4 5 22 201
7 (a) (b) (c) (d) (e)
Which of the following number will come in place of (d) ?
(1) 4948 (2) 4840
(3) 4048 (4) 4984
(5) None of these

34. 5 5.25 11.5 36.75
(a) (b) (c) (d) (e)
Which of the following number will come in place of (c) ?
(1) 34.75 (2) 24.75
(3) 24.5 (4) 34.5
(5) None of these

35. 38 19 28.5 71.25
18 (a) (b) (c) (d) (e)
Which of the following number will come in place of (d) ?
(1) 118.75 (2) 118.25
(3) 108.25 (4) 118.125
(5) None of these

36. 25 146 65 114
39 (a) (b) (c) (d) (e)
Which of the following number will come in place of (e) ?
(1) 122 (2)119
(3) 112 (4) 94
(5) None of these

Directions (37-41) : In each of these questions a number series is given. Only one number is **wrong** in each series. You have to find out the **wrong** number.

(SBI Associate Banks PO Exam. 07,01.2007)

37. 10 15 24 35 54 75 100
(1) 35 (2) 75
(3) 24 (4) 15
(5) 54

38. 1 3 4 7 11 18 27 47
(1) 4 (2) 11
(3) 18 (4) 7
(5) 27

39. 3 2 3 6 12 37.5 115.5
(1) 37.5 (2) 3
(3) 6 (4) 2
(5) 12

40. 2 8 32 148 765 4626 32431
(1) 765 (2) 148
(3) 8 (4) 32
(5) 4626

41. 2 3 11 38 102 229 443
(1) 11 (2) 229
(3) 102 (4) 38
(5) 3

Directions (42-46): What should come in place of the question mark(?) in the following number series ?

(SBI PO Preliminary (Tire-I) Exam. 27.04.2008)

42. 7413 7422 7440 ? 7503 7548
(1) 7464 (2) 7456
(3) 7466 (4) 7477
(5) None of these

43. 4 16 36 64 100 ?
(1) 120 (2) 180
(3) 136 (4) 144
(5) None of these

44. 12 33 96 ? 852 2553
(1) 285 (2) 288
(3) 250 (4) 384
(5) None of these

45. 70000 14000 2800 ? 112 22.4
(1) 640 (2) 420
(3) 560 (4) 540
(5) None of these

46. 102 99 104 97 106 ?
(1) 96 (2) 95
(3) 100 (4) 94
(5) None of these

Directions (47-51) : What will ome in place of the question mark (?) in the following number series which as only one number wrong by a margin of + 1 or - 1 ? The first and last number in the series are correct ?

(SBI PO Preliminary (Tire-I) Exam. 27.07.2008)

47. 93 95 99 ? 110 121 134
(1) 104 (2) 96
(3) 82 (4) 103
(5) None of these

48. 8 12 18 26 40.5 60.75 136.6875
(1) 104.125 (2) 121.125
(3) 96.125 (4) 83.125
(5) None of these

49. 4 7 11 18 28 ? 76 12
(1) 59 (2) 38
(3) 46 (4) 53
(5) None of these

50. 3 10 ? 172 886 5346 3747 299832
(1) 39 (2) 27
(3) 24 (4) 34
(5) None of these

51. 15 22 57 183 ? 748 3751 22542
(1) 709 (2) 698
(3) 748 (4) 800
(5) None of these

Directions (52-56) : In e ach o the se questions a number series is given. In each series **only one** number is **wrong.** Find out the **wrong** number.

(SBI Associate Banks PO Exam. 07.08.2011)

52. 3601 3602 1803 604 154 36 12
(1) 3602 (2) 1803
(3) 604 (4) 154
(5) 36

53. 4 12 42 196 1005 6066 42511
(1) 12 (2) 42
(3) 1005 (4) 196
(5) 6066

54. 2 8 12 20 30 42 56
(1) 8 (2) 42
(3) 30 (4) 20
(5) 12

55. 32 16 24 65 210 945 5197.5
(1) 945 (2) 16
(3) 24 (4) 210
(5) 65

56. 7 13 25 49 97 194 385
(1) 13 (2) 49
(3) 97 (4) 194
(5) 25

Directions (57-61): In each of the following questions, a number series is given. After the series a number is given followed by (a), (b), (c), (d) and (e). You have to complete the 'series starting with the number given, following the sequence of the original series and answer the questions that bllow the series.

(SBI Management Executive Exam. 23.02.2014)

57. 37 19 20 31.5 65 165
21 (a) (b) (c) (d) (e)
What will come in the place of (e) ?
(1) 105 (2) 41
(3) 110 (4) 108
(5) 116

58. 5 6 16 57 244 1245
9 (a) (b) (c) (d) (e)
What will come in the place of (d) ?
(1) 366 (2) 364
(3) 368 (4) 378
(5) 382

59. 7 5 11 49 335 3005
13 (a) (b) (c) (d) (e)
What will come in the place of (b) ?
(1) 31 (2) 27
(3) 29 (4) 28
(5) 30

60. 12 47 152 467 1412 4247
33 (a) (b) (c) (d) (e)
What will come in the place of (d) ?
(1) 3131 (2) 1133
(3) 3311 (4) 3113
(5) 3123

61. 54 50 84 188 496 1456
42 (a) (b) (c) (d) (e)
What will come the in the place of (d) ?
(1) 304 (2) 286
(3) 293 (4) 281
(5) 301

RBI GRADE-B OFFICER EXAMS

Directions (1-5) : In each of the following questions a number series is given. After the series a number is given followed by (a), (b) (c), (d) and (e). You have to complete the series starting with the number given, following the sequence of the original series and answer the questions that follow the series.

(RBI Grade-B Officer Exam.17.11.2002)

1. 5 6 16 57 244 1245
2 (a) (b) (c) (d) (e)
What will come in place of (d) ?
(1) 46 (2) 39
(3) 156 (4) 172
(5) None of these

2. 3 5 9 17 33 65
7 (a) (b) (c) (d) (e)
What will come in place of (d)
(1) 95 (2) 51
(3) 99 (4) 49
(5) None of these

3. 7 4 5 9 20 52.5
3 (a) (b) (c) (d) (e)
What will come in place of (c) ?
(1) 4.5 (2) 2
(3) 6 (4) 7
(5) None of these

4. 3 10 32 111 460 2315
2 (a) (b) (c) (d) (e)
What will come in place of (b) ?
(1) 29 (2) 30
(3) 26 (4) 28
(5) None of these

5. 5 8 6 10 7 12
7 (a) (b) (c) (d) (e)
What will come in place of (c) ?
(1) 14 (2) 16
(3) 9 (4) 11
(5) None of these

Directions (6-10) : What should come in place of the question mark (?) in the following number series ?

(RBI Grade-B Officer Exam. 2007)

6. 104 109 99 114 94 9
(1) 69 (2) 124
(3) 120 (4) 78
(5) None of these

7. 980 392 156.8 ? 25.088 10.0352
(1) 65.04 2) 60.28
(3) 62.72 (4) 63.85
(5) None of these

8. 14 16 35 109 441 ?
(1) 2651 (2) 2205
(3) 2315 (4) 2211
(5) None of these

9. 1331 2197 4913 6859 ? 24389
(1) 12167 (2) 13824
(3) 9261 (4) 15625
(5) None of these

10. 3600 725 150 35 12 ?
(1) 8 (2) 7.4
(3) 10.5 (4) 10
(5) None of these

Directions (11-15) : What should come in place of quesbon mark (?) in the following number series ?

(RBI Grade-B Officer Exam. 2008)

11. 13 14 30 93 376 1885 ?
(1) 10818 (2) 10316
(3) 11316 (4) 11318
(5) None of these

12. 4 6 9 13.5 20.25 30.375
(1) 40.25 (2) 45.5625
(3) 42.7525 (4) 48.5625
(5) None of these

13. 400 240 144 86.4 51.84 31.104 ?
(1) 19.2466 (2) 17.2244
(3) 16.8824 (4) 18.6625
(5) None of these

14. 9 4.5 4.5 6.75 13.5 33.75 ?
(1) 101.25 (2) 103.75
(3) 99.75 (4) 105.50
(5) None of these

15. 705 728 774 843 935 1050 ?

(1) 1190 (2) 1180
(3) 1185 (4) 1187
(5) None of these

Directions (16-20) : In each of these questions a number series is given. Below the series one number is given followed by (a), (b), (c), (d) and (e) You have to complete this series following the same logic as in the original series and answer the question that tollows.

(RBI Grade-B Officer Exam.11.10.2009)

16. 5 9 25 91 414 2282 5
3 (a) (b) (c) (d) (e)
What will come in place of (c) ?
(1) 63.25 (2) 63.75
(3) 64.25 (4) 64.75
(5) None of these

17. 15 9 8 12 36 170
19 (a) (b) (C) (d) (e)
What will come in place of (b) ?
(1) 18 (2) 16
(3) 22 (4) 24
(5) None of these

18. 7 6 10 27 104 515
9 (a) (b) (c) (d) (e)
What will come in place of (d) ?
(1) 152 (2) 156
(3)108 (4)112
(5) None of these

19. 6 16 57 244 1245 7506
4 (a) (b) (c) (d) (e)
What will come in place of (d) ?
(1) 985 (2) 980
(3) 1004 (4) 1015
(5) None of these

20. 8 9 20 63 256 1285
5 (a) (b) (c) (d) (e)
What will come in place of (e)
(1) 945 (2) 895
(3) 925 (4) 845
(5) None of these

Directions (21-2 5): I n the following number series only one number is **wrong.** Find out the **wrong** number.

(RBI Grade-B Officer Exam.06.02.2011)

21. 4 3 4.5 8.5 20 53 162.5
(1) 3 (2) 4.5
(3) 8.5 (4) 20
(5) 53

22. 12000 2395 472 89.8 12.96 - 2.408 -5.4816
(1) -5.4816 (2) 472
(3) 12.96 (4) - 2.408
(5) 2395

23. 1 8 28 99 412 2075 12460
(1) 28 (2) 99
(3) 412 (4) 2075
(5) 12460

24. 144 215 540 1890 8505 46777.5 304053.75
(1) 215 (2) 540
(3) 1890 (4) 8505
(5) 46777.5

25. 2222 1879 1663 1538 1474 1447 1440
(1) 1879 (2) 1538
(3) 1474 (4) 1447
(5) 1440

Directions (26 - 30) : What will come in place of the question mark (?) in the following number series ?

(RBI Grade 'B' Officer's Exam. 18.12.2011)

26. 9 31 73 141 (?)
(1) 164 (2) 280
(3) 239 (4) 241
(5) None of these

27. 35 256 451 620 763 (?)
(1) 680 (2) 893
(3) 633 (4) 880
(5) None of these

28. 130 139 155 180 216 (?)
(1) 260 (2) 290
(3) 265 (4) 996
(5) None of these

29. 2890 (?) 1162 874 730 658
(1) 1684 (2) 1738
(3) 1784 (4) 1672
(5) None of these

30. 14 1004 1202 1251.5 1268 (?)
(1) 1267.5 (2) 1276.25
(3) 1324.5 (4) 1367.25
(5) None of these

Directions (31-35) : What will come in place of the question mark (?) in the following number series ?

(RBI Officer Grade 'B' Online Exam. 25.08.2013

31. 224 576 752 840 884 ?
(1) 960 (2) 890
(3) 906 (4) 908
(5) None of these

32. 55 66.15 88.45 121.9 166.5 ?
(1) 212.25 (2) 322.25
(3) 224.25 (4) 222.25
(5) None of these

33. 36 49 75 88 114 (?)
(1) 130 (2) 140
(3) 132 (4) 128
(5) 127

INSURANCE EXAMS

1. What will come in place of the question mark (?) in the following series ?
3 7 18 26 ? 53 64 96
(1) 34 (2) 37
(3) 32 (4) 38

(United India Insurance Co. AAO Exam. 21.04.2002)

2. What will come in place of the question mark (?) in the following series ?
1.7 3.2 2.7 4.2 3.7 ? 4.7 6.2
(1) 6.2 (2) 5.5
(3) 5.2 (4) 4.3

(United India Insurance Co. AAO Exam. 21.04.2002)

Directions (3-7) : In each of the following questions, a number series in given. **Only** one number is **wrong** in this series. Find out that **wrong** number, and taking this wrong number as the first term of the second series formed following the same logic, find out the fourth term of the second series.

(LIC Assistant Administrative Officer (AAO) Exam. 24.04.2008)

3. 8 4 4 6 12 28 90
(1) 18 (2) 42
(3) 21 (4) 24
(5) None of these

4. 17 17.25 18.25 20.75 24.5 30.75
(1) 23.25 (2) 24.25
(3) 24,5 (4) 24,75
(5) None of these

5. 438 487 447 476 460 469
(1) 485 (2) 425
(3) 475 (4) 496
(5) None of these

6. 2 7 18 45 99 209 431
(1) 172 (2) 171
(3) 174 (4) 175
(5) None of these

7. 6 8 10 42 146 770 4578
(1) 868 (2) 8872
(3) 858 (4) 882
(5) None of these

Directions (8-12) : Find out the wrong number in the following given sequence.

(LIC Assistant Administrative Officer (AAO) Exam. 2006)

8. 7 4 6 9 20 52.5 160.5
(1) 6 (2) 4
(3) 20 (4) 9
(5) 52.5

9. 4 6 12 30 75 315 1260
(1) 315 (2) 75
(3) 12 (4) 6
(5) 30

10. 3 4 13 38 87 166 289
(1) 38 (2) 13
(3) 87 (4) 166
(5) 4

11. 4 5 9 29 111 556 3325
(1) 5 (2) 9
(3) 29 (4) 111
(5) 556

12. 2 6 16 38 84 176 368
(1) 6 (2) 16
(3) 38 (4) 84
(5) 176

Directions (13 - 17) : What should come in place of the question mark (?) in the following number series ?

(New India Assurance AO Exam. 25.10.2009)

13. 3 52 88 113 129 ?
(1) 128 (2) 142
(3) 133 (4) 145
(5) None of these

14. 2 3 8 ? 112 565
(1) 36 (2) 14
(3) 27 (4) 45
(5) None of these

15. 6 4 8 23 ? 385.25
(1) 84.5 (2) 73
(3) 78.5 (4) 82
(5) None of these

18. 8 84 216 512 ? 1728
(1) 729 (2) 1331
(3) 684 (4) 1000
(5) None of these

17. 5 11 32 108 444 ?
(1) 1780 (2) 2230
(3) 1784 (4) 2225
(5) None of these

18. If $S = 1^2 - 2^2 + 3^2 - 4^2 + ...+ 199^2 - 200^2$, then the value of S is
(1) 19900 (2) 20100
(3) -20100 (4) -19900

(New India Assurance AO Exam. 25.10.2009)

19. Theexpression $\frac{3}{4}+\frac{5}{36}+\frac{7}{144}+....\frac{17}{5184}+\frac{19}{8100}$ is equal to
(1) 0.9 (2) 0.95
(3) 0.99 (4) 1.91

Directions (20- 24) : What will come in place of the question mark (?) in the following number series ?

(United India Insurance AO Exam. 27.03.2011)

20. 8 14 32 70 136 (?)
(1) 248 (2) 247
(3) 237 (4) 238
(5) None of these

21. 25 41 89 169 281 (?)
(1) 425 (2) 415
(3) 409 (4) 419
(5) None of these

22. 461 474 465 478 469 (?)
(1) 460 (2) 482
(3) 456 (4) 478
(5) None of these

23. 980 516 284 168 110 (?)
(1)73 (2)71
(3) 83 (4) 91
(5) None of these

24. 4 4 10 34 94 (?)
(1) 230 (2) 214
(3) 220 (4) 209
(5) None of these

25. The sum 1 + 3 - 5 + 7 + 9 - 11 +13 + 15- 17 +.....+ 61 + 63 - 65 is equal to
(1) 319 (2) 330
(3) 341 (4) 451

(New India Insurance AAO Exam. 22.05.2011)

26. If $x = \frac{1}{2} + \frac{1}{6} + \frac{1}{12} + \frac{1}{20} + \frac{1}{30} + \frac{1}{42} + \frac{1}{56} + \frac{1}{63}$ then value of $\frac{1}{x}$ is closest to
(1) 1.1 (2) 1
(3) 0.9 (4) 0.8

(Ntw India Insurance AAO Exam. 22.05.2011)

27. If $\left(1-\frac{1}{2^2}\right)\left(1-\frac{1}{3^2}\right)\left(1-\frac{1}{4^2}\right)\ldots\left(1-\frac{1}{2011^2}\right) = \frac{x}{2\times 2011}$ then the value of x is
(1) 1 (2) 2010
(3) 2011 (4) 2012

(United India Insurance AAO Exam. 03.06.2012)

Directions (28 - 32) : Find the wrong number in the following number series .

(LIC Assistant Administrative Officer (AAO) Exam. 12.05.2013)

28. 1050 510 242 106 46 16 3
(1) 3 (2) 106
(3) 242 (4) 510
(5) None of these

29. 550 546 537 521 494 460 411
(1) 494 (2) 546
(3) 521 (4) 460
(5) None of these

30. 8 21 47 86 140 203 281
(1) 47 (2) 86
(3) 140 (4) 203
(5) None of these

31. 4 24 161 965 4795 19176 57525
(1) 161 (2) 965
(3) 57525 (4) 19176
(5) None of these

32. 1 2 8 24 120 720 5040
(1)120 (2) 24
(3) 8 (4) 720
(5) None of these

Directions (33-38) : What should come in place of the question mark (?) in the following number series ?

(United India Insurance AO Exam. 26.05.2013

33. 1548 516 129 43 ?
(1) 11 (2) 10.75
(3) 9.5 (4) 12
(5) None of these

34. 949 189.8 ? 22.776 11.388 6.8328
(1) 48.24 (2) 53.86
(3) 74.26 (4) 56.94
(5) None of these

35. 121 144 190 259 ? 466
(1) 351 (2) 349
(3) 374 (4) 328
(5) None of these

36. 14 43.5 264 ? 76188
(1) 3168 (2) 3176
(3) 1587 (4) 1590
(5) None of these

37. 41 164 2624 ? 6045696
(1) 104244 (2) 94644
(3) 94464 (4) 102444
(5) None of these

38. Find the missing number in the series :
2, 5, 9, ?, 20, 27
(1) 14 (2)16
(3)18 (4)24

(NICL (GIC) Administrative Officer Exam. 15.1.2.2013)

SHORT ANSWERS
NATIONALISED BANKS & IBPS PO/MT/SO

1. (4) **2.** (1)
3. (4) **4.** (3)
5. (2) **6.** (3)
7. (5) **8.** (2)
9. (1) **10.** (4)
11. (3) **12.** (5)
13. (2) **14.** (1)
15. (4) **16.** (1)
17. (5) **18.** (1)
19. (1) **20.** (2)
21. (4) **22.** (3)
23. (2) **24.** (4)
25. (1) **26.** (5)
27. (3) **28.** (1)
29. (3) **30.** (2)
31. (5) **32.** (4)
33. (1) **34.** (3)
35. (2) **36.** (3)
37. (5) **38.** (5)
39. (3) **40.** (3)
41. (2) **42.** (1)
43. (3) **44.** (5)
45. (4) **46.** (1)
47. (2) **48.** (1)
49. (4) **50.** (5)
51. (3) **52.** (2)
53. (5) **54.** (1)
55. (3) **56.** (2)
57. (4) **58.** (3)
59. (5) **60.** (1)
61. (2) **62.** (4)
63. (5) **64.** (4)
65. (3) **66.** (2)
67. (1) **68.** (3)
69. (4) **70.** (1)
71. (5) **72.** (3)
73. (5) **74.** (1)
75. (4) **76.** (2)
77. (3) **78.** (2)
79. (4) **80.** (1)
81. (5) **82.** (3)
83. (3) **84.** (3)
85. (3) **86.** (2)
87. (3) **88.** (1)
89. (5) **90.** (3)
91. (1) **92.** (4)
93. (3) **94.** (1)
95. (5) **96.** (4)
97. (3) **98.** (1)
99. (2) **100.** (2)
101. (4) **102.** (5)
103. (1) **104.** (3)
105. (4) **106.** (2)
107. (3) **108.** (5)
109. (5) **110.** (1)
111. (3) **112.** (4)
113. (5) **114.** (1)
115. (2) **116.** (3)
117. (2) **118.** (1)
119. (1) **120.** (2)
121. (2) **122.** (5)
123. (3) **124.** (3)
125. (3) **126.** (2)
127. (5) **128.** (3)
129. (4) **130.** (3)
131. (3) **132.** (2)
133. (4) **134.** (5)
135. (4) **136.** (1)
137. (2) **138.** (1)
139. (3) **140.** (1)
141. (4) **142.** (5)
143. (3) **144.** (3)
145. (3) **146.** (5)
147. (2) **148.** (3)
149. (1) **150.** (3)
151. (5) **152.** (4)
153. (2) **154.** (1)
155. (2) **156.** (4)
157. (4) **158.** (1)
159. (3) **160.** (2)
161. (4) **162.** (1)
163. (1) **164.** (4)
165. (5) **166.** (4)
167. (4) **168.** (2)
169. (5) **170.** (4)
171. (1) **172.** (1)
173. (3) **174.** (5)
175. (4) **176.** (1)
177. (5) **178.** (3)
179. (2) **180.** (3)
181. (5) **182.** (3)
183. (4) **184.** (5)
185. (4) **186.** (4)
187. (1) **188.** (5)
189. (3) **190.** (2)
191. (4) **192.** (1)
193. (2) **194.** (5)
195. (2) **196.** (4)
197. (1) **198.** (3)
199. (2) **200.** (4)
201. (3) **202.** (5)
203. (4) **204.** (2)
205. (1) **206.** (2)
207. (4) **208.** (3)
209. (1) **210.** (2)
211. (2) **212.** (1)
213. (5) **214.** (4)

215. (3) **216.** (1)
217. (4) **218.** (5)
219. (3) **220.** (3)
221. (1) **222.** (2)
223. (3) **224.** (4)
225. (5) **226.** (5)
227. (3) **228.** (5)
229. (5) **230.** (5)

SBI PO EXAMS

1. (3) **2.** (3)
3. (4) **4.** (5)
5. (1) **6.** (4)
7. (2) **8.** (5)
9. (3) **10.** (3)
11. (4) **12.** (5)
13. (5) **14.** (1)
15. (3) **16.** (1)
17. (2) **18.** (4)
19. (3) **20.** (5)
21. (4) **22.** (2)
23. (1) **24.** (4)
25. (3) **26.** (1)
27. (2) **28.** (1)
29. (3) **30.** (4)
31. (3) **32.** (3)
33. (1) **34.** (2)
35. (4) **36.** (3)
37. (1) **38.** (5)
39. (4) **40.** (4)
41. (2) **42.** (5)
43. (4) **44.** (1)
45. (3) **46.** (2)
47. (4) **48.** (5)
49. (5) **50.** (1)
51. (3) **52.** (4)
53. (2) **54.** (1)
55. (3) **56.** (4)
57. (1) **58.** (2)
59. (3) **60.** (4)
61. (5)

RBI GRADE-B OFFICER EXAMS

1. (4) **2.** (5)
3. (3) **4.** (2)
5. (1) **6.** (5)
7. (3) **8.** (4)
9. (1) **10.** (2)
11. (3) **12.** (2)
13. (4) **14.** (1)
15. (5) **16.** (4)
17. (2) **18.** (1)
19. (5) **20.** (3)
21. (3) **22.** (2)
23. (5) **24.** (1)
25. (5) **26.** (4)
27. (4) **28.** (3)
29. (2) **30.** (2)
31. (3) **32.** (4)
33. (5)

INSURANCE EXAMS

1. (2) **2.** (3)
3. (3) **4.** (2)
5. (1) **6.** (5)
7. (4) **8.** (1)
9. (2) **10.** (4)
11. (3) **12.** (5)
13. (5) **14.** (3)
15. (1) **16.** (4)
17. (2) **18.** (3)
19. (3) **20.** (4)
21. (1) **22.** (2)
23. (5) **24.** (5)
25. (1) **26.** (1)
27. (4) **28.** (2)
29. (1) **30.** (3)
31. (2) **32.** (3)
33. (2) **34.** (4)
35. (1) **36.** (5)
37. (3) **38.** (1)

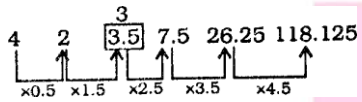
EXPLANATIONS
NATIONALISED BANKS
& IBPS PO/MT/SO

1. (4) The series is based on the following pattern:
$11 = 2 \times 3 + 5$
$38 = 11 \times 4 - 6$
$197 = 38 \times 5 + 7$
$1172 \neq 197 \times 6 - 8$
$\therefore$ **1172** is wong and it should be replaced by $197 \times 6 - 8 = 1174$

2. (1) The series is based on the following pattern:
$107 - 71 = 36 = 6^2$
$71 - 46 = 25 = 5^2$
$46 - 30 = 16 = 4^2$
$30 - 21 = 9 = 3^2$
$21 - 19 = 2 \neq 2^2$
$\therefore$ **19** I should be replaced by 17 for which $21 - 17 = 2^2$

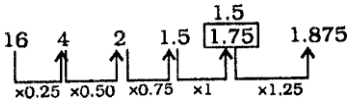
3. (4) The series is based on the following pattern:
$16 = 9 + 7$
$25 = 16 + 9$
$41 = 25 + 16$
68 $\neq 41 + 25$

4. (3) The series is based on the following pattern:



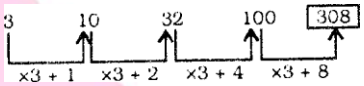
Obviously, 3.5 Is the wrong number which should be replaced by 3.

5. (2) The series is based on the following pattern:



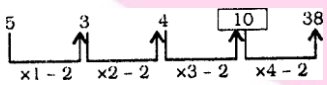
Obviously, 1.75 is the wrong number which should be replaced by 1.5.

6. (3) The given series is based on the following pattern:



Hence, 308 will come in place of question mark.

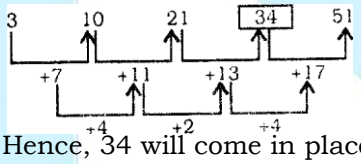
7. (5) The given series is based on the following pattern:



Hence, 10 will come in place of question mark.

8. (2) The given series is based on the following pattern:
$5 \times 1 + (1)^2 = 6$
$6 \times 2 + (2)^2 =$ **16**
$16 \times 3 + (3)^2 = 57$
$57 \times 4 + (4)^2 = 244$
Hence, 16 will come in place of question mark.

9. (1) The given series is based on the following patterns.

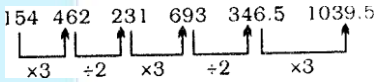


Hence, 34 will come in place of question mark.

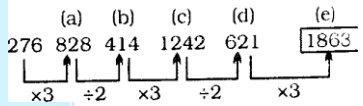
10. (4) The given series is based on the following pattern:
$5 \times 2 + 1 = 11$
$11 \times 2 + 3 =$ **25**
$25 \times 2 + 5 = 55$
$55 \times 2 + 7 = 117$

11. (3) The given series is based on the following pattern:
$30 = 12 \times 6 - 7 \times 6$
$120 = 30 \times 5 - 6 \times 5$
$460 = 120 \times 4 - 5 \times 4$
$1368 = 460 \times 3 - 4 \times 3$
$2730 = 1368 \times 2 - 3 \times 2$
Similarly,
(a) $= 16 \times 6 - 7 \times 6 = 96 - 42 = 54$
(b) $= 54 \times 5 - 6 \times 5 = 240$
(c) $= 240 \times 4 - 5 \times 4 = 940$
(d) $= 940 \times 3 - 4 \times 3 =$ **2808**
Hence, 2808 will come in place of (d).

12. (5) The given series is based on the following pattern:

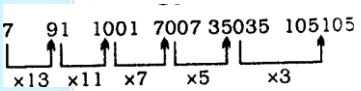


Similarly,

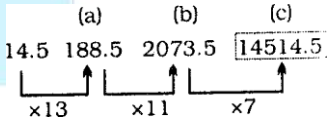


Hence, 1863 will come in place of (e).

13. (2) The given series is based on the following pattern:

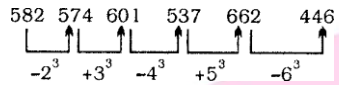


Similarly,

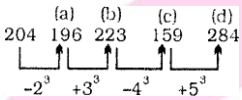


Hence, 14514.5 will come in place of (c).

14. (1) The given series is based on the following pattern :

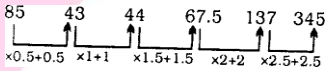


Similarly,

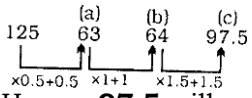


Hence, 284 will come in place of(d).

15. (4) The given series is based on the following pattern:



Similarly,



Hence, **97.5** will come in place of (c).

16. (1) The given series is based on the following pattern :

$1 = 1^3$ $? = 2^3 = \mathbf{8}$

$27 = 3^3$ $64 = 4^3$

$125 = 5^3$

Hence, 8 will come in place of the question mark.

17. (5) The given series is based on the following pattern :

$25 = 5^2$ $16 = 4^2$

$? = 3^2 = \mathbf{9}$ $4 = 2^2$ and

$1 = 1^2$

Hence, 9 will come in place of the question mark,

18. (1) The given series Is based on the following pattern:

$1 \times 2 + 2 \times 2 = 6$

$6 \times 4 + 4 \times 3 = 36$

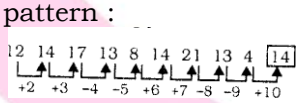
$36 \times 6 + 6 \times 4 = 240$

$240 \times 8 + 8 \times 5 = 1960$

$1960 \times 10 + 10 \times 6 =$ **19660**

Hence, 19660 will come in place of the quesdon mark.

19. (1) The given series is based on the following pattern :



Hence, 14 will come in place ol the question mark.

20. (2) The given series is based on the following pattern :

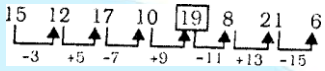
$2 + 5 = 7$ $7 + 5 = 12$

$12 + 7 = 19$ $19 + 12 = 31$

$31 + 19 = 50$ $50 + 31 =$ **81**

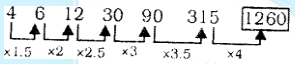
Hence, 81 will come in place of the question mark.

21. (4) The given series is based on the following pattern:



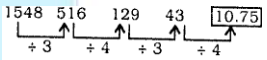
Hence, 19 will come in place of the question mark.

22. (3) The given series is based on the following pattern :



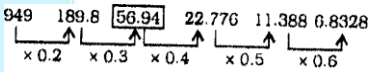
Hence, 1260 will come in place of the question mark.

23. (2) The given number series is based on the following pattern :



Hence, 10.75 will replace the quesdon mark.

24. (4) The given number series is based on the following pattern :



Hence, 56.94 will replace the question mark.

25. (1) The given number series is based on the following pattern :

$121 + 23 \times 1 = 144$

$144 + 23 \times 2 = 190$

$190 + 23 \times 3 = 259$

$\therefore ? = 259 + 23 \times 4$

$= 259 + 92 = 351$

Hence, **351** will replace the question mark.

26. (5) The given number series is based on the following pattern :

$14 \times 3 + 1.5 = 43.5$

$43.5 \times 6 + 1.5 \times 2 = 264$

$264 \times 12 + 1.5 \times 4 =$ **3174**

$3174 \times 24 + 1.5 \times 8 = 76188$

Hence, 3174 will replace the question mark.

27. (3) The given number series is based on the following pattern :

$41 \times 2^2 = 164$

$164 \times 4^2 = 2624$

$2624 \times 6^2 =$ **94464**

$94464 \times 8^2 = 6045696$

Hence, 94464 will replace the question mark.

28. (1) The given number series is based on the following pattern :

$12 \times 1 = 12$

$12 \times 1.5 = 18$

$18 \times (1 + 1.5) = 18 \times 2.5 = 45$
$45 \times (1.5 + 2.5) = 45 \times 4 = 180$
$180 \times (4 + 2.5) = 180 \times 6.5 = 1170$
$\therefore ? = 1170 \times (4 + 6.5) =$ **12285**
Hence, 12285 will replace the quesdon mark.

29. (3) The given number series is based on the following pattern :
$467 - 444 = 23 = 23 \times 1$
$513 - 467 = 46 = 23 \times 2$
$582 - 513 = 69 = 23 \times 3$
$674 - 582 = 92 = 23 \times 4$
$789 - 674 = 115 = 23 \times 5$
$\therefore ? = 789 + 23 \times 6$
$= 789 + 138 =$ **927**
Hence, 927 will replace the question mark.

30. (2) The given number series is based on the following pattern :
$1 = 1^4$; $16 = 2^4$;
$81 = 3^4$; $256 = 4^4$;
$625 = 5^4$; $1296 = 6^4$;
$\therefore ? = 7^4 = 7 \times 7 \times 7 \times 7$
$=$ **2401**
Hence, 2401 will replace the question mark.

31. (5) The given number series is based on the following pattern :
$23 \times 1 + 2 = 25$
$25 \times 2 + 3 = 53$
$53 \times 3 + 4 = 163$
$163 \times 4 + 5 = 657$
$657 \times 5 + 6 = 3291$
$\therefore ? = 3291 \times 6 + 7$
$= 19746 + 7 =$ **19753**
Hence, 19753 will replace the question mark.

32. (4) The given number series is based on the following pattern :
$13 \times 1 = 13$
$13 \times 5 = 65$
$65 \times 9 = 585$
$585 \times 13 = 7605$
$7605 \times 17 = 129285$
$\therefore ? = 129285 \times 21 =$ **2714985**
Hence, 2714985 will replace the question mark.

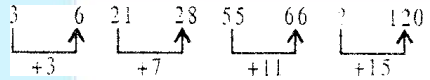
33. (1) The given number series is based on the following pattern :
$40280625 \div 55 = 732375$
$732375 \div 45 = 16275$
$16275 \div 35 = 465$
$465 \div 25 = 18.6$
$18.6 \div 15 = 1.24$
$\therefore ? = 1.24 \div 5 =$ **0.248**
Hence, 0.248 will replace the question mark.

34. (3) The given number series is based on the following pattern :
$14 \times 1 - 2 = 14 - 2 = 12$
$12 \times 2 - 3 = 24 - 3 = 21$
$21 \times 3 - 4 = 63 - 4 = 59$
$59 \times 4 - 5 = 236 - 5 = 231$
$231 \times 5 - 6 = 1155 - 6 = 1149$
$\therefore ? = 1149 \times 6 - 7$
$= 6894 - 7 =$ **6887**
Hence, 6887 will replace the question mark.

35. (2) The given number series is based on the following pattern :
$12 \times 12 \times 12 = 1728$
$14 \times 14 \times 14 = 2744$
$16 \times 16 \times 16 = 4096$
$18 \times 18 \times 18 = 5832$
$20 \times 20 \times 20 = 8000$
$22 \times 22 \times 22 = 10648$
$\therefore ? = 24 \times 24 \times 24 =$ **13824**
Hence, 13824 will replace the question mark.

36. (3) The given number series is based on the following pattern :
$120 \div 8 = 7$
$15 \times 7 = 105$
$105 \div 6 = 17.5$
$17.5 \times 5 = 87.5$
$\therefore = 87.5 \div 4 =$ **21.875**
Hence, 21.875 will replace the question mark.

37. (5) The given number series is based on the following pattern :



Hence, 105 will replace the question mark.

38. (5) The given number series is based on the following pattern :
$487.5 - 357.5 = 130$
$357.5 - 247.5 = 110$
$247.5 - 157.5 = 90$
$157.5 - 87.5 = 70$
$87.5 - 47.5 =$ **40**
$87.5 - 37.5 = 50$
$37.5 - 7.5 = 30$
Clearly, **47.5** is the wrong number. It should be replaced by 37.5.

39. (3) The given number series is based on the following pattern :
$13 + 3 = 16$
$16 + 5 = 21$
$21 + 7 = 28 \neq$ **27**
$28 + 11 = 39$
$39 + 13 = 52$
$52 + 17 = 69$

Clearly, 27 is the wrong num-ber. It should be replaced by 28.

40. (3) The given number series is based on the following pattern :
1500 + 81 = 1581
1581 + 83 = 1664
1664 + 85 = 1749
1749 + 87 = 1836 ≠ **1833**
1836 + 89 = 1925
1925 + 91 = 2016
Clearly, 1833 is the wrong number. It should be replaced by 1836.

41. (2) The given number series is based on the following pattern :
66 + 25 = 91
91 + 29 = 120
120 + 33 = 153
153 + 37 = 190
190 + 41 = 231 ≠ **233**
231 + 45 = 276
Clearly, 233 is the wrong number. It should be replaced by 231.

42. (1) The given number series is based on the following pattern :
11 × 11 × 11 = 1331
13 × 13 × 13 = 2197
15 × 15 × 15 = 3375
17 × 17 × 17 = 4913 ≠ **4914**
19 × 19 × 19 = 6859
Clearly, 4914 is the wrong number. It should be replaced by 4913.

43. (3) The given number series is based on the following pattern :
$20 + 2^2 = 24$
$24 + 3^2 = 33$
$33 + 4^2 = 49$
$49 + 5^2 = 74$
$74 + 6^2 = 110$
$\therefore ? = 110 + 7^2$
$= 110 + 49 =$ **159**

44. (5) The given number series is based on the following pattern :
529 = 23 × 23
841 = 29 × 29
961 = 31 × 31
1369 = 37 × 37
1681 = 41 × 41
1849 = 43 × 43
$\therefore ?$ = 47 × 47 = **2209**
Here, the numbers are formed by squaring the prime numbers greater than 23.

45. (4) The given number series is based on the following pattern :
16 × 1.5 = 24
24 × 2 = 48
48 × 2.5 = 120
120 × 3 = 360
360 × 3.5 = 1260
$\therefore ?$ = 1260 × 4 = **5040**

46. (1) The given number series is based on the following pattern :
8 × 4 - 1= 32 - 1 = 31
31 × 4 - 2 = 124 - 2 = 122
122 × 4 - 3 = 488 - 3 = 485
485 × 4 - 4 = 1940 - 4 = 1936
1936 × 4 - 5 = 7744 - 5 = 7739
$\therefore ?$ = 7739 × 4 - 6
= 30956 - 6 = **30950**

47. (2) The given number series is based on the following pattern :
499 + 1 × 123 = 622
622 + 2 × 123 = 868
868 + 3 × 123 = 1237
1237 + 4 × 123 = 1729
1729 + 5 × 123 = 2344
$\therefore ?$ = 2344 + 6 × 123
= 2344 + 738 = **3082**

48. (1) The given number series is based on the following pattern
$1^1 = 1$; $2^2 = 4$
$3^3 = 27$; $4^4 = 256$
$5^5 = 3125$; $6^6 =$ **46656**
Hence 46658 is the wrong number.

49. (4) The given number series is based on the following pattern
18000 ÷ 5 = 3600
3600 ÷ 5 = 720
720 ÷ 5 = 144 ≠ **142.2**
144 ÷ 5 = 28.3
28.8 ÷ 5 = 5.76
Hence 142.2 is the wrong number.

50. (5) The given number series is based on the following pattern :
$12 + 15^2 = 12 + 225 = 237$
$237 + 13^2 = 237 + 169 = 406$
$406 + 11^2 = 406 + 121 = 527$
527 + 81 = 608
$608 + 7^2 = 608 + 49 = 657$
Hence 604 is the wrong number.

51. (3) The given number series is based on the following pattern :
3 × 7 + 2 × 7 = 21 + 14 = 35
35 × 6 + 3 × 6 = 210 + 18
= 228 ≠ **226**
228 × 5 + 4 × 5 = 1140 + 20 = 1160
1160 × 4 + 5 × 4 = 4640 + 20 = 4660
4660 × 3 + 6 × 3 = 13980 + 18 = 13998
Hence 226 is the wrong number

52. (2) The given number series i based on the following pattern :

$18 \times 7 - 7 = 126 - 7 = 119$
$119 \times 6 - 6 = 714 - 708$
$708 \times 5 - 5 = 3540 - 5 = 3535 \neq$ **3534**
$3535 \times 4 - 4 = 14140 - 4 = 14136$
Hence 3534 is the wrong number.

53. (5) $5 + 2^2 = 5 + 4 = 9$
$9 + 3^2 = 9 + 9 = 18$
$18 + 4^2 = 18 + 16 = 34$
$34 + 5^2 = 34 + 25 = 59$
$59 + 6^2 = 59 + 36 = 95$
$\therefore ? = 95 + 7^2 = 95 + 49 =$ **144**

54. (1) $1200 \div 2.5 = 480$
$480 \div 2.5 = 192$
$192 \div 2.5 = 76.8$
$76.8 \div 2.5 = 30.72$
$30.72 \div 2.5 = 12.288$
$\therefore ? = 12.288 \div 2.5 =$ **4.9152**

55. (3) $963 - 1 \times 36 = 963 - 36 = 927$
$927 - 2 \times 36 = 927 - 72 = 855$
$855 - 3 \times 36 = 855 - 108 = 747$
$747 - 4 \times 36 = 747 - 144 = 603$
$603 - 5 \times 36 = 603 - 180 = 423$
$\therefore ? = 423 - 6 \times 36 = 423 - 216 =$ **207**

56. (2) $29 \times 29 = 841$
$31 \times 31 = 961$
$33 \times 33 = 1089$
$35 \times 35 = 1225$
$37 \times 37 = 1369$
$39 \times 39 = 1521$
$\therefore ? = 41 \times 41 =$ **1681**

57. (4) $18 \times 1 + 2 = 18 + 2 = 20$
$20 \times 2 + 4 = 40 + 4 = 44$
$44 \times 3 + 6 = 132 + 6 = 138$
$138 \times 4 + 8 = 552 + 8 = 560$
$560 \times 5 + 10 = 2800 + 10 = 2810$
$\therefore ? = 2810 \times 6 + 12 = 16860 + 12 =$ **16872**

58. (3) $4 \times 1 + 2 = 4 + 2 = 6$
$6 \times 2 + 3 = 12 + 3 = 15 \neq$ **18**
$15 \times 3 + 4 = 45 + 4 = 49$
$49 \times 4 + 5 = 196 + 5 = 201$
$201 \times 5 + 6 = 1005 + 6 = 1011$

59. (5) $48 \times \frac{3}{2} = 72$; $72 \times \frac{3}{2} = 108$
$108 \times \frac{3}{2} = 162$: $162 \times \frac{3}{2} = 243$
$243 \times \frac{3}{2} = 364.5 \neq$ **366**

60. (1) $2 \times 6 + 7 \times 6 = 12 + 42 = 54$
$54 \times 5 + 6 \times 5 = 270 + 30 = 300$
$300 \times 4 + 5 \times 4 = 1200 + 20 = 1220$
$1220 \times 3 + 4 \times 3 = 3660 + 12$
$= 3672 \neq$ **3674**
$3672 \times 2 + 3 \times 2 = 7344 + 6$
$= 7350$

61. (2) $2^3 = 8 : 3^3 = 27$
$4^3 = 64 : 5^3 = 125$
$6^3 = 216 \neq$ **218**
$7^3 = 343$

62. (4) $19 + 7^2 = 19 + 49 = 68$
$68 + 6^2 = 68 + 36 = 104 \neq$ **102**
$104 + 5^2 = 104 + 25 = 129$
$129 + 4^2 = 129 + 16 = 145$
$145 + 3^2 = 145 + 9 = 154$

63. (5)
$0 + 5 = 5$
$5 + 13 = 18$
$18 + 25 = 43$
$43 + 41 = 84$
$84 + 61 = 145$
$\therefore ? = 145 + 85 =$ **230**

64. (4) $10 \times 1 + 1 \times 7 = 10 + 7 = 17$
$17 \times 2 + 2 \times 7 = 34 + 14 = 48$
$48 \times 3 + 3 \times 7 = 144 + 21 = 165$
$165 \times 4 + 4 \times 7 = 660 + 28 = 688$
$688 \times 5 + 5 \times 7 = 3440 + 35 = 3475$
$\therefore ? = 3475 \times 6 + 6 \times 7$
$= 20850 + 42 =$ **20892**

65. (3) $1 \times 3 = 3$
$3 \times 8 = 24$
$24 \times 15 = 360$
$360 \times 24 = 8640$
$8640 \times 35 = 302400$
$\therefore ? = 302400 \times 48$
$=$ **14515200**

66. (2) $12 \times 1 + 2 \times 1 = 12 + 2 = 14$
$14 \times 2 + 2 \times 2 = 28 + 4 = 32$
$32 \times 3 + 2 \times 3 = 96 + 6 = 102$
$102 \times 4 + 2 \times 4 = 408 + 8 = 416$
$416 \times 5 + 2 \times 5 = 2080 + 10$
$= 2090$
$\therefore ? = 2090 \times 6 + 2 \times 6$
$= 12540 + 12 =$ **12552**

67. (1) $10 \times \frac{3}{2} = 15$
$15 \times \frac{4}{4} = 15$
$15 \times \frac{5}{6} = 12.5$
$12.5 \times \frac{6}{8} = 9.375$
$9.375 \times \frac{7}{10} = 6.5625$
$\therefore ? = 6.5625 \times \frac{8}{12} =$ **4.375**

68. (3) The pattern of the number series is :
$17 \times 3 + 1 = 51 + 1 = 52$
$52 \times 3 + 2 = 156 + 2 = 158$
$158 \times 3 + 3 = 474 + 3 = 477$
$477 \times 3 + 4 = 1431 + 4 =$ **1435**

69. (4) The pattern of the number series is :
$3 \times 7 + 1 = 21 + 1 = 22$
$22 \times 6 + 2 = 132 + 2 =$ **134**
$134 \times 5 + 3 = 670 + 3 = 673$
$673 \times 4 + 4 = 2692 + 4 = 2696$

70. (1) The pattern of the number series is :
$6 \times 1 + 1 \times 7 = 6 + 7 = 13$
$13 \times 2 + 2 \times 6 = 26 + 12 = 38$
$38 \times 3 + 3 \times 5 = 114 + 15 =$ **129**
$129 \times 4 + 4 \times 4 = 516 + 16 = 532$

71. (5) The pattern of the number series is :
$\frac{286}{2} - 1 = 143 - 1 = 142$
$\frac{142}{2} - 1 = 71 - 1 =$ **70**
$\frac{70}{2} - 1 = 35 - 1 = 34$
$\frac{34}{2} - 1 = 17 - 1 = 16$

72. (3) The pattern of the number series is :
$17 \times 0.5 + 0.5 = 9$
$9 \times 1 + 1 =$ **10**
$10 \times 1.5 + 1.5 = 16.5$
$16.5 \times 2 + 2 = 35$

73. (5) The pattern is :
$2 \times 3 + 2 = 6 + 2 = 8$
$8 \times 3 + 2 = 24 + 2 = 26$
$26 \times 3 + 2 = 78 + 2 =$ **80**
$80 \times 3 + 2 = 240 + 2 = 242$

74. (1) The pattern is :
$3 \times 1 + 1^2 = 3 + 1 = 4$
$4 \times 2 + 2^2 = 8 + 4 = 12$
$12 \times 3 + 3^2 = 36 + 9 =$ **45**
$45 \times 4 + 4^2 = 180 + 16 = 196$

75. (4) The pattern is :
$9 \times 2 - 1 = 18 - 1 = 17$
$17 \times 2 - 1 = 34 - 1 =$ **33**
$33 \times 2 - 1 = 66 - 1 = 65$
$65 \times 2 - 1 = 130 - 1 = 129$

76. (2) The pattern is :
$7 \times 2 - 1 = 14 - 1 = 13$
$13 \times 2 - 1 = 26 - 1 =$ **25**
$25 \times 2 - 1 = 50 - 1 = 49$
$49 \times 2 - 1 = 98 - 1 = 97$

77. (3) The pattern is :
$5 \times 0.5 + 0.5 = 2.5 + 0.5 = 3$
$3 \times 1.5 + 1.5 = 4.5 + 1.5 = 6$
$6 \times 2.5 + 2.5 = 15 + 2.5 =$ **17.5**
$17.5 \times 3.5 + 3.5 = 61.25 + 3.5 = 64.75$

78. (2) The pattern is :
$16 \times 0.5 = 8$ $8 \times 1.5 = 12$
$12 \times 2.5 = 30$ $30 \times 3.5 =$ **105**

79. (4) The pattern is :
$5 \times 1 + 1 = 6$
$6 \times 2 + 2 = 14$
$14 \times 3 + 3 = 45$
$45 \times 4 + 4 = 184$

80. (1) The pattern is :
$7 \times 1 + 1 \times 5 = 12$
$12 \times 2 + 2 \times 4 = 32$
$32 \times 3 + 3 \times 3 = 105$
$105 \times 4 + 4 \times 2 =$ **428**

81. (5) The pattern is :
$11 \times 2 + 1 = 23$
$23 \times 2 + 1 = 47$
$47 \times 2 + 1 = 95$
$95 \times 2 + 1 =$ **191**

82. (3) The pattern is :
$9 \times 2 - 1 = 17$
$17 \times 2 - 1 = 33$
$33 \times 2 - 1 = 65$
$65 \times 2 - 1 =$ **129**

83. (3) The pattern of the number series is :
$8 + 3 = 11$
$11 + 3^2 = 11 + 9 = 20 \neq$ **17**
$20 + 3^3 = 20 + 27 = 47$
$47 + 3^4 = 47 + 81 = 128$
$128 + 3^5 = 128 + 243 = 371$

84. (3) The pattern of the number series is :
$1 + 2^2 = 1 + 4 = 5$
$5 + 2^3 = 5 + 8 = 13$
$13 + 2^4 = 13 + 16 = 29 \neq$ **31**
$29 + 2^5 = 29 + 32 = 61$
$61 + 2^6 = 61 + 64 = 125$

85. (3) The pattern is :
$150 \times 2 - 1 \times 10$
$= 300 - 10 = 290$
$290 \times 2 - 2 \times 10$
$= 580 - 20 = 560$
$560 \times 2 - 3 \times 10 = 1120 - 30$
$= 1090 \neq$ **1120**
$1090 \times 2 - 4 \times 10 = 2180 - 40 = 2140$
$2140 \times 2 - 5 \times 10 = 4280 - 50 = 4230$

86. (2) The pattern is : $10 \times 1 - 2 = 8$
$8 \times 2 - 3 = 13$
$13 \times 3 - 4 = 35$
$35 \times 4 - 5 = 135$
$135 \times 5 - 6 = 675 - 6$
$= 669 \neq$ **671**
$669 \times 6 - 7 = 4014 - 7 = 4007$

87. (3) The pattern is :
$(80 \div 2) + 2 = 40 + 2 = 42$

$(42 \div 2) + 2 = 21 + 2 = 23 \neq$ **24**
$(23 \div 2) + 2 = 11.5 + 2 = 13.5$
$(13.5 \div 2) + 2 = 6.75 + 2 = 8.75$
$(8.75 \div 2) + 2 = 4.375 + 2 = 6.375$

88. (1) The pattern is :

$125 \times \frac{3}{5} = 75$

$75 \times \frac{3}{5} = 45$

$45 \times \frac{3}{5} = 27 \neq$ **25**

$27 \times \frac{3}{5} = 16.2$

$16.2 \times \frac{3}{5} = 9.72$

89. (5) The pattern is :
$29 + 1 \times 8 = 37$
$37 - 2 \times 8 = 37 - 16 = 21$
$21 + 3 \times 8 = 21 + 24 = 45 \neq$ **43**
$45 - 4 \times 8 = 45 - 32 = 13$
$13 + 5 \times 8 = 13 + 40 = 53$
$53 - 6 \times 8 = 53 - 48 = 5$

90. (3) The pattern is:
$13 + 12 = 25$; $25 + 15 = 40$
$40 + 18 = 58 \neq$ **57**
$58 + 21 = 79$

91. (1) The pattern is :
$850 - 200 = 650 \neq$ **600**
$650 - 100 = 550$
$550 - 50 = 500$
$500 - 25 = 475$
$475 - 12.5 = 462.5$

92. (4) The pattern is:
$2 \times 3 = 6 \neq$ **10**
$6 \times 3 = 18$; $18 \times 3 = 54$
$54 \times 3 = 162$

93. (3) The pattern is:
$8 + 4 \times 1 = 12$; $12 + 4 \times 3 = 24$
$24 + 4 \times 5 = 44 \neq$ **46**
$44 + 4 \times 7 = 72$
$72 + 4 \times 9 = 108$

94. (1) The pattern is :
$142 - 23 = 119$; $119 - 19 = 100$
$100 - 17 = 83$
$83 - 13 = 70 \neq$ **65**
$70 - 11 = 59$
$59 - 7 = 52$

95. (5) The pattern is :
$5 + 7^2 = 54$
$54 + 6^2 = 90$
$90 + 5^2 = 115$
$115 + 4^2 = 131$
$131 + 3^2 = 140$
$140 + 2^2 = 140 + 4 =$ **144**

96. (4) The pattern is :
$7 \times 0.5 + 0.5 = 3.5 + 0.5 = 4$
$4 \times 1 + 1 = 4 + 1 = 5$
$5 \times 1.5 + 1.5 = 7.5 + 1.5 = 9$
$9 \times 2 + 2 = 18 + 2 =$ **20**

97. (3) The pattern is :
$6 \times 7 = 42$
$42 \times 6 =$ **252**
$252 \times 5 = 1260$

98. (1) The pattern is:
$4 \times 5 - 10 = 10$
$10 \times 5 - 10 = 40$
$40 \times 5 - 10 = 190$
$190 \times 5 - 10 = 940$
$940 \times 5 - 10 = 4700 - 10$
$=$ **4690**

99. (2) The pattern is :
$2 \times 1 + 1 \times 7 = 9$
$9 \times 2 + 2 \times 6 = 30$
$30 \times 3 + 3 \times 5 =$ **105**
$105 \times 4 + 4 \times 4 = 436$
$436 \times 5 + 5 \times 3 = 2195$

100. (2) The pattern of the numbe series is :
$(484 \div 2) - 2 = 242 - 2 = 240$
$(240 \div 2) - 2 = 120 - 2 = 118 = 120$
$(118 \div 2) - 2 = 59 - 2 = 57$
$(57 \div 2) - 2 = 28.5 - 2 = 26$ 5

101. (4) The pattern of the number series is :
$3 \times 1 + 2 = 5$
$5 \times 2 + 3 = 13$
$13 \times 3 + 4 = 43$
$43 \times 4 + 5 = 177 \neq$ **176**
$177 \times 5 + 6 = 891$

102. (5) The Pattern of the number series is :
$6 + 1^2 = 6 + 1 = 7$
$7 + 3^2 = 7 + 9 = 16$
$16 + 5^2 = 16 + 25 = 41$
$41 + 7^2 = 41 + 49 = 90$
$90 + 9^2 = 90 + 81 = 177 \neq$ **154**
$171 + 11^2 = 171 + 121 = 292$

103. (1) The pattern of the number series is :
$5 \times 1 + 1^2 = 6 \neq$ **7**
$6 \times 2 + 2^2 = 16$
$16 \times 3 + 3^2 = 57$
$57 \times 4 + 4^2 = 228 + 16 = 244$
$244 \times 5 + 5^2 = 1220 + 25 = 1245$

104. (3) The pattern of the number series is :
$4 \times 0.5 + 0.5 = 2 + 0.5 = 2.5$
$2.5 \times 1 + 1 = 3.5$
$3.5 \times 1.5 + 1.5 = 6.75 = \neq$ **65**
$6.75 \times 2 + 2 = 15.5$
$15.5 \times 2.5 + 2.5 = 38.75 + 25 = 41.25$
$41.25 \times 3 + 3 = 123.75 + 3 = 126.75$

105. (4) The pattern of the number series is :
325- 1 × 11 = 314
314 - 2 × 11 = 292
292 - 3 × 11 = 259
259 - 4 × 11 = 215
215 - 5 × 11 = ≠ **160**

106. (2) The pattern of the number series is :
45 × 1 + 1 = 46
46 × 1.5 + 1 = 70
70 × 2 + 1 = 141
141 × 2.5 + 1
= 352.5 + 1 = **353.5**

107. (3) The pattern of the number series is :
620 + 1 × 12 = 632
632 - 2 × 12 = 608
608 + 3 × 12 = 644
644 - 4 + 12 = 596
596 + 5 × 12 = 656

108. (5) The pattern of the number series is :
15 × 2 - 1 × 5 = 25
25 × 2 - 2 × 5 = 40
40 × 2 - 3 × 5 = 65
65 × 2 - 4 × 5 = **110**
110 × 2 - 5 × 5 = 195

109. (5) The pattern of the number series is :
120 × 2.5 + 20 = 320
320 × 2.5 + 20 = **820**
820 × 2.5 + 20 = 2070
2070 × 2.5 + 20 = 5195

110. (1) The pattern of the number series is :
$32 + 1^2 = 32 + 1 = 33 \neq$ **34**
$33 + 2^2 = 33 + 4 = 37$
$37 + 3^2 = 37 + 9 = 46$
$46 + 4^2 = 46 + 16 = 62$
$62 + 5^2 = 62 + 25 = 87$

111. (3) The pattern of the number series is :
7 + 1 × 11 = 7 + 11 = 18
18 + 3 × 11 = 18 + 33 = 51 ≠ **40**
51 + 5 × 11 = 51 + 55 = 106
106 + 7 × 11 = 106 + 77 = 183
183 + 9 × 11 = 183 + 99 = 282

112. (4) The pattern of the number series is :
850 - 1 × 7 = 843
843 - 2 × 7 = 829
829 - 3 × 7 = 808
808 - 4 × 7 = 780 ≠ **788**
780 - 5 × 7 = 745
745 - 6 × 7 = 703

113. (5) The pattern of the number series is :
33 + 288 = 321
321 + 144 = 465
465 + 72 = 537
537 + 36 = 573
573 + 18 = 591 ≠ **590**
591 + 9 = 600

114. (1) The pattern of the number series is :
37 + 1 × 5 = 42 ≠ **47**
42 + 2 × 5 = 52
52 + 3 × 5 = 67
67 + 4 × 5 = 87
87 + 5 × 5 = 112
112 + 6 × 5 = 142

115. (2) The pattern of the number series is :
13 + 3 = 16
16 + (3 + 3) = 22
22 + (6 + 5) = 33
33 + (11 + 7) = 51
51 + (18 + 9) = **78**

116. (3) The pattern of the number series is :
39 + 1 × 13 = 52
52 + 2 × 13 = 78
78 + 3 × 13 = 117
117 + 4 × 13 = 169
169 + 5 × 13 = **234**

117. (2) The pattern of the number series is :
$62 + 5^2 = 62 + 25 = 87$
$87 + 10^2 = 87 + 100 = 187$
$187 + 15^2 = 187 + 225 = 412$
$412 + 20^2 = 412 + 400 = 812$
$812 + (25)^2 = 812 + 625 =$ **1437**

118. (1) The pattern of the number series is :
$7 + 1^2 = 8$
$8 + 4^2 = 24$
$24 + 9^2 = 105$
$105 + 16^2 = 361$
$361 + 25^2 =$ **986**

119. (1) The pattern of the number series is :
656 - 224 = 432
432 - 112 = 320
320 - 56 = 264
264 - 28 = 236
236 - 14 = **222**

120. (2) The pattern of the number series is :
7 × 2 + 6 = 20
20 × 2 + 6 = 46
46 × 2 + 6 = 98
98 × 2 + 6 = 202
202 × 2 + 6 = 404 + 6 = **410**

121. (2) The pattern of the number series is :
$210 - 1^3 = 209$
$209 + 2^2 = 213$
$213 - 3^3 = 186$
$186 + 4^2 = 202$
$202 - 5^3 = 202 - 125 =$ **77**

122. (5) The pattern of the number series is :
27 + 11 = 38
38 + 33 = 71
71 + 55 = 126
126 + 77 = 203
203 + 99 = **302**

123. (3) The pattern of the number series is :
435 - 9 × 9 = 354
354 - 9 × 8 = 282
282 - 9 × 7 = 219
219 - 9 × 6 = 165
165 - 9 × 5 = **120**

124. (3) The paatem of the number series is :
$4 + 14^2 = 4 + 196 = 200$
$200 + 13^2 = 200 + 169 = 369$
$369 + 12^2 = 369 + 144 = 513$
$513 + 11^2 = 513 + 121 = 634$
$634 + 10^2 = 634 + 100 =$ **734**

125. (3) The pattern of the number series is :
495 - 1 × 10 = 485
485 - 2 × 10 = 465
465 - 4 × 10 = 425
425 - 8 × 10 = 345
345 - 16 × 10 = **185**

126. (2) The pattern of the number series is :
16 + 6 = 22
22 + 11 = 33
33 + 16 = 49
49 + 21 = 70
70 + 26 = **96**

127. (5) The pattern of the number series is :
$32 + 2^2 = 36$
$36 + 4^2 = 52$
$52 + 6^2 = 88$
$88 + 8^2 = 152$
$152 + 10^2 = 252$

128. (3) The pattern of the number series is :
17 + 272 = 289
289 + 136 = 425
425 + 68 = 493
493 + 34 = 527
527 + 17 = **544**

129. (4) The pattern of the numbe series is :
13 + 1 × 14 = 27
27 + 2 × 14 = 55
55 + 3 × 14 = 97
97 + 4 × 14 = 153
153 + 5 × 14 = **223**

130. (3) The pattern of the number series is :
50 × 1.2 = 60
60 × 1.25 = 75
75 × 1.3 = 97.5
97.5 × 1.35 = **131.625**
131.625 × 1.4 = 184.275

131. (3) The pattern of the number series is :
12 × 1 + 3 × 1 = 15
15 × 2 + 3 × 2 = 36
36 × 3 + 3 × 3 = **117**
117 × 4 + 3 × 4 = 480
480 × 5 + 3 × 5 = 2415

132. (2) The pattern of the number series is :
1 × 1 + 1 = 2
2 × 2 + 2 = 6
6 × 3 + 3 = 21
21 × 4 + 4 = 88
88 × 5 + 5 = 445
445 × 6 + 6 = **2676**

133. (4) The pattern of the number series is :
$20 + 1^2 = 21$
$21 + 2^2 = 25$
$25 + 3^2 = 34$
$34 + 4^2 = 50$
$50 + 5^2 =$ **75**

134. (5) The pattern of the number series is :
$\frac{600}{5} + 5 = 125$
$\frac{125}{5} + 5 = 30$
$\frac{30}{5} + 5 =$ **11**
$\frac{11}{5} + 5 = 7.2$

135. (4) The pattern of the number series is :
$11 + 2^2 = 11 + 4 = 15$
$15 + 4^2 = 15 + 16 = 31$
$31 + 6^2 = 31 + 36 = 67$
$67 + 8^2 = 67 + 64 = 131$
$131 + 10^2 = 131 + 100 =$ **231**

136. (1) The pattern of the number series is :
483 - 1 × 12 = 483 - 12 = 471
471 - 3 × 12 = 471 - 36 = 435
435 - 5 × 12 = 435 - 60 = 375
375 - 7 × 12 = 375 - 84 = 291
291 - 9 × 12 = 291 - 108 = **183**

137. (2) The pattern of the number series is :
5 + 1 × 2 = 7
7 + 2 × 3 = 13
13 + 3 × 4 = 25
25 + 4 × 5 = 45
45 + 5 × 6 = **75**

138. (1) The pattern of the number series is :
4 +1 × 7 = 11
11 + 2 × 7 = 25
25 + 4 × 7 = 53
53 + 8 × 7 = 109
109 + 16 × 7 = 109 + 112 = **221**

139. (3) The pattern of the number series is :
15 + 6 × 1 = 21
21 + 6 × 2 = 33
33 + 6 × 3 = 51
51 + 6 × 4 = 75
75 + 6 × 5 = 105

140. (1) The pattern of the number series is :

$5 + 7^3 = 5 + 343 = 348$
$348 + 6^3 = 348 + 216 = 564$
$564 + 5^3 = 564 + 125 = 689$
$689 + 4^3 = 689 + 64 = 753$, not **716**
$753 + 3^3 = 753 + 27 = 780$

141. (4) The pattern of the number series is :
$\frac{4444}{2} + 2 = 2224$
$\frac{2224}{2} + 2 = 1114$
$\frac{1114}{2} + 2 = 559$ not **556**
$\frac{559}{2} + 2 = 281.5$

142. (5) The pattern of the number series is :
$4.5 + 11.5 = 16$
$16 + 9.5 = 25.5$, not **25**
$25.5 + 7.5 = 33$
$33 + 5.5 = 38.5$

143. (3) The pattern of the number series is :
$6 \times 7 + 1 \times 7 = 49$
$49 \times 6 + 2 \times 6 = 306$, not **305**
$306 \times 5 + 3 \times 5 = 1545$
$1545 \times 4 + 4 \times 4 = 6196$
$6196 \times 3 + 5 \times 3 = 18603$

144. (3) The pattern of the number series is :
$8 \times 0.5 + 1 = 5$
$5 \times 1 + 1.5 = 6.5$
$6.5 \times 1.5 + 2 = 9.75 + 2 = 11.75$, not **11**
$11.75 \times 2 + 2.5 = 23.5 + 2.5 = 26$
$26 \times 2.5 + 3 = 68$

145. (3) The pattern of the number series is :
$586 + 1 = 587$
$587 + (1 - 2) = 587 - 1 = 586$
$586 + (-1 - 4) = 586 - 5 = 581$
$581 + (-5 - 6) = 581 - 11 = 570$
$570 + (-11 - 8) = 570 - 19 = 551$
$551 + (-19 \_ 10) = 551 - 29 = 522$

146. (5) The pattern of the number series is :
$64 - 10 = 54$
$54 + 15 = 69$
$69 - 20 = 49$
$49 + 25 = 74$
$74 - 30 = 44$
$44 + 35 =$ **79**

147. (2) The pattern of the number series is :
$(4000 \div 2) + 8 = 2008$
$(2008 \div 2) + 8 = 1012$
$(1012 \div 2) + 8 =$ **514**
$(514 \div 2) + 8 = 265$

148. (3) The pattern of the number series is :
$5 \times 1 = 5$
$5 \times 3 = 15$
$15 \times 5 = 75$
$75 \times 7 =$ **525**
$525 \times 9 = 4725$

149. (1) The pattern of the number series is :
$52 \times \frac{1}{2} = 26$
$26 \times 1 = 26$
$26 \times \frac{3}{2} = 39$
$39 \times 2 = 78$
$78 \times \frac{5}{2} =$ **195**

150. (3) The pattern of the number series is :
$14 - 10 = 4$
$25 - 14 = 11 = 4 \times 3 - 1$
$55 - 25 = 30 = 11 \times 3 - 3$
$140 - 55 = 85 = 30 \times 3 - 5$
$\therefore ? = 140 + 85 \times 3 - 7$
$= 140 + 248 =$ **388**

151. (5) The pattern of the number series is :
$119 + 1 \times 12 = 131$
$131 + 2 \times 12 = 155$
$155 + 3 \times 12 = 191$
$191 + 4 \times 12 = 239$
$239 + 5 \times 12 =$ **299**

152. (4) The pattern of the number series is :
$11 + 1 \times 46 = 11 + 46 = 57$
$57 + 2 \times 46 = 57 + 92 = 149$
$149 + 2 \times 92 = 149 + 184 = 333$
$333 + 2 \times 184 = 333 + 368 = 701$
$701 + 2 \times 368 = 701 + 736 =$ **1437**

153. (2) The pattern of the number series is :
$697 - 553 = 144 = 12^2$
$553 - 453 = 100 = 10^2$
$453 - 389 = 64 = 8^2$
$389 - 353 = 36 = 6^2$
$\therefore ? = 353 - 4^2 = 353 - 16 =$ **337**

154. (1) The pattern of the number series is :
$336 - 224 = 112$
$224 - 168 = 56$
$168 - 140 = 28$
$140 - 126 = 14$
$\therefore ? = 126 - 7 = 119$

155. (2) The pattern of the number series is :
$9 \times 2 - 3 = 18 - 3 = 15$
$15 \times 2 - 3 = 30 - 3 = 27$
$27 \times 2 - 3 = 54 - 3 = 51$
$51 \times 2 - 3 = 102 - 3 = 99$
$99 \times 2 - 3 = 198 - 3 =$ **195**

156. (4) The pattern of the number series is :
$13 + 8 = 21$
$21 + 8 + 7 = 21 + 15 = 36$

36 + 15 + 7 = 36 + 22 = 58
58 + 22 + 7 = 58 + 29 = 87
87 + 29 + 7 = 87 + 36 = **123**

157. (4) The pattern of the number series is :
7 + 2 + 0 = 9
9 + (2 + 8) = 19
19 + (10 + 16) = 45
45 + (26 + 24) = 95
95 + (50 + 32) = **177**

158. (1) The pattern of the number series is :
$14 + 1^2 = 15$
$15 + 2^3 = 23$
$23 + 3^2 = 32$
$32 + 4^3 = 96$
$96 + 5^2 = 96 + 25 =$ **121**

159. (3) The pattern of the number series is :
20 + 1 × 4 = 20 + 4 = 24
24 + 3 × 4 = 24 + 12 = 36
36 + 5 × 4 = 36 + 20 = 56
56 + 7 × 4 = 56 + 28 = 84
84 + 9 × 4 = 84 + 36 = **120**

160. (2) The pattern of the number series is :
$732 - 3 = 729 = 9^3$
$1244 - 732 = 512 = 8^3$
$1587 - 1244 = 343 = 7^3$
$1803 - 1587 = 216 = 6^3$
$1928 - 1803 = 125 = 5^3$
$\therefore ? = 1928 + 4^3 = 1928 + 64 =$ **1992**

161. (4) The pattern of the number series is :
16 × 1.5 = 24
24 × 2.5 = **60**
60 × 3.5 = 210
210 × 4.5 = 945

162. (1) The pattern of the number series is :
(45030 ÷ 5) - 6 = 9000
(9000 ÷ 5) - 5 = 1795
(1795 ÷ 51 - 4 = 355
(355 ÷ 5) - 3 = 68
(68 ÷ 5) - 2 = 13.6 - 2 = **11.6**

163. (1) The pattern of the number series is :
5 × 1 + 1 × 7 = 12
12 × 2 + 2 × 6 = 36
36 × 3 + 3 × 5 = 123
123 × 4 + 4 × 4 = 492 + 16 = **508**
508 × 5 + 5 × 3 = 2540 + 15 = 2555

164. (4) The pattern of the number series is :
8 × 0.5 + 7 = 4 + 7=11
11 × 1 + 6 = 17
17 × 1.5 + 5 = 25.5 + 5 = **30.5**
30.5 × 2 + 4 = 61 + 4 = 65

165. (5) The pattern of the number series is :
389 - 117 = 272
525 - 389 = 136
593 - 525 = 68
627 - 593 = 34
$\therefore ?$ = 627 + 17 = **644**

166. (4) The pattern of the number series is :
7 + 1 × 4 = 11
11 + (1 + 2) 4 = 11 + 3 × 4 = 23
23 + (3 + 4) 4 = 23 + 7 × 4 = 51
51 + (7 + 6) 4 = 51 + 13 × 4 = 103
103 + (13 + 8) 4 = 103 + 21 × 4 = **187**

167. (4) The pattern of the number series is :
18 + 9 = 27
27 + (9 + 13) = 49
49 + (9 + 26) = 84
84 + (9 + 39) = 132

168. (2) The pattern of the number series is :
33 + 10 = 43
43 + (10 + 12) = 65
65 + (10 + 24) = 99
99 + (10 + 36) = 145
145 + (10 + 48) = **203**

169. (5) The pattern of the number series is :
$655 - 439 = 216 = 6^3$
$439 - 314 = 125 = 5^3$
$314 - 250 = 64 = 4^3$
$250 - 223 = 27 - 3^3$
$\therefore ? = 223 - 2^3 = 223 - 8$
= **215**

170. (4) The pattern of the number series is :
15 + 6 = 21
21 + 18 (= 6 + 12) = 39
39 + 38 (= 18 + 20) = 77
77 + 66 (= 38 + 28) = 143
143 + 102 (= 66 + 36) = **245**

171. (1) The pattern of the number series is :
33 + 6 = 39
39 + 18 (= 6 + 12) = 57
57 + 30 (= 18 + 12) = 87
87 + 42 (= 30 + 12) = 129
129 + 54 (= 42 + 12) = **183**

172. (1) The pattern of the number series is :
$19 - 15 = 4 = 2^2$
$83 - 19 = 64 = 4^3$
$119 - 83 = 36 = 6^2$
$631 - 119 = 512 = 8^3$
$\therefore ? = 631 + 10^2 = 631 + 100 =$ **731**

173. (3) The pattern of the number series is :
19 + 1 × 7 = 19 + 7 = 26
26 + 2 × 7 = 26 + 14 = 40
40 + 4 × 7 = 40 + 28 = 68
68 + 8 × 7 = 68 + 56 = 124
124 + 16 × 7 = 124 + 112
= **236**

174. (5) The pattern of the number series is :
69 - 43 = 26
58 - 69 = - 11
84 - 58 = 26
73 - 84 = -11

∴ ? = 73 + 26 = **99**

175. (4) The pattern of the numbe series is :
15 + 3 = 18
18 - 2 = 16
16 + 3 = 19
19 - 2 = 17
17 + 3 = 20
20 - 2 = **18**

176. (1) The pattern of the number series is :

$1050 \times \frac{2}{5} = 420$

$420 \times \frac{2}{5} = 168$

$168 \times \frac{2}{5} = 67.2$

$\therefore 10.752 \times \frac{2}{5} =$ **4.3008**

177. (5) The pattern of the number series is :
0 + 1 × 6 = 6
6 + 2 × 9 = 24
24 + 3 × 12 = 60
60 + 4 × 15 = 120
120 + 5 × 18 = 210
210 + 6 × 21 = 210 + 126 = **336**

178. (3) The pattern of the number series is :
32 + 1 × 17 = 32 + 17 = 49
49 + 2 × 17 = 49 + 34 = 83
83 + 4 × 17 = 83 + 68 = 151
151 + 8 × 17 = 151 + 136 = 287
287 + 16 × 17 = 287 + 272 = 559
559 + 32 × 17 = 559 + 544 = **1103**

179. (2) The pattern of the number series is :
552 - 462 = 90
650 - 552 = 98
756 - 650 = 106
870 - 756 = 114
992 - 870 = 122
∴ ? = 992 + 130 = **1122**

180. (3) The pattern of the number se ries is :
28 + 11 = 39
39 + 24(= 11 + 13) = 63
63 + 39 (= 24 + 15) = 102
102 + 56 (= 39 + 17) = 158
158 + 75 (= 56 + 19) = **233**

181. (5) The pattern of the number series is :
$7 + 3^2 = 7 + 9 = 16$
$16 + 5^3 = 16 + 125 = 141$
$141 + 7^2 = 141 + 49 = 190$
$190 + 9^3 = 190 + 729 = 919$
$919 + 11^2 = 919 + 121 =$ **1040**

182. (3) The pattern of the number series is :
12 + 5 × 1 = 17
17 + 5 × 3 = 32
32 + 5 × 5 = 57
57 + 5 × 7 = 92
92 + 5 × 9 = 137

183. (4) The pattern of the number series is :
19 + 2 × 3 = 19 + 6 = 25
25 + 4 × 5 = 25 + 20 = 45
45 + 6 × 7 = 45 + 42 = 87
87 + 8 × 9 = 87 + 72 = 159
159 + 10 × 11 = 159 + 110 = **269**

184. (5) The pattern of the number series is :
83 + 41 × 1 = 124
124 + 41 × 2 = 124 + 82 = 206
206 + 41 × 4 = 206 + 164 = 370
370 + 41 × 8 = 370 + 328 = 698
698 + 41 × 16 = 698 + 656 = **1354**

185. (4) The pattern of the number series is :
1 × 7 = 7
7 × 7 = 49
49 × 7 = 343
343 × 7 = **2401**

186. (4) The pattern of the number series is :
13 + 7 = 20
20 + 19 (= 7 + 12) = 39
39 + 39 (=19 + 20) = 78
78 + 67 (= 39 + 28) = 145
145 + 103 (= 67 + 36) = **248**

187. (1) The pattern of the number series is :
12 + 1 × 23 = 35
35 + 2 × 23 = 35 + 46 = 81
81 + 2 × 46 = 81 + 92 = 173
173 + 2 × 92 = 173 + 184 = 357
357 + 2 × 184 = 357 + 368 = **725**

188. (5) The pattern of the number series is :
3 + 97 = 100
100 + 197 = 297
297 + 297 = 594
594 + 397 = 991
991 + 497 = **1488**

189. (3) The pattern of the number series is :
112 + 1 × 7 = 119
119 + 3 × 7 = 119 + 21 = 140
140 + 5 × 7 = 140 + 35 = 175
175 + 7 × 7 = 175 + 49 = 224
224 + 9 × 7 = 224 + 63 = **287**

190. (2) The pattern of the number series is :
958 - 833 = 125
833 - 733 = 100
733 - 658 = 75
658 - 608 = 50
∴ ? = 608 - 25 = **583**

191. (4) The pattern of the number series is :
11 × 1 - 1 = 10
10 × 2 - 2 = 18
18 × 3 - 3 = 51

$51 \times 4 - 4 = 200$
$200 \times 5 - 5 =$ **995**

192. (1) The pattern of the number series is :
$25 \times 2 - 2 = 50 - 2 = 48$
$48 \times 2 - 2 = 96 - 2 = 94$
$94 \times 2 - 2 = 188 - 2 = 186$
$186 \times 2 - 2 = 372 - 2 = 370$
$370 \times 2 - 2 = 740 - 2 =$ **738**

193. (2) The pattern of the number series is :
$14 + 10 = 24$
$24 + 19 (=10 + 9) = 43$
$43 + 28 (= 19 + 9) = 71$
$71 + 37 (= 28 + 9) = 108$
$108 + 46 (=37 + 9) =$ **154**

194. (5) The pattern of the number series is :
$144 + 29 = 173$
$173 - 33 = 140$
$140 + 29 = 169$
$169 - 33 = 136$
$136 + 29 =$ **165**

195. (2) The pattern of the number series is :
$8 + 2 = 10$
$10 + 8 (= 2 \times 3 + 2) = 18$
$18 + 26 (= 3 \times 8 + 2) = 44$
$44 + 80 (=3 \times 26 + 2) = 124$
$124 + 242 (= 3 \times 80 + 2) =$ **366**

196. (4) The pattern of the number series is :
$13 + 1 \times 12 = 13 + 12 = 25$
$25 + 3 \times 12 = 25 + 36 = 61$
$61 + 5 \times 12 = 61 + 60 = 121$
$121 + 7 \times 12 = 121 + 84 = 205$
$205 + 9 \times 12 = 205 + 108$
$=$ **313**

197. (1) The pattern of the number series is :
$\frac{656}{2} + 24 = 328 + 24 = 352$
$\frac{352}{2} + 24 = 176 + 24 = 200$
$\frac{200}{2} + 24 = 100 + 24 = 124$
$\frac{124}{2} + 24 = 62 + 24 = 86$
$\frac{86}{2} + 24 = 43 + 24 =$ **67**

198. (3) The pattern of the number series is :
$454 + 18 = 472$
$472 - 27 = 445$
$445 + 18 = 463$
$463 - 27 = 436$
$436 + 18 =$ **454**

199. (2) The pattern of the number series is :
$12 \times 4 - 30 = 48 - 30 = 18$
$18 \times 4 - 36 = 72 - 36 = 36$
$36 \times 4 - 42 = 144 - 42 = 102$
$102 \times 4 - 48 = 408 - 48 = 360$
$360 \times 4 - 54 = 1440 - 54 =$ **1386**

200. (4) The pattern of the number series is :
$7 \times 2 - 2 = 12$
$12 \times 4 - (2 + 6) = 48 - 8 = 40$
$40 \times 6 - (8 + 10) = 240 - 18 = 222$
$222 \times 8 - (18 + 14) = 1776 - 32$
$= 1744 \neq$ **1742**
$1744 \times 10 - (32 + 18) = 17440 - 50 = 17390$

201. (3) The pattern of the number series is :
$6 \times 7 + 7^2 = 42 + 49 = 91$
$91 \times 6 + 6^2 = 546 + 36 = 582$
$582 \times 5 + 5^2 = 2910 + 25 = 2935$
$2935 \times 4 + 4^2 = 11740 + 16 = 11756$
$11756 \times 3 + 3^2 = 35268 + 9 = 35277$

202. (5) The pattern of the number series is :
$9050 - 15^3 = 9050 - 3375 = 5675$
$5675 - 13^3 = 5675 - 2197 = 3478$
$3478 - 11^3 = 3478 - 1331 = 2147$
$2147 - 9^3 = 2147 - 729 = 1418$
$1418 - 7^3 = 1418 - 343 = 1075 \neq$ **1077**

203. (4) The pattern of the number series is :
$1 = 1$
$2^2 = 4$
$3^3 = 27 \neq$ **25**
$4^4 = 256$
$5^5 = 3125$
$6^6 = 46656$

204. (2) The pattern of the number series is :
$8424 \div 2 = 4212$
$4212 \div 2 = 2106$
$2106 \div 2 = 1053 \neq$ **1051**
$1053 \div 2 = 526.5$
$526.5 \div 2 = 263.25$

205. (1) The pattern is :
$5531 - 5506 = 25 = 5^2$
$5555 - 5506 = 49 = 7^2$
$5506 - 5425 = 81 = 9^2$
$5425 - 5304 = 121 = 11^2$
$5304 - 5135 = 169 = 13^2$
$5135 - 4910 = 225 = 15^2$
$4910 - 4621 = 289 = 17^2$
Clearly, 5531 is wrong which should be substituted by 5555.

206. (2) The pattern is :
$6 + 1 = 7$
$7 + 1 \times 2 = 9$
$9 + 2 \times 2 = 13$
$13 + 8 = 21 \neq$ **26**
$21 + 16 = 37$
$37 + 32 = 69$

207. (4) The pattern is :
$1 \times 1 + 2 = 3$

$3 \times 2 + 4 = 10$
$10 \times 3 + 6 = 36$
$36 \times 4 + 8 = 152$
$152 \times 5 + 10 = 770 \neq$ **760**
$770 \times 6 + 12 = 4632$

208. (3) The pattern is :
$4 + 1^3 = 5$
$5 + 2^3 = 13$
$13 + 3^3 = 40$
$40 + 4^3 = 104 \neq$ **105**
$104 + 5^3 = 229$
$229 + 6^3 = 445$

209. (1) The pattern is :
$157.5 \div 3.5 = 45$
$45 \div 3 = 15$
$15 \div 2.5 = 6$
$6 \div 2 = 3$
$3 \div 1.5 = 2$
$2 \div 1 = 2 \neq$ **1**

210. (2) The pattern is :
$123 + 11 \times 14 = 123 + 154 = 277$
$277 + 13 \times 14 = 277 + 182 = 459$
$459 + 15 \times 14 = 459 + 210 = 669$
$669 + 17 \times 14 = 669 + 238 = 907$
$907 + 19 \times 14 = 907 + 266$
$=$ **1173**

211. (2) The pattern is :
$456.5 - 407 = 49.5$
$407 - 368.5 = 38.5$
$368.5 - 341 = 27.5$
$341 - 324.5 = 16.5$
$\therefore ? = 324.5 - 5.5 =$ **319**

212. (1) The pattern is :
$23 + 1 \times 19.2 = 42.2$
$42.2 + 2 \times 19.2 = 80.6$
$80.6 + 4 \times 19.2 = 157.4$
$157.4 + 8 \times 19.2 = 311$
$311 + 16 \times 19.2 = 311 + 307.2$
$=$ **618.2**

213. (5) The pattern is :
$154 - 36 = 118$
$232 - 154 = 78$
$278 - 232 = 46$
$300 - 278 = 22$
$\therefore ? - 300 = 6$
$\Rightarrow ? =$ **306**

214. (4) The pattern is ;
$24 + 8^3 = 24 + 512 = 536$
$536 - 7^2 = 536 - 49 = 487$
$487 + 6^3 = 487 + 216 = 703$
$703 - 5^2 = 703 - 25 = 678$
$678 + 4^3 = 678 + 64 = 742$

215. (3) The pattern is :
$576 - 224 = 352$
$752 - 576 = 176$
$840 - 752 = 88$
$884 - 840 = 44$
$\therefore ? = 884 + 22 =$ **906**

216. (1) The pattern is :
$5 \times 1 + 1^2 = 5 + 1 = 6$
$6 \times 2 + 2^2 = 12 + 4 = 16$
$16 \times 3 + 3^2 = 48 + 9 = 57$
$57 \times 4 + 4^2 = 228 + 16 =$ **244**

217. (4) The pattern is :
$12 \times 4 =$ **48**
$48 \times 3.5 = 168$
$168 \times 3 = 504$
$504 \times 2.5 = 1260$
$1260 \times 2 = 2520$

218. (5) The pattern is :
$4 \times 2 + 1 = 8 + 1 = 9$
$9 \times 3 + 2 = 27 + 2 = 29$
$29 \times 4 + 3 = 116 + 3 =$ **119**
$119 \times 5 + 4 = 595 + 4 = 599$
$599 \times 6 + 5 = 3594 + 5 = 3599$

219. (3) The pattern is :
$177 - 7 = 170$
$170 - 11 = 159$
$159 - 13 = 146$
$146 - 17 =$ **129**
$129 - 19 = 110$
Note : Consecutive prime numbers have been subtracted.

220. (3) The pattern is :
$2 + 1^3 = 2 + 1 = 3$
$3 + 2^3 = 3 + 8 = 11$
$11 + 3^3 = 11 + 27 = 38$
$38 + 4^3 = 38 + 64 = 102$
$102 + 5^3 = 102 + 125 =$ **227**

221. (1) The pattern of the number series is :
$21 \times 0.5 = 10.5$
$10.5 \times 1 =$ **10.5**
$10.5 \times 1.5 = 15.75$
$15.75 \times 2 = 31.50$
$31.50 \times 2.5 = 78.75$

222. (2) The pattern of the number series is :
$6 + 1 \times 13 = 6 + 13 = 19$
$19 + 3 \times 13 = 19 + 39 = 58$
$58 + 5 \times 13 = 58 + 65 =$ **123**
$123 + 7 \times 13 = 123 + 91 = 214$
$214 + 9 \times 13 = 214 + 117 = 331$

223. (3) The pattern of the number series is :
14 $+ 1 \times 2 =$ **16**
$16 + 3 \times 4 = 16 + 12 = 28$
$28 + 5 \times 6 = 28 + 30 = 58$
$58 + 7 \times 8 = 58 + 56 = 114$
$114 + 9 \times 10 = 114 + 90 = 204$

224. (4) The pattern of the number series is :
$13.76 + 1 \times 1.15 = 14.91$
$14.91 + 2 \times 1.15 = 14 + 2.30 = 17.21$

17.21 + 3 × 1.15 = 17.21 + 3.45 = 20.66
20.66 + 4 × 1.15 = 20.66 + 4.60 = **25.26**
25.26 + 5 × 1.15 = 25.26 + 5.75 = 31.01

225. (5) The pattern of the number series is :
15 + 1^2 = **16**
16 + 2^3 = 16 + 8 = 24
24 + 3^2 = 24 + 9 = 33
33 + 4^3 = 33 + 64 = 97
97 + 5^2 = 97 + 25 = 122

226. (5) The pattern is :
2 × 3 = 6
6 × 2.5 = 15
15 × 2 = 30
30 × 1.5 = 45
45 × 1 = 45 ≠ **43.5**
45 × 0.5 = 22.5

227. (3) The pattern is :
950 - 661 = 289 = 17^2
661 - 436 = 225 = 15^2
436 - **269** = 167 ≠ 13^2
∴ 436 - 267 = 169 = 13^2
267 - 146 = 121 = 11^2
146 - 65 = 81 = 9^2

228. (5) The pattern is :
6.5 + 5.3 = 11.8
11.8 + 2 × 5.3 = 11.8 + 10.6 = 22.4
22.4 + 3 × 5.3 = 22.4 + 15.9 = 38.3
38.3 + 4 × 5.3 = 38.3 + 21.2 = 59.5
59.5 + 5 × 5.3 = 59.5 + 26.5 = 86
≠ **87.3**
86 + 6 × 5.3 = 86 + 31.8 = 117.8

229. (5) The pattern is :
1 × 3 - 1 = 2
2 × 3 - 2 = 4
4 × 3 - 3 = 9
9 × 3 - 4 = 23
23 × 3 - 5 = 69 - 5 = 64 ≠ **69**
64 × 3 - 6 = 192 - 6 = 186

230. (5) The pattern is :
250 - 11 = 239
239 - (11 × 2 + 1) = 239 - 23 = 216
216 - (11 × 3 + 2) = 216 - 35 = 181
181 - (11 × 4 + 3)
= 181 - 47 = 134 ≠ **136**
134 - (11 × 5 + 4)
= 134 - 59 = 75
75 - (11 × 6 + 58)
= 75 - 71 = 4

SBI PO EXAMS

1. (3) The series is based on following pattern:
3 × 1 + 2 = 5
5 × 2 + 2 = 12
12 × 3 + 2 = 38
38 × 4 + 2 = 154
154 × 5 + 2 = **772**
772 × 6 + 2 = 4634
Therefore, the number 914 is wrong.
∴ According to question, the new series is as follows:
914 × 1 + 2 = 916
916 × 2 + 2 = **1834**
1834 × 3 + 2 = 5504
Therefore, the required number is 1834.

2. (3) The series is based on following pattern :
3 × 1 + 1 = 4
4 × 2 + 2 = 10
10 × 3 + 3 = **33**
33 × 4 + 4 = 136
136 × 5 + 5 = 685
685 × 6 + 6 = 4116
Therefore, the number 34 is wrong.
∴ According to question, the new series starts from the number 34 in the same pattern.
34 × 1 + 1 = 35
35 × 2 + 2 = **72**
Hence, the number 72 is required answer.

3. (4) The series is based on following pattern :
214 - $(14)^2$ = 18
18 + $(12)^2$ = 162
162 - $(10)^2$ = 62
62 + $(8)^2$ = **126**
126 - $(6)^2$ = 90
90 + $(4)^2$ = 106
Therefore the number 143 is wrong.
∴ According to question, the new series starts from the number 143 in
143 - $(14)^2$ = -53
-53 + $(12)^2$ = **91**
Hence, the number 91 is required answer.

4. (5) The series in based on following pattern:
160 × 0.5 = 80
80 × 1.5 = 120
120 × 2.5 = **300**
300 × 3.5 = 1050
1050 × 4.5 = 4725
4725 × 5.5 = 25987.5
Therefore, the number 180 is wrong.
∴ According to question, the new series starts from the number 180 in the same pattern:
180 × 0.5 = 90
90 × 1.5 = **135**
Hence, the number 135 is required answer.

5. (1) The series is based on following pattern:
2 + 1^2 - 0 = 3
3 + 2^2 - 1 = **6**
6 + 3^2 - 2 = 13
13 + 4^2 - 3 = 26
26 + 5^2 - 4 = 47

$47 + 6^2 - 5 = 78$

Therefore, the number 7 is wrong.

According to question, the new series starts from the number 7 in the same pattern.

$7 + 1^1 - 0 = 8$

$8 + 2^2 - 1 = \mathbf{11}$

Hence, the number 11 is required answer.

6. (4) The series is based on following pattern :

$2 \times 1 + 1^2 = 3$

$3 \times 2 + 2^2 = 10$

$10 \times 3 + 3^2 = 39$

$39 \times 4 + 4^2 = 172$

$172 \times 5 + 5^2 = 885$

Similarly, the new series is as follows :

$1 \times 1 + 12 = 2$.....(a)

$\mathbf{2 \times 2 + 2^2 = 8}$**.....(b)**

$8 \times 3 + 3^2 = 33$ .....(c)

Therefore, the number 8 will come in place of (b).

7. (2) The series is based on the following pattern:

$5 \times 1 + 2 = 7$

$7 \times 2 - 4 = 10$

$10 \times 3 + 6 = 36$

$36 \times 4 - 8 = 136$

$136 \times 5 + 10 = 690$

Similarly, the new series is as follows:

$2 \times 1 + 2 = 4$ ....(a)

$4 \times 2 - 4 = 4$ ....(b)

$4 \times 3 + 6 = 18$ ....(c)

$18 \times 4 - 8 = 64$ ....(d)

$\mathbf{64 \times 51 + 10 = 330}$ **.....(e)**

Therefore, the number 330 will come in palce of (e).

8. (5) The series is based on following pattern:

$8 \times 0.5 = 4$

$4 \times 1.5 = 6$

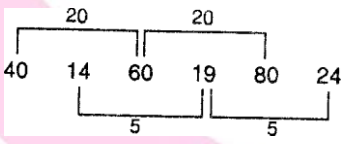
$6 \times 2.5 = 15$

$15 \times 3.5 = 52.6$

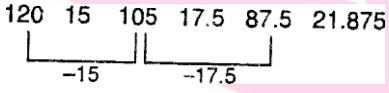
$52.5 \times 4.5 = 236.25$

Therefore, the number 236.25 will come in place of (d).

9. (3) Interchanging (3) and (5)



10. (3) Interchanging (3) and (5)



11. (4) The series is based on following pattern

$2 \times 1 + (1)^2 = 3$

$3 \times 2 - (2)^2 = 2$

$2 \times 3 + (3)^2 = 15$

$15 \times 4 - (4)^2 = 44$

$44 \times 5 + (5)^2 = 245$

$245 \times 6 - (6)^2 = 1434$

Similarly,

$3 \times 1 + (1)^2 = 4$ ....(a)

$4 \times 2 - (2)^2 = 4$ ....(b)

$4 \times 3 + (3)^2 = \mathbf{21}$ ....(c)

$21 \times 4 - (4)^2 = 68$ ....(d)

Therefore, the 21 will come in place of (c).

12. (5) The series is based on following pattern

$1 \times 1 + (1)^2 = 2$

$2 \times 2 + (2)^2 = 8$

$8 \times 3 + (3)^2 = 33$

$33 \times 4 + (4)^2 = 148$

$148 \times 5 + (5)^2 = 765$

$765 \times 6 + (6)^2 = 4626$

Similarly,

$2 \times 1 + (1)^2 = 3$ ....(a)

$3 \times 2 + (2)^2 = 10$ ....(b)

$10 \times 3 + (3)^2 = 39$ .....(c)

$39 \times 4 + (4)^2 = \mathbf{172}$ ....(d)

Therefore, the number 172 will come in place of (d).

13. (5) The series is based on following pattern :

$2 \times 2 + 0.5 = 4.5$

$4.5 \times 2 + (0.5) \times 4 = 11$

$11 \times 2 + 2 \times 4 = 30$

$30 \times 2 + 8 \times 4 = 92$

$92 \times 2 + 32 \times 4 = 312$

$312 \times 2 + 128 \times 4 = 1136$

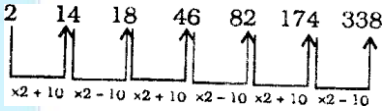
Similarly,

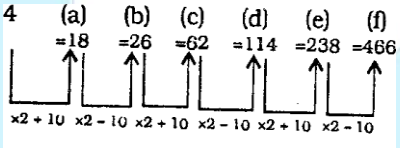
$1 \times 2 + 0.5 = 2.5$ ....(a)

$2.5 \times 2 + (0.5) \times 4 = \mathbf{7}$ ....(b)

Therefore, the number 7 wil come in place of (b)

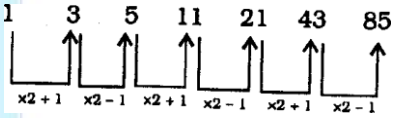
14. (1)

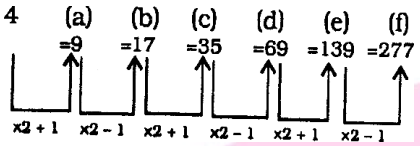




In the given series 176 should be replace br 174.238 will come in place of (e)

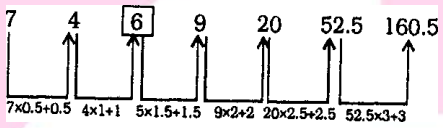
15. (3)





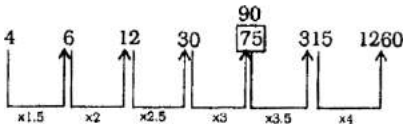
In the given series 7 should be replaced by 5. and 277 should come in place of (f).

16. (1) The given number series is based on the following pattern



Hence the wrong number is 6

17. (2) The given number series is based on the following pattern:



Hence, the wrong number is 75

18. (4)The given number series is basei on the following pattern

$4 - 3 = 1^2$

$13 - 4 = 9 = 32$

$38 - 13 = 25 = 5^2$

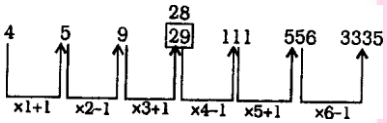
$87 - 38 = 49 = 7^2$

$168 - 87 = 81 = 9^2$

$289 - 168 = 121 = 11^2$

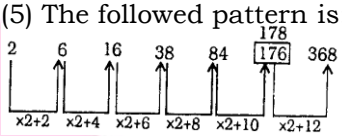
Obviously, 166 is the wrong number.

19. (3) The number series follows the rule as mentioned below:



Hence 29 is the wrong number.

20. (5) The followed pattern is:



Hence the wrong number is 176

21. (4) The given series is based on tne following pattern

$2 \times 3 = 6$

$6 \times 3 = 18$

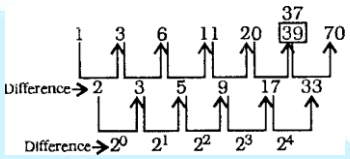
$18 \times 6 \neq 109$ but 108

$108 \times 18 = 1944$

$1944 \times 108 = 209952$

Obviously, 109 is the wrong number and it should be replaced with 108.

22. (2) The given series is based on the following pattern :



Obviously, 39 is the wrong number and it should be replaced with 37.

23. (1) The given series is based on the following pattern :

$2 \times 2 + 7 = 11$ (not 13)

$11 \times 3 - 6 = 27$

$27 \times 4 + 5 = 113$

$113 \times 5 - 4 = 561$

Obviously the number 13 is wrong and it should be replaced with 11.

24. (4) The given series is based on the following pattern.

$50 + (1^2) = 51$

$51 - (2^2) = 47$

$47 + (3^2) = 56$

$56 - (4^2) = 40$ (not 42)

$40 + (5^2) = 65$

Obviously, the number 42 is wrong and it should be replaced with 40.

25. (3) The given series is based on the following pattern :

$3 \times 2 + 3 = 9$

$9 \times 3 - 4 = 23$

$23 \times 4 + 5 = 97$ (not 99)

$97 \times 5 - 6 = 479$

Obviously, the number 99 is wrong and it should be replaced with 97.

26. (1) The given series is based on the following pattern:

$2 + 3 = 5$

$5 + 3 = 8$

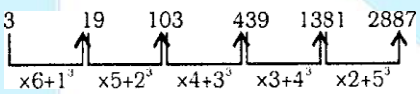
$8 + 5 = 13$

$13 + 8 = 21$

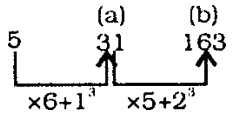
$21 + 13 = 34$

Obviously, the number 4 is wrong and it should be replaced with 3.

27. (2) The given series is based on the following pattern :



Similarly,

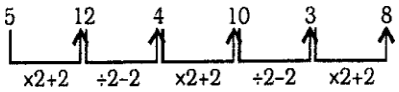


Hence, 163 will come in place of (b).

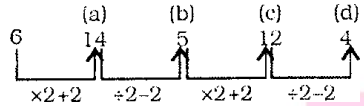
28. (1) The give n se rie s is base d on t h e following pattern

13 = 4 × 1 + 1 × 9
40 = 13 × 2 + 2 × 7
135 = 40 × 3 + 3 × 5
552 = 135 × 4 + 4 × 3
2765 = 552 × 5 + 5 × 1
Similarly,
(a) = 2 × 1 + 1 × 9 = 11
(b) = 11 × 2 + 2 × 7 = 36
(c) = 36 × 3 + 3 × 5 = 123
Hence, 123 will come in place of (c).

29. (3) The given series is based on the following pattern:

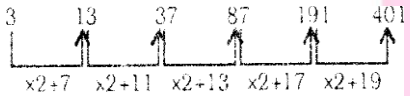


Similarly,

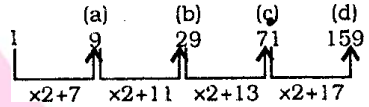


Hence, 4 will come in place of (d).

30. (4) The given series is based on the following pattern :

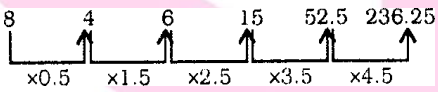


7, 11, 13, 17, 19, ... are consecutive prime numbers)
Similarly,

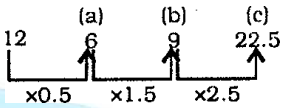


Hence, 159 will come in place of (d).

31. (3) The given series is based on the following pattern :



Similarly,



Hence, 22.5 will come in place of (c).

32. (3) The given series is based on the following pattern :

9 × 2 + 1.5 = 19.5
19.5 × 2 + 2 = 41
41 × 2 + 2.5 = 84.5
Therefore, the new series is as follows :
12 × 2 + 1.5 = 25.5 ....(a)
25.5 × 2 + 2 = 53 ....(b)
53 × 2 + 2.5 = **108.5** ....(c)
108.5 × 2 + 3 = 220 ....(d)
220 × 2 + 3.5 = 443.5 ....(e)
Therefore, the number 108.5 will come in place of (C) in the new series.

33. (1) The series is based on following pattern:

4 × 1 + 1 = 5
↓ + 3
5 × 4 + 2 = 22
↓ + 5
22 × 9 + 3 = 201
Similarly the new series is as follows :
7 × 1 + 1 = 8 ....(a)
8 × 4 + 2 = 4 ....(b)
34 × 9 + 3 = 309 ....(c)
309 × 16 + 4 = **4948** ....(d)
Therefore, the number 4948 will come in place of (d) in the new series.

34. (2) The series is based on following pattern :

5 × 1+ 0.25 × 1 = 5.25
↓ + 3
5.25 × 2 + 0.25 × 4 = 11.5
↓ + 5
11.5 × 3 + 0.25 × 9 = 36.75
Similarly, the new series is as follows.
3 × 1 + 0.25 × 1 = 3.25 ....(a)
3.25 × 2 + 0.25 × 4 = 7.5 ....(b)
7.5 × 3 + 0.25 × 9 = **24.75** ....(c)
Therefore, the number 24.75 will come in place of (c) in the new series.

35. (4) The series is based on following pattern :

38 × 0.5 = 19
19 × 1.5 = 28.5
28.5 × 2.5 = 71.25
Similarly, the new series is as follows :
18 × 0.5 = 9 ....(a)
9 × 1.5 = 13.5 .....(b)
13.5 × 2.5 = 33.75 ....(c)
33.75 × 3.5 = **118.125.....(d)**
Therefore, the number 118.125 will come

in place of (d) in the new series.

36. (3) The series is based on following pattern:
$25 + (11)^2 \Rightarrow 25 + 121 = 146$
$146 - (9)^2 \Rightarrow 146 - 81 = 65$
$65 + (7)^2 \Rightarrow 65 + 49 = 114$
Similarly, the new series is as follows :
$39 + (11)^2 \Rightarrow 39 + 121$
$= 190$.....(a)
$160 - (9)^2 \Rightarrow 160 - 81$
$= 79$ .....(b)
$79 + (7)^2 \Rightarrow 79 + 49$
$= 128$ .....(c)
$128 + (5)^2 \Rightarrow 128 - 25$
$= 103$ .....(d)
$103 + (3)^2 \Rightarrow 103 + 9$
$= 111$ ....(e)
Therefore, the number 112 will come in place of (e) in new series.

37. (1) The given series is based on following pattern
$15 - 10 = 5$
$24 - 15 = 9$
$37 - 24 = 13$
$54 - 37 = 17$
$75 - 54 = 21$
$100 - 75 = 25$
Obviously, 35 is wrong number.

38. (5) Here the middle number = difference of succeeding number and preceding number.
i.e., $4 - 1 = 3$
$7 - 3 = 4$
$11 - 4 = 7$
$18 - 7 = 11$
$27 - 11 = 16$
Here the sequence gets disturbed
$\therefore 29 - 11 = 18$
$47 - 18 = 29$
Hence, 27 is the wrong number.

39. (5) The sequence is based on following pattern:
$3 \times 0.5 + 0.5 = 2$
$2 \times 1 + 1 = 3$
$3 \times 1.5 + 1.5 = 6$
$6 \times 2 + 2 = 14$
$14 \times 2.5 + 2.5 = 37.5$
$37.5 \times 3 + 3 = 115.5$
Obviously, 12 is the wrong number.

40. (4) $32431 = 7 \times 4626 + 7^2$
$4626 = 6 \times 765 + 6^2$
$765 = 5 \times 148 + 5^2$
$148 = 4 \times 32 + 4^2$
But $148 = 4 \times 33 + 4^2$
$33 = 3 \times 8 + 3^2$
$8 = 2 \times 2 + 2^2$
Obviously 32 is the wrong number.

41. (2) The sequence is based on following pattern:
$3 - 2 = 1^3$
$11 - 3 = 8 = 2^3$
$38 - 11 = 27 = 3^3$
$102 - 38 = 64 = 4^3$
But,
$\mathbf{229 - 102 = 127 \neq 5^3}$
$\mathbf{227 - 102 = 125 = 5^3}$
$443 - 227 = 216 = 6^3$
Obviously 229 is the wrong number.

42. (5) The given number series is based on the following pattern :
$7413 + 9 \times 1 = 7422$
$7422 + 9 \times 2 = 7440$
$7440 + 9 \times 3 = 7467$
$7467 + 9 \times 4 = 7503$
Hence, 7467 will replace the question mark.

43. (4) The given number series is based on the following pattern :
$4 = 2^2$; $16 = 4^2$;
$36 = 6^2$; $64 = 8^2$;
$100 = 10^2$.
$\therefore ? = 12^2 = \mathbf{144}$
Hence, 144 will replace the question mark.

44. (1) The given number series is based on the following pattern:
$12 \times 3 - 3 = 33$
$33 \times 3 - 3 = 96$
$96 \times 3 - 3 = \mathbf{285}$
$285 \times 3 - 3 = 852$
Hence, 285 will replace the question mark.

45. (3) The given number series is based on the following pattern :
$70000 \div 5 = 14000$
$14000 \div 5 = 2800$
$2800 \div 5 = \mathbf{560}$
$560 \div 5 = 112$
$112 \div 5 = 22.4$
Hence, 560 will replace the question mark.

46. (2) The given number series is based on the following pattern :
$102 - 3 = 99$
$99 + 5 = 104$
$104 - 7 = 97$
$97 + 9 = 106$
$106 - 11 = \mathbf{95}$
Hence, 95 will replace the question mark.

47. (4) The given number series is based on the following pattern
93 + 2 (prime number) = 95
$95 + 3 = 98 \neq 99$
$98 + 5 = \mathbf{103}$

103 + 7 = 110
110 + 11 = 121
121 + 13 = 134
Hence, 103 will replace the question mark

48. (5) The given number series is based on the following pattern:
8 × 1.5 = 12
12 × 1.5 = 18
18 × 1.5 = 27 ≠ 26
27 × 1.5 = 40.5
40.5 × 1.5 = 60.75
∴ ? = 60.75 × 1.5 = **91.125**
Hence, 91.125 will replace the question mark.

49. (5) The given number series is based on the following pattern : 4 + 7 = 11
11 + 7 = 18
18 + 11 = 29 ≠ 28
∴ ? = 29 + 18 = **47**
Hence, 47 will replace the question mark.

50. (1) The given number series is based on the following pattern:
$3 \times 2 + 2^2 = 10$
$10 \times 3 + 3^2 =$ **39**
$39 \times 4 + 4^2 = 172$
$172 \times 5 + 5^2 = 885 \neq 886$
$885 \times 6 + 6^2 = 5346$
Hence, 39 will replace the question mark.

51. (3) The given number series is based on the following pattern :
15 × 1 + 1 × 7 = 22
22 × 2 + 2 × 6 = 56 ≠ 57
56 × 3 + 3 × 5 = 183
183 × 4 + 4 × 4 = **748**
748 × 5 + 5 × 3 = 3755
3755 × 6 + 6 × 2 = 22542
Hence, 748 will replace the question mark.

52. (4) The pattern of the number series is :
3601 ÷ 1 + 1 = 3602
3602 ÷ 2 + 2- 1801 + 2 = 1803
1803 ÷ 3 + 3 - 601 + 3 - 604
604 ÷ 4 + 4 = 151 + 4 = 155 ≠ **154**
155 ÷ 5 + 5 = 31 + 5 = 36
36 ÷ 6 + 6 = 6 + 6 = 12

53. (2) The pattern of the number series is :
$4 \times 2 + 2^2 = 8 + 4 = 12$
$12 \times 3 + 3^2 = 36 + 9 = 45 \neq$ **42**
$45 \times 4 + 4^2 = 180 + 16 = 196$
$196 \times 5 + 5^2 = 980 + 25 = 1005$
$1005 \times 6 + 6^2 = 6030 + 36 = 6066$

54. (1) The pattern of the number series is :
2 + 4 = 6 ≠ **8**
6 + 6 = 12
12 + 8 = 20
20 + 10 = 30
30 + 12 = 42

55. (5) The pattern of the number series is :
$32 \times \frac{1}{2} = 16$
$16 \times \frac{3}{2} = 24$
$24 \times \frac{5}{2} = 60 \neq$ **65**
$60 \times \frac{7}{2} = 210$
$210 \times \frac{9}{2} = 945$
$945 \times \frac{11}{2} = 5197.5$

56. (4) The pattern of the number series is :
7 × 2 - 1 = 14 - 1 = 13
13 × 2 - 1 = 26 - 1 = 25
25 × 2 - 1 = 50 - 1 = 49
49 × 2 - 1 = 98 - 1 = 97
97 × 2 - 1 = 194 - 1 = 193 ≠ **194**
193 × 2 - 1 = 386 - 1 = 385

57. (1) The pattern of the given series Is :
37 × 0.5 + 0.5 = 18.5 + 0.5 = 19
19 × 1 + 1 = 19 + 1 - 20
20 × 1.5 + 1.5 = 30 + 1.5 - 31.5
31.5 × 2 + 2 = 63 + 2 = 65
65 × 2.5 + 2.5 = 162.5 + 2.5 - 165
Similarly,
21 × 0.5 + 0.5 = 10.5 + 0.5 = 11(a)
11 × 1 + 1 = 11 + 1 = 12 (b)
12 × 1.5 + 1.5 = 18 + 1.5 = 19.5 (c)
19.5 × 2 + 2 = 39 + 2 = 41 (d)
41 × 2.5 + 2.5 = 102.5 + 2.5 = **105** (e)

58. (2) The pattern of the given series is :
$5 \times 1 + 1^2 = 5 + 1 = 6$
$6 \times 2 + 2^2 = 12 + 4 = 16$
$16 \times 3 + 3^2 = 48 + 9 = 57$
$57 \times 4 + 4^2 = 228 + 16 = 244$
$244 \times 5 + 5^2 = 1220 + 25 = 1245$
Similarly,
$9 \times 1 + 1^2 = 9 + 1 = 10$ (a)
$11 \times 2 + 2^2 = 22 + 4 = 26$ (b)
$26 \times 3 + 3^2 = 78 + 9 = 87$ (c)
$87 \times 4 + 4^2 = 348 + 16 =$ **364** (d)

59. (3) The pattern of the given series is :
7 × 1 - 2 = 7 - 2 = 5
5 × 3 - 4 = 15 - 4 = 11
11 × 5 - 6 = 55 - 6 = 49
49 × 7 - 8 = 343 - 8 = 335
335 × 9 - 10 = 3015 - 10 = 3005
Similarly,

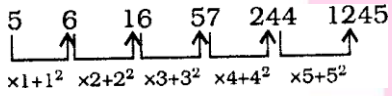
13 × 1 - 2 = 13 - 2 = 11 (a)
11× 3 - 4 = 33 - 4= **29** (b)

60. (4) The pattern of the given series is :
12 × 3 + 11 = 36 + 11 = 47
47 × 3 + 11 = 141 + 11 = 152
152 × 3 + 11 = 456 + 11 = 467
467 × 3 + 11 = 1401 + 11 = 1412
1412 × 3 + 11 = 4236 + 11 = 4247
Similarly,
33 × 3 + 11 = 99 + 11 = 110 (a)
110 × 3 + 11 = 330 + 11 = 341 (b)
341 × 3 + 11 = 1023 + 11 = 1034(c)
1034 × 3 + 11 = 3102 + 11
= **3113** (d)

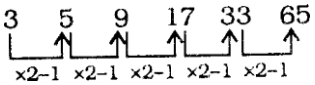
61. (5) The pattern of the given series is :
68 × 1 - 8 = 60
60 × 1.5 + 14 = 90 + 14 = 104
104 × 2 - 20 = 208 - 20 = 188
188 × 2.5 + 26 = 470 + 26 = 496
496 × 3 - 32 = 1488 - 32 = 1456
Similarly,
42 × 1 - 8 = 42 - 8 = 34 (a)
34 × 1.5 + 14 = 51 + 14 = 65 (b)
65 × 2 - 20 = 130 - 20 = 110 (c)
110 × 2.5 + 26 = 275 + 26 = **301** (d)

RBI GRADE-B OFFICER EXAMS

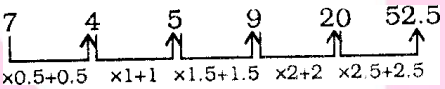
1. (4)The given series is based on the following pattern:



2. (5) The given series is based on the following pattern:

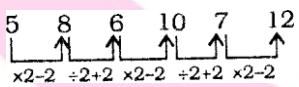


3. (3) The given series is based on the following pattern:

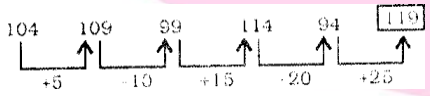


4. (2) 30 (According to question)

5. (1) The given series is based on the following pattern:

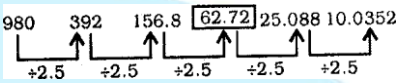


6. (5) The given series is based on the following pattern:



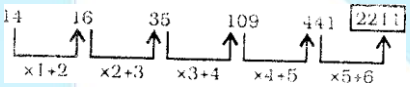
He nce, 119 will come in place of the question mark.

7. (3) The given series is based on the following pattern :



Hence, 62.72 will come ir place of the question mark.

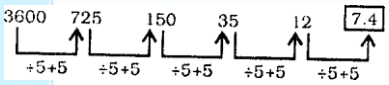
8. (4) The given series is based on the following pattern :



Hence, 2211 will come in place of the question mark.

9. (1) The given series is based on the following pattern:
Numbers are cubes of consecutive prime numbers. i.e.
11^3 = 1331
13^3 = 2197
17^3 = 4913
19^3 = 6859
23^3 = **12167**
29^3 = 24389
Hence, 12167 will come in place of the question mark.

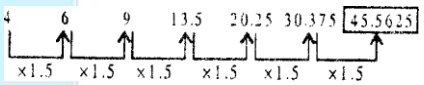
10. (2) The given series is based on the following pattern



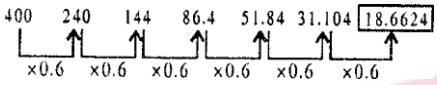
Hence, 7.4 will come in place of the question mark.

11. (3) The given number series is based on the following pattern :
13 × 1 + 1 = 14
14 × 2 + 2 = 30
30 × 3 + 3 = 93
93 × 4 + 4 = 376
376 × 5 + 5 = 1885
∴ ? = 1885 × 6 + 6 = **11316**
Hence, number 11316 will replace the question mark.

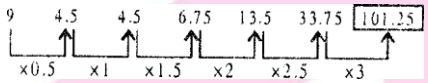
12. (2)



13. (4)



14. (1)



15. (5)
705 + 1 × 23 = 728
728 + 2 × 23 = 774
774 + 3 × 23 = 843
843 + 4 × 23 = 935
935 + 5 × 23 = 1050
∴? = 1050 + 6 × 23 = 1050 + 138 = 1188

16. (4) The pattern of the given series is :
5 × 1.5 + 1.5 = 7.5 + 1.5 = 9
9 × 2.5 + 2.5 = 22.5 + 2.5 = 25
25 × 3.5 + 3.5 = 87.5 + 3.5 = 91
91 × 4.5 + 4.5 = 409.5 + 4.5 = 414
Similarly,
(a) ⇒ 3 × 1.5 + 1.5 = 4.5 + 1.5 = 6
(b) ⇒ 6 × 2.5 + 2.5 = 15 + 2.5 = 17.5
(c) ⇒ 17.5 × 3.5 + 3.5 = 61.25 + 3.5 = **64.75**

17. (2) The pattern of the given se ries is :
15 × 1 - 1 × 6 = 15 - 6 = 9
9 × 2 - 2 × 5 = 18 - 10 = 8
8 × 3 - 3 × 4 = 24 - 12 = 12
12 × 4 - 4 × 3 = 48 - 12 = 36
36 × 5 - 5 × 2 = 180 - 10 = 170
Similarly,
(a) ⇒ 19 × 1 - 1 × 6 = 19 - 6 = 13
(b) ⇒ 13 × 2 - 2 × 5 = 26 - 10 = **16**

18. (1) The pattern of the given series is :
7 × 1 - 1 = 6
6 × 2 - 2 = 10
10 × 3 - 3 = 27
27 × 4 - 4 = 104
104 × 5 - 5 = 515
Similarly,
(a) ⇒ 9 × 1 - 1 = 8
(b) ⇒ 8 × 2 - 2 =14
(c) ⇒ 14 × 3 - 3 = 39
(d) ⇒ 39 × 4 - 4 = **152**

19. (5) The pattern of the given series is :
6 × 2 + 2^2 = 12 + 4 = 16
16 × 3 + 3^2 = 48 + 9 = 57
57 × 4 + 4^2 = 228 + 16 = 244
Similarly,
(a) ⇒ 4 × 2 + 2^2 = 8 + 4 = 12
(b) ⇒ 12 × 3 + 3^2 = 36 + 9 = 45
(c) ⇒ 45 × 4 + 4^2 = 180 + 16 = 196
(d) ⇒ 196 × 5 + 5^2 = 980 + 25 = **1005**

20. (3) The pattern of the given series is :
8 × 1 + 1 = 9
9 × 2 + 2 = 20
20 × 3 + 3 = 63
63 × 4 + 4 = 256
Similarly,
(a) ⇒ 5 × 1 + 1 = 6
(b) ⇒ 6 × 2 + 2 = 14
(c) ⇒ 14 × 3 + 3 = 45
(d) ⇒ 45 × 4 + 4 = 184
(e) ⇒ 184 × 5 + 5 = **925**

21. (3) The pattern of the number series is :
4 × 0.5 + 1 = 2 + 1 = 3
3 × 1 + 1.5 = 3 + 1.5 = 4.5
4.5 × 1.5 + 2 = 6.75 + 2
= 8.75 ≠ **8.5**
8.75 × 2 + 2.5 = 17.5 + 2.5 = 20
20 × 2.5 + 3 = 50 + 3 = 53

22. (2) The pattern of the number series is :
12000 ÷ 5 - 5 = 2400 - 5 = 2395
2395 ÷ 5 - 5 = 479 - 5
= 474 ≠ **472**
474 ÷ 5 - 5 = 94.8 - 5 = 89.8
89.8 ÷ 5 - 5= 17.96 - 5 = 12.96

23. (5) The pattern of the number series is :
1 × 1 + 7 × 1 = 1 + 7 = 8
8 × 2 + 6 × 2 = 16 + 12 = 28
28 × 3 + 5 × 3 = 84 + 15 = 99
99 × 4 + 4 × 4 = 396 + 16 = 412
412 × 5 + 3 × 5 = 2060 + 15 = 2075
2075 × 6 + 2 × 6 = 12450 + 12
= 12462 ≠ **12460**

24. (1) The pattern of the number series is :
144 × 1.5 = 216 ≠ **215**
216 × 2.5 = 540
540 × 3.5 = 1890
1890 × 4.5 = 8505
8505 × 5.5 = 46777.5

25. (5) The pattern of the number series is :
2222 - 7^3 = 2222 - 343 = 1879
1879 - 6^3 = 1879 - 216 = 1663
1663 - 5^3 = 1663 - 125 = 1538
1538 - 4^3 = 1538 - 64 = 1474
1474 - 3^3 = 1474 - 27 = 1447
1447 - 2^3 = 1447 - 8
= 1439 ≠ 440

26. (4) The pattern is :
2^3 + 1^2 = 9
3^3 + 2^2 = 31
4^3 + 3^2 = 73
5^3 + 4^2 = 141
6^3 + 5^2 = **241**

27. (4) The pattern is :

35 + 221 = 256
256 + (221 - 26) = 451
451 + 169 (=195 - 26) = 620
620 + 143 (=169 - 26) = 763
763 + 117 = **880**

28. (3) The pattern is :
$130 + 3^2 = 139$
$139 + 4^2 = 155$
$155 + 5^2 = 180$
$180 + 6^2 = 216$
$216 + 7^2 =$ **265**

29. (2) The pattern is :
658 + 72 = 730
730 + 144 = 874
874 + 288 = 1162
1162 + 576= **1738**

30. (2) The pattern is :
$14 + 990 = 1004$
$1004 + \frac{990}{5} = 1202$
$1202 + \frac{198}{4} = 1251.5$
$1251.5 + 16.5 \left(= \frac{49.5}{3}\right) = 1268$
$1268 + 8.25 =$ **1276.25**

31. (3) The pattern is :
576 - 224 = 352
752 - 576 = 176
840 - 752 = 88
884 - 840 = 44
∴ ? = 884 + 22 = **906**

32. (4) The pattern is :
55 + 11.15 = 66.15
66.15 + 2 × 11.15 = 88.45
88.45 + 3 ×11.15 = 121.9
121.9 + 4 × 11.15 = 166.5
166.5 + 5 × 11.15
= 166.5 + 55.75 = **222.25**

33. (5) The pattern is
36 + 13 = 49
49 + 2 × 13 = 75
75 + 13 = 88
88 + 2 × 13 = 114
114 + 13 = **127**

INSURANCE EXAMS

1. (2) The series is based on following pattern :
$3 + 4 \times (2)^\circ = 7$
7 + 11 = 18
$18 + 4 \times (2)^1 = 26$
26 + 11 = **37**
$37 + 4 \times (2)^2 = 53$
53 + 11 = 64
$64 + 4 \times (2)^3 = 96$
Therefore, the number 37 will come in place of question mark (?) in the series.

2. (3) The series is based on following pattern :
1.7 + 1.5 = 3.2
3.2 - 0.5 = 2.7
2.7 + 1.5 = 4.2
4.2 - 0.5 = 3.7
3.7 + 1.5 = **5.2**
5.2 - 0.5 = 4.7
4.7 + 1.5 = 6.2
Therefore, the number 5.2 will come in place of question mark (?) in the series.

3. (3) The original series is based on following pattern:
$8 \times \frac{1}{2} = 4$
$4 \times 1 = 4$
$4 \times 1.5 = 6$
$6 \times 2 = 12$
$12 \times 2.5 = 30$
$30 \times 3 = 90$
Therefore, the number 28 is wrong. Hence, the new series is as follows:
$28 \times \frac{1}{2} = 14$ ....2nd term
$14 \times 1 = 14$ ....3rd term
$14 \times 1.5 =$ **21 - 4th term**
$21 \times 2 = 42$
Therefore, the fourth term of new series is 21.

4. (2) The original series is based on following pattern:
$17 + 0.25 \times (1)^2 = 17.25$
$17.25 + 0.25 \times (2)^2 = 18.25$
$18.25 + 0.25 \times (3)^2$
= **20.50**
$20.50 + 0.25 \times (4)^2 = 24.50$
$24.50 + 0.25 \times (5)^2 = 30.75$
Therefore, the number 20.75 is wrong.
Hence, the new series is as follows:
$20.75 + 0.25 \times 1^2 = 21.00$ .... 2nd term
$21.00 + 0.25 \times (2)^2 = 22.00$ .... 3rd term
$22.00 + 0.25 \times (3)^2 = 24.25$ ....4th term
Therefore, the fourth term of the new series is 24.25.

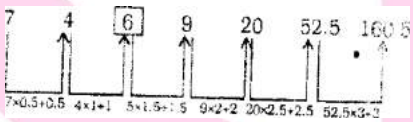
5. (1) The original series is based on following pattern:
$438 + (7)^2 = 487$
$487 - (6)^2 =$ **451**
$451 + (5)^2 = 476$
$476 + (4)^2 = 460$
$460 + (3)^2 = 469$

Therefore, the number 447 is wrong. Hence the new series is as follows:
$447 + (7)^2 = 496$ .....2nd term
$496 - (6)^2 = 460$ .....3rd term
$460 + (5)^2 =$ **485 - 4th term**
$485 - (4)^2 = 469$
Therefore, the fourth term of the new series is 485.

6. (5) The original series is based on following pattern:
$2 \times 2 + 3 = 7$
$7 \times 2 + 5 =$ **19**
$19 \times 2 + 7 = 45$
$45 \times 2 + 9 = 99$
$99 \times 2 + 11 = 209$
$209 \times 2 + 13 = 431$
Therefore, the number 18 is wrong.
Hence, the new series is as follows:
$18 \times 2 + 3 = 39$ — 2nd term
$39 \times 2 + 5 = 83$ — 3rd term
$83 \times 2 + 7$ = **173 - 4th term**
$173 \times 2 + 9 = 355$
Therefore, the fourth term of the new series is 173,

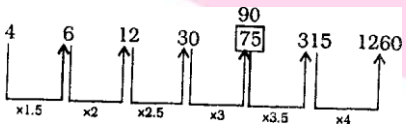
7. (4) The original series is based on following pattern:
$6 \times 1 + 1 \times 2 = 8$
$8 \times 2 - 2 \times 3 = 10$
$10 \times 3 + 3 \times 4 = 42$
$42 \times 4 - 4 \times 5 = 148$
$148 \times 5 + 5 \times 6 = 770$
$770 \times 6 - 6 \times 7 = 4578$
Therefore, the number 146 is wrong.
Hence, the new series is as follows:
$146 \times 1 + 1 \times 2 = 148$
= 2nd term
$148 \times 2 - 2 \times 3$
= 290 -- 3rd term
$290 \times 3 + 3 \times 4$
= **882 - 4th term**
Therefore, the fourth term of the new series is 882.

8. (1) The given number series is based on the following pattern



Hence the wrong number is 6.

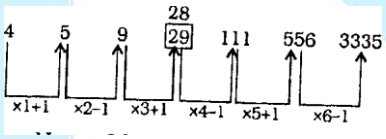
9. (2) The given number series is based on the following pattern :



Hence, the wrong number is 75.

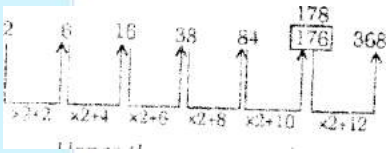
10. (4) The given number series is based on the following pattern:
$4 - 3 = 1^2$
$13 - 4 = 9 = 3^2$
$38 - 13 = 25 = 5^2$
$87 - 38 = 49 = 7^2$
$168 - 87 = 81 = 9^2$
$289 - 168 = 121 = 11^2$
Obviously, 166 is the wrong number.

11. (3) The number series follows the rule as mentioned below:



Hence 29 is the wrong number.

12. (5) The followed pattern is :



Hence the wrong number is 176.

13. (5) The pattern of the number series is :
$3 + 7^2 = 3 + 49 = 52$
$52 + 6^2 = 52 + 36 = 88$
$88 + 5^2 = 88 + 25 = 113$
$113 + 4^2 = 113 + 16 = 129$
$129 + 3^2 = 129 + 9 =$ **138**

14. (3) The pattern of the number series is :
$2 \times 1 + 1 = 52$
$3 \times 2 + 2 = 8$
$8 \times 3 + 3 =$ **27**
$27 \times 4 + 4 = 112$
$112 \times 5 + 5 = 565$

15. (1) The pattern of the number series is :
$6 \times 0.5 + 1 = 4$
$4 \times 1.5 + 2 = 8$
$8 \times 2.5 + 3 = 23$
$23 \times 3.5 + 4 =$ **84.5**
$84.5 \times 4.5 + 5 = 385.25$

16. (4) The pattern of the number series is :
$2^3 = 8$; $4^3 = 64$
$6^3 = 216$; $8^3 = 512$
$10^3 =$ **1000** ; $12^3 = 1728$

17. (2) The pattern of the number series is :
$5 \times 1 + 1 \times 6 = 11$
$11 \times 2 + 2 \times 5 = 32$
$32 \times 3 + 3 \times 4 = 108$
$108 \times 4 + 4 \times 3 = 444$
$444 \times 5 + 5 \times 2 =$ **2230**

18. (3) $S = (1^2 - 2^2) + (3^2 - 4^2) + (5^2 - 6^2) +$ .....to 100 terms

= -3 - 7 - 11 - 15 - .... to 100 terms
= - (3 + 7 + 11 + 15 + ... to 100 terms)
$= \frac{100}{2}[2 \times 3 + (100 - 1)4]$
$\left[S_n = \frac{n}{2}[2a + (n-1)d]\right]$
= - 50 × 402 = - 20100

19. (3) Tricky approach
$\frac{3}{4} + \frac{5}{36} + \frac{7}{44} + ... + \frac{17}{5184} + \frac{19}{8100}$
$= \left(1 - \frac{1}{4}\right) + \left(\frac{1}{4} - \frac{1}{9}\right) + \left(\frac{1}{9} + \frac{1}{16}\right) + ... + \left(\frac{1}{81} - \frac{1}{100}\right)$
$= 1 - \frac{1}{100} = \frac{99}{100} = 0.99$

20. (4) The pattern is :
8 + 6 = 14
14 + 18 (= 6 + 12) = 32
32 + 38 (= 18 + 20) = 70
70 + 66 (= 38 + 28) = 136
136 + 102 (= 66 + 36)
= **238**

21. (1) The pattern is :
25 + 1 × 16 = 41
41 + 3 × 16 = 41 + 48 = 89
89 + 5 × 16 = 89 + 80 = 169
169 + 7 × 16 = 169 + 112 = 281
281 + 9 × 16 = 281 + 144 = **425**

22. (2) The pattern is :
461 + 13 = 474
474 - 9 = 465
465 + 13 = 478
478 - 9 = 469
469 + 13 = **482**

23. (5) The pattern is :
(980 ÷ 2) + 26 = 516
(516 ÷ 2) + 26 = 284
(284 ÷ 2) + 26 = 168
(168 ÷ 2)+ 26 = 110
(110 ÷ 2) + 26 = **81**

24. (5) The pattern is :
4 + 0 = 4
4 + 6= 10
10 + 24 (= 6 + 18) = 34
34 + 60 (= 6 + 54) = 94
94 + 168 (= 6 + 162) = **262**

25. (1) Expression =
(1 + 7 + 13 + 19 + ... + 61) + (3 - 5 + 9 - 11 + ... + 63 - 65)
= (1 + 7 +13 + ... + 61) - 2 ×11
First Part = 1 + 7 + 13 +....+ 61
$t_n = a + (n-1)d$
$\Rightarrow 61 = 1 + (n - 1)d$
$\Rightarrow 61 - 1 = (n - 1)6$
$\Rightarrow (n - 1)6 = 60$
$\Rightarrow n - 1 = 10$
$\Rightarrow n = 11$
$S_n = \frac{n}{2}[a + l] = \frac{11}{2}(1 + 61) = 341$
∴ Expre ssion = 341 - 22 = 319

26. (1) $x = \frac{1}{1\times 2} + \frac{1}{2\times 3} + \frac{1}{3\times 4} + ... + \frac{1}{7\times 8} + \frac{1}{7\times 9}$
$= 1 - \frac{1}{2} + \frac{1}{2} - \frac{1}{3} + \frac{1}{3} - \frac{1}{4} + ... + \frac{1}{6} - \frac{1}{7} + \frac{1}{7} - \frac{1}{8} + \frac{1}{7\times 9}$
$= 1 - \frac{1}{8} + \frac{1}{63}$
$= \frac{504 - 63 + 8}{8\times 63} = \frac{449}{504}$
$\therefore \frac{1}{x} = \frac{504}{449} \approx 1.1$

27. (4)
$\left(1 - \frac{1}{2^2}\right)\left(1 - \frac{1}{3^2}\right)\left(1 - \frac{1}{4^2}\right) \cdots \left(1 - \frac{1}{2011^2}\right) = \frac{x}{2\times 2011}$
$\Rightarrow \left(1 - \frac{1}{2}\right)\left(1 + \frac{1}{2}\right)\left(1 - \frac{1}{3}\right)\left(1 + \frac{1}{3}\right)\left(1 - \frac{1}{4}\right)\left(1 + \frac{1}{4}\right)$
$\left(1 - \frac{1}{5}\right)\left(1 + \frac{1}{5}\right) .... \left(1 - \frac{1}{2011}\right)\left(1 + \frac{1}{2011}\right) = \frac{x}{2\times 2011}$
$\Rightarrow \frac{1}{2} \times \frac{3}{2} \times \frac{2}{3} \times \frac{4}{3} \times \frac{3}{4} \times \frac{5}{4} \times \frac{4}{5} \times \frac{6}{5} \cdots$
$\frac{2010}{2011} \times \frac{2012}{2011} = \frac{x}{2\times 2011}$
$\Rightarrow \frac{1}{2} \times \frac{2012}{2011} = \frac{x}{2\times 2011}$
$\Rightarrow x = 2012$

28. (2) The pattern is :
$\frac{1050 - 30}{2} = 510$

$\frac{510-26}{2}$ = 242

$\frac{242-22}{2}$ = 100 ≠ **106**

$\frac{110-18}{2}$ = 46

$\frac{46-14}{2}$ = 16.

29. (1) The pattern is
550 - 2^2 = 550 - 4 = 546
546 - 3^2 = 546 - 9 = 537
537 - 42 = 537 - 16 = 521
521 - 5^2 = 521 - 25
= 496 ≠ **494**
496 - 6^2 = 496 - 36 = 460

30. (3) The pattern is ;
8 + 1 × 13 = 21
21 + 2 ×13 = 21 +26 = 47
47 + 3 × 13 = 47 + 39 = 86
86 + 4 × 13 = 86 + 52
= 138 ≠ **140**
138 + 5 × 13 = 138 + 65 = 203
203 + 6 × 13 = 203 + 78 = 281

31 (2) The pattern is ;
4 × 8 - 8 = 32 - 8 = 24
24 × 7 - 7 = 168 - 7 = 161
161 × 6 - 6 = 966 - 6
= 960 ≠ **965**
960 × 5 - 5 = 4800 - 5 = 4795

32. (3) The pattern is :
1 × 2 = 2
2 × 3 = 6 ≠ **8**
6 × 4 = 24
24 × 5 = 120
120 × 6 = 720

33. (2) The given number series is based on the following pattern :
1548 ÷ 3 = 516
516 ÷ 4 = 129
129 ÷ 3 = 43
43 ÷ 4 = **10.75**
Hence, 10.75 will replace the question mark.

34. (4) The given number series is ' based on the following pattern :
949 × 0.2 = 189.8
189.8 × 0.3 = **56.94**
56.94 × 0.4 = 22.776
22.776 × 0.5 = 11.388
11.388 × 0.6 = 6.8328
Hence, 56.94 will replace the question mark.

35. (1) The given number series is based on the following pattern :
121 + 23 × 1 = 144
144 + 23 × 2 = 190
190 + 23 × 3 = 259
∴ ? = 259 + 23 × 4 = 259 + 92 = **351**
Hence, 351 will replace the question mark.

36. (5) The given number series is based on the following pattern :
14 × 3 + 1.5 = 43.5
43.5 × 6+ 1.5 × 2 = 264
264 × 12 + 1.5 × 4 = **3174**
3174 × 24 + 1.5 × 8 = 76188
Hence, 3174 will replace the question mark.

37. (3) The given number series is based on the following pattern :
41 × 2^2 = 164
164 × 4^2 = 2624
2624 × 6^2 = **94464**
94464 × 8^2 = 6045696
Hence 94464 will replace the question mark.

38. (1) The pattern is :
2 + 3 = 5
5 + 4 = 9
6 + 5 = **14**
14 + 6 = 20
20 + 7 = 27

MODEL EXERCISES

1. The interior angles of a polygon are in AP, the smallest angle is 120° and the common difference is 5. Then, the number of sides of the polygon are —
(1) 16 (2) 9
(3) 8 (4) 12
(5) None of these

2. A man arranges to pay off a debt of Rs 3600 in 40 annual instalments which form an AP. When 30 of the instalments are paid, he dies leaving one-third of the debt unpaid. Find the value of the first instalment.
(1) 55 (2) 53
(3) 51 (4) 49
(5) None of these

3. Find $1^3 + 2^3 + 3^3 + ... + 15^3$
(1) 11025 (2) 13400
(3) 900 (4) 14400
(5) None of these

4. The value of
$(1^3 + 2^3 + 3^3 + ... + 15^3)$ -
$(1 + 2 + 3 + ... + 15)$ is —
(1) 14280 (2) 14400
(3) 12280 (4) 13280
(5) None of these

5. What is the next number in the series given below ?
53, 48, 50, 50, 47
(1) 51 (2) 46
(3) 53 (4) 52
(5) None of these

6. In a GP, the first term is 5 and the common ratio is 2. The eighth term is —
(1) 640 (2) 1280
(3) 256 (4) 160
(5) None of these

7. If the arithmetic mean of two numbers is 5 and geometric mean is 4, then the numbers are —
(1) 4, 6 (2) 4, 7
(3) 3, 8 (4) 2, 8
(5) None of these

8. What is the next number in the series given below ?
2, 5, 9, 14, 20
(1) 25 (2) 26
(3) 27 (4) 28
(5) None of these

9. The sum of 40 terms of an AP whose first term is 4 and common difference is 4, will be —
(1) 3200 (2) 1600
(3) 200 (4) 2800
(5) None of these

10. Let S_n denote the sum of the first '*n*' terms of an AP
$S_{2n} = 3S_n$. Then, the ratio $\frac{S_{3n}}{S_n}$ is equal to
(1) 4 (2) 6
(3) 8 (4) 10
(5) None of these

11. The missing number in the series
8, 24, 12, 36, 18, 54 is —
(1) 27 (2) 108
(3) 68 (4) 72
(5) None of these

12. The sum of the 6th and 15th elements of an arithmetic progression is equal to the sum of 7th, 10th and 12th elements of the same progression. Which element of the series should necessarily be equal to zero ?
(1) 10th (2) 8th
(3) 1st (4) 9th
(5) None of these

13. If p, *q*, *r*, *s* are in harmonic progression and $p > s$, then —
(1) $\frac{1}{ps} < \frac{1}{qr}$ (2) $q + r = p + s$
(3) $\frac{1}{q} + \frac{1}{p} = \frac{1}{r} + \frac{1}{s}$ (4) None of these

(MAT Exam. Sept. 2003)

14. What is the eighth term of the sequence
1, 4, 9, 16, 25 ..... ?
(1) 8 (2) 64
(3) 128 (4) 200
(5) None of these

15. In a geometric progression, the sum of the first and the last term is 66 and the product of the second and the last but one term is 128. Determine the first term of the series.
(1) 64 (2) 64 or 2
(3) 2 or 32 (4) 32
(5) None of these

16. A sequence is generated by the rule that the *x*th term is $x^2 + 1$ for each positive integer *x*. In this sequence, for any value $x > 1$, the value of $(x + 1)$th term less the value of *x*th term is —
(1) $2x^2 > + 1$ (2) $x^2 + 1$
(3) $2x + 1$ (4) $x + 2$
(5) None of these

17. Four different integers form an increasing AP. If one of these numbers is equal to the sum of the squares of the other three numbers, then the numbers are —

(1) -2, -1, 0, 1 (2) 0, 1, 2, 3
(3) -1, 0, 1, 2 (4) 1, 2, 3, 4
(5) None of these

18. How many terms are there in an AP whose first and fifth terms are -14 and 2 respectively and the sum of terms is 40 ?
(1) 15 (2) 10
(3) 5 (4) 20
(5) None of these

19. The first three numbers in a series are -3, 0, 3, the 10th number in the series will be —
(1) 18 (2) 21
(3) 24 (4) 27
(5) None of these

SHORT ANSWERS

1.	(2)	**2.**	(3)
3.	(4)	**4.**	(1)
5.	(4)	**6.**	(1)
7.	(4)	**8.**	(3)
9.	(1)	**10.**	(2)
11.	(1)	**12.**	(2)
13.	(4)	**14.**	(1)
15.	(4)	**16.**	(2)
17.	(2)	**18.**	(3)
19.	(3)		
1.	(4)	**2.**	(1)
3.	(4)	**4.**	(3)
5.	(2)	**6.**	(3)
7.	(5)	**8.**	(2)
9.	(1)	**10.**	(4)
11.	(3)	**12.**	(5)
13.	(2)	**14.**	(1)
15.	(4)	**16.**	(1)
17.	(5)	**18.**	(1)
19.	(1)		

EXPLANATIONS

1. (2) Let the polygon has n sides.
Given, the smallest interior angle is 120°, hence the greatest exterior angle will be (180° -120°) = 60°
We know sum of exterior angles of a polygon = 360°
60 + 55 + 50 + ... = 360
{Common difference = -5}

$\therefore \frac{n}{2}[2a + (n - 1)\,d] = 360$

$\frac{n}{2}[120 + (n - 1) \times -5] = 360$

$\Rightarrow n^2 - 25n + 144 = 0$

$\Rightarrow n = 9, 16$

Number of sides cannot be 16.
Hence, $n = 9$

2. (3) According to question,
Sum of 40 instalments S_{40}
$= 3600 = 20\,(2a + 39d)$
$\Rightarrow 2a + 39d = 180$ ...(i)
Sum of 30 instalments
$S_{30} = 2400 = 15\,(2a + 29d)$
$\Rightarrow 2a + 29d = 160$ ...(ii)
Solving Eqs. (i) and (ii), we get
$a = 51$ and $d = 2$
$\therefore$The value of first instalment
= Rs 51

3. (4) According to question, we have,

$1^3 + 2^3 + 3^3 + ... + n^3 = \left[\frac{n \times (n+1)}{2}\right]^2$

Here, n = number of terms = 15

$\therefore \left[\frac{n(n+1)}{2}\right]^2 = \left[\frac{15 \times 16}{2}\right]^2$

$= (120)^2 = 14400$

4. (1) According to question,
$(1^3 + 2^3 + 3^3 + ... + 15^3)$ -
$(1 + 2 + 3 + ... + 15)$

$= \left[\frac{n(n+1)}{2}\right]^2 - \left[\frac{n(n+1)}{2}\right]$

$= \left[\frac{15 \times 16}{2}\right]^2 \left[\frac{15 \times 16}{2}\right]$

$= (120)^2 - (120)$
$= 120 \times 119 = 14280$

5. (4) According to question,
53, 48, 50, 50, 47....
The above series can be splitted into two series one in ascending order and other in descending order 53, 50, 47 and other is 48, 50, 52.
Hence, 52 will be the next number.

6. (1) According to question,
nth term of a GP = a^{n-1}
$\therefore$ 8th term = $5 \times (2)^{8-1} = 5 \times (2)^7$
$= 5 \times 128 = 640$

7. (4) Let the two numbers be x and y.
Then, AM,

$\frac{x + y}{2} = 5$

$\Rightarrow x + y = 10$

and GM, $= \sqrt{xy}$..(i)

$\Rightarrow xy = 16$
$\Rightarrow (x - y)^2 = (x + y)^2 - 4xy$
$100 - 64 = 36$
$x - y = 6$ ...(ii)
Or
Solving Eqs. (i) and (ii),
$x = 8$ and $y = 2$

8. (3) According to question,
2 + 3 =5; 5 + 4 = 9;
9 + 5 = 14; 14 + 6 = 20;
20 + 7 = 27
Hence, the next number of the series will be 27.

9. (1) According to question,

$S_{40} = \frac{n}{2}[2a + (n - 1)d]$

$= 20\,[4 + 39 \times 4]$
$= 20 \times 160 = 3200$

10. (2) Let a be the first term and d be the common difference.

Then, $S_n = \frac{n}{2}(2a + (n-1)d]$

$S_2 = \frac{2n}{2}[2a + (2n-1)d]$

and $S_{3n} = \frac{3n}{2}[2a + (3n-1)d]$]

Given, $S_{2n} = 3S_n$

$\therefore \frac{2n}{2}[2a + (2n-1)d] =$

$2\frac{n}{2}[2a + (n-1)d]$

$\Rightarrow 4a + (4n-2)d = 6a + (3n-3)d$

$\Rightarrow d(4n - 2 - 3n + 3) = 2a$

$\Rightarrow d = \frac{2a}{n+1}$

$\therefore S_n = \frac{2an^2}{n+1}$

and $S_3n = \frac{12an^2}{n+1}$

$\therefore \frac{S_n}{S_n} = \frac{2an^2}{n+1} \times \frac{n+1}{12an^2} = \frac{1}{6} = \frac{S_{3n}}{S_n} = 6$

11. (1) According to question,
8, 24, 12, 36, 18, 54

8 24 12 36 18 54 27
×3 ÷2 ×3 ÷2 ×3 ÷2

Hence, 27 will come in the blank space.

12. (2) Let the first term and common term of the AP be a and d respectively.
Then, $(a + 5d) + (a + 14d) =$
$(a + 6d) + (a + 9d) + (a + 11d)$
$\Rightarrow 2a + 19d = 3a + 26d$
$\Rightarrow a + 7d = 0$
$\therefore$ 8th term is 0.

13. (4) According to question,
If p, q, r, s are in HP.

$\Rightarrow \frac{1}{p}, \frac{1}{q}, \frac{1}{r}, \frac{1}{s}$ are in AP

$\Rightarrow \frac{1}{q} - \frac{1}{p} = \frac{1}{s} - \frac{1}{r}$

$\Rightarrow \frac{1}{q} + \frac{1}{r} = \frac{1}{s} + \frac{1}{p}$

Hence the none of these be answer

14. (2) According to question,
1, 4, 9, 16, 25
$(1)^2 (2)^2 (3)^2 (4)^2 (5)^2$
Each term of the progression is the square of a natural number.
Hence, the eighth term of the sequence will be $(8)^2 = 64$

15. (2) Let the last term be n,
then $a + ar^{n-1} = 66$
and $ar.\ ar^{n-2} = 128$
$a^2 r^{n-1}$' = 128
From Eqs. (i) and (ii),
$a(66 - a) = 128$
$\Rightarrow a^2 - 66a + 128 = 0$
$\Rightarrow a = 64, 2$

16. (3) According to question,
$(x + 1)^{th}$ term $-x^{th}$ term
$= (x + 1)^2 + 1 - (x^2 + 1)$
$= x^2 + 2x + 1 + 1 - x^2 - 1$
$= 2x + 1$

17. (3) By hit and trial or common sense, we have,
$2 = (-1)^2 + (0)^2 + (1)^2$
Hence the numbers are -1, 0, 1, 2

18. (2) According to question,

$T_5 = a + (n-1).d$
$2 = -14 + 4d$
$d = \frac{16}{4} = 4$

$\therefore S_n = \frac{n}{2}[2a + (n-1) \times d]$

$40 = \frac{n}{2}[-28 + (n-1) \times 4]$
$\Rightarrow 80 = -28n + 4n^2 - 4n$
$\Rightarrow 4n^2 - 32n - 80 = 0$
$n^2 - 8n - 20 = 0$
$\Rightarrow (n - 10)(n + 2) = 0$
$\therefore n = 10\ (\because n \neq -2)$

19. (3) According to question,
$a = -3.\ d = 3$
$\therefore T_{10} = a + (10-1).d$
$T_{10} = -3 + 9 \times 3 = 24$

NUMBER SERIES-264

Directions (Q. 1-5): In each of the following number series, a wrong number is given. Find out that number.

1. 1, 12, 31, 63, 101, 156, 227
   (1) 31 (2) 63 (3) 101 (4) 156 (5) 227
2. 4, 9, 28, 99, 415, 2105, 12660
   (1) 9 (2) 28 (3) 99 (4) 415 (5) 2105
3. 7, 26, 64, 124, 215, 342, 511
   (1) 26 (2) 64 (3) 124 (4) 215 (5) 342
4. 9, 28, 63, 120, 205, 323, 483
   (1) 28 (2) 63 (3) 120 (4) 205 (5) 323
5. 26, 57, 102, 164, 250, 366, 518
   (1) 57 (2) 102 (3) 164 (4) 250 (5) 366

Directions (Q. 6-10): In each of the following number series, a wrong number is given. Find out the wrong number.

6. 30, 210, 742, 1716, 3390, 5814
   (1) 210 (2) 742 (3) 1716 (4) 3390 (5) 5814
7. 1440, 1152, 930, 766, 651, 580, 542
   (1) 930 (2) 766 (3) 651 (4) 580 (5) 542
8. 18, 59, 187, 576, 1749, 5269
   (1) 59 (2) 187 (3) 576 (3) 1749 (5) 5269
9. 7, 22, 64, 216, 898, 4525, 27190
   (1) 64 (2) 216 (3) 898 (4) 4525 (5) 27190
10. 16, 9278, 15109, 18484, 20212, 20941, 21157
    (1) 9278 (2) 15109 (3) 18484 (4) 20212 (5) 20941

Directions (Q. Nos. 11-15) What will come in place of question mark (?) in the following number series?

11. 1 7 49 343 (?)
    (1) 16807 (2) 1227 (3) 2058 (4) 2401 (5) None of these
12. 13 20 39 78 145 (?)
    (1) 234 (2) 244 (3) 236 (4) 248 (5) None of these
13. 12 35 81 173 357 (?)
    (1) 725 (2) 715 (3) 726 (4) 736 (5) None of these
14. 3 100 297 594 991 (?)
    (1) 1489 (2) 1479 (3) 1478 (4) 1498 (5) None of these
15. 112 119 140 175 224 (?)
    (1) 277 (2) 276 (3) 287 (4) 266 (5) None of these

Directions (Q. 16 - 20): In each of the following number series, a wrong number is given. Find out that number.

16. 4, 5, 18, 80, 388, 2065, 12606
    (1) 5 (2) 18 (3) 80 (4) 388 (5) 2065
17. 22, 51, 88, 133, 186, 248, 316
    (1) 51 (2) 88 (3) 133 (4) 186 (5) 248
18. 7, 9, 21, 57, 137, 284, 539
    (1) 9 (2) 21 (3) 57 (4) 137 (5) 284

19. 3, 17, 83, 371, 1907, 11507, 80627
(1) 17 (2) 83 (3) 371 (4) 1907 (5) 11507

20. 8, 9, 25, 105, 362, 987, 2283
(1) 9 (2) 25 (3) 105 (4) 362 (5) 987

Directions (Q. 21-25): In each of the following number series, a wrong number is given. Find out the wrong number.

21. 6, 39, 213, 1090, 5496, 27525
(1) 39 (2) 213 (3) 1090 (4) 5496 (5) 27525

22. 17, 141, 358, 701, 1213, 1942
(1) 141 (2) 358 (3) 701 (4) 1213 (5) 1942

23. 6, 14, 51, 249, 1486, 10401
(1) 14 (2) 51 (3) 249 (4) 1486 (5) 10401

24. 8, 24, 88, 232, 488, 887
(1) 24 (2) 88 (3) 232 (4) 488 (5) 887

25. 8, 21, 85, 421, 2521, 17641
(1) 21 (2) 85 (3) 421 (4) 2521 (5) 17641

Directions (Q. 26-30): In each of the following number series, a wrong number is given. Find out the wrong number.

26. 13, 16, 38, 124, 504, 2535
(1) 16 (2) 38 (3) 124 (4) 504 (5) 2535

27. 6, 10, 32, 111, 464, 2345
(1) 10 (2) 32 (3) 111 (4) 464 (5) 2345

28. 8, 18, 64, 272, 1395, 8424
(1) 18 (2) 64 (3) 272 (4) 1395 (5) 8424

29. 80, 105, 195, 478, 1350, 3975
(1) 105 (2) 195 (3) 478 (4) 1350 (5) 3975

30. 8, 18, 78, 420, 2424, 15270
(1) 18 (2) 78 (3) 420 (4) 2424 (5) 15270

Directions (Q. 31-35): What should come in place of question mark (?) in the following number series?

31. 9480, 5384, 8759, 6015, 8212, ?
(1) 6218 (2) 6484 (3) 6692 (4) 6816 (5) None of these

32. 12, 21, 78, 458, 3649, ?
(1) 36039 (2) 36248 (3) 36469 (4) 36878 (5) None of these

33. 8, 71, 565, 3950, 23693, ?
(1) 118456 (2) 118214 (3) 118684 (4) 118724 (5) None of these

34. 6, 7, 9, 36, 40, ?
(1) 92 (2) 108 (3) 148 (4) 151 (5) 165

35. 14, 24, 32, 44, 108, 122, ?
(1) 212 (2) 338 (3) 436 (4) 647 (5) 555

Directions (Q.36-40) What will come in place of question mark (?) in the following number series ?

36. 17 19 33 (?) 129 227
(1) 64 (2) 73 (3) 67 (4) 72 (5) None of these

37. 35 256 451 620 763 (?)
(1) 680 (2) 893 (3) 633 (4) 880 (5) None of these

38. 18 139 868 917 (?) 1051
(1) 1042 (2) 1036 (3) 942 (4) 996 (5) None of these ‘

39. 2890 (?) 1162 874 730 658
(1) 1684 (2) 1738 (3) 1784 (4) 1672 (5) None of these

40. 14 1004 1202 1251.5 1268 (?)
(1) 1267.5 (2) 1276.25 (3) 1324.5 (4) 1367.25 (5) None of these

Directions (Q. 41-45): Which is the next number in the given number series.

41. 8, 14, 40, 138, 576, ?
(1) 2910 (2) 2915 (3) 2920 (4) 2925 (5) 2930

42. 17, 98, 260, 829, 3352, ?
(1) 16680 (2) 16785 (3) 16890 (4) 16995 (5) 17000

43. 600, 120, 144, 316.8, ?
(1) 1011.84 (2) 1012.96 (3) 1013.76 (4) 1014.12 (5) 1015.25

44. 472, 1450, 3406, 6340, 10252, ?
(1) 15142 (2) 15144 (3) 15146 (4) 15148 (5) 15150

45. 8, 18, 42, 108, 300, 870, ?
(1) 2570 (2) 2572 (3) 2574 (4) 2576 (5) 2578

Directions (Q. 46-50): What is the next number in the given number series?

46. 27,1358, 3086, 5283, 8027
(1) 11401 (2) 11402 (3) 11403 (4) 11404 (5) 11405

47. 17, 68, 238, 867, 3672, ?
(1) 18611 (2) 18612 (3) 18613 (4) 18614 (5) 18615

48. 64, 96, 288, 1296, 7776, ?
(1) 58310 (2) 58320 (3) 58330 (4) 58340 (5) 58350

49. 42, 50, 132, 468, 2000, ?
(1) 10200 (2) 10300 (3) 10400 (4) 10500 (5) 10600

50. 96, 128, 371, 1395, 4520, ?
(1) 12292 (2) 12294 (3) 12296 (4) 12298 (5) 12300

Directions (Q. 51-55): Which is the next number in the following number series?

51. 112, 229, 286, 520, 634, 985, ?
(1) 1152 (2) 1154 (3) 1156 (4) 1158 (5) 1160

52. 17, 38, 122, 500, 2516, ?
(1) 15115 (2) 15116 (3) 15117 (4) 15118 (5) 15119

53. 48, 72, 144, 360, 1080, ?
(1) 3780 (2) 3782 (3) 3784 (4) 3786 (5) 3790

54. 7, 71, 583, 2311, 6407, 14407, ?
(1) 24231 (2) 25231 (3) 26231 (4) 27231 (5) 28231

55. 19874, 19858, 19777, 19521, 18896, ?
(1) 17600 (2) 17500 (3) 17400 (4) 17300 (5) 17200

Directions (Q. 56-60): What will be the next number in the following number series?

56. 15, 115, 126, 270, 283, 479, ?
(1) 536 (2) 554 (3) 584 (4) 592 (5) None of these

57. 23, 312, 673, 1114, 1643, ?
(1) 2024 (2) 2160 (3) 2268 (4) 2304 (5) 2412

58. 6, 28, 110, 476, 2426, ?
(1) 14612 (2) 14512 (3) 14412 (4) 14312 (5) 14212

59. 15, 57, 168, 417, 942, ?
(1) 1816 (2) 1904 (3) 2019 (4) 2146 (5) 2251

60. 12, 24, 44, 74, 116, ?
(1) 164 (2) 172 (3) 178 (4) 184 (5) 196

Directions (Q. 61-65): Find the next number in the following number series.

61. 215, 302, 517, 732, 947, 1162, ?
(1) 1372 (2) 1375 (3) 1377 (4) 1379 (5) 1381

62. 192, 292, 400, 516, 640, ?
(1) 770 (2) 772 (3) 774 (4) 776 (5) 778

63. 19, 29, 41, 55, 71, ?
(1) 89 (2) 91 (3) 93 (4) 95 (5) 97

64. 768, 512, 320, 192, 112, ?
(1) 56 (2) 64 (3) 72 (4) 96 (5) 84

65. 18, 42, 78, 132, 210, ?
(1) 310 (2) 312 (3) 314 (4) 316 (5) 318

Directions (Q. 66-70) : Find the next number in the place of question mark (?) in the following number series.

66. 4, 13, 54, 273, 1642, ?
(1) 10432 (2) 10968 (3) 11120 (4) 11499 (5) 11562

67. 3, 14, 66, 312, 1640, ?
(1) 9950 (2) 9960 (3) 9970 (4) 9980 (5) 9990

68. 3, 8, 16, 15, 42, 29, 81, ?
(1) 50 (2) 54 (3) 72 (4) 78 (5) 96

69. 6, 42, 114, 258, 546, ?
(1) 1116 (2) 1118 (3) 1120 (4) 1122 (5) 1124

70. 484, 729, 1024, 1369, 1764, ?
(1) 2204 (2) 2206 (3) 2209 (4) 2212 (5) 2215

Directions (Q. 71-75) : What will be the next number in the following number series?

71. 27 76 272 713 1497 ?
(1) 2720 (2) 2721 (3) 2722 (4) 2723 (5) 2724

72. 68 216 444 752 1140 ?
(1) 1600 (2) 1602 (3) 1604 (4) 1606 (5) 1608

73. 7 14 35 78 151 262 ?
(1) 417 (2) 419 (3) 421 (4) 423 (5) 425

74. 3 35 99 195 323 483 ?
(1) 645 (2) 655 (3) 665 (4) 675 (5) 685

75. 5 7 19 49 105 195 ?
(1) 323 (2) 325 (3) 327 (4) 329 (5) 331

Directions (Q. 76-80): What number should come in place of question mark in the following number series?

76. 5, 21, 57, 121, 221, 365, ?
(1) 536 (2) 561 (3) 584 (4) 604 (5) 628

77. 5, 49, 481, 3841, ?
(1) 23041 (2) 22031 (3) 21021 (4) 20011 (5) 19001

78. 8, 19, 52, 151, 448, ?

(1) 1120 (2) 1148 (3) 1236 (4) 1284 (5) 1339

79. 9801, 9604, 9409, 9216, 9025, ?
(1) 8836 (2) 8792 (3) 8688 (4) 8542 (5) 8466

80. 339, 733, 1327, 2201, 3371, ?
(1) 4677 (2) 4757 (3) 4837 (4) 4917 (5) 5007

Directions (Q. 81-85): What will be the next number in the following number series?

81. 3, 14, 83, 254, 627, ?
(1) 1292 (2) 1294 (3) 1296 (4) 1298 (5) 1300

82. 18, 31, 83, 317, 1565, ?
(1) 9365 (2) 9375 (3) 9385 (4) 9395 (5) 9405

83. 43, 145, 381, 841, 1639, ?
(1) 2911 (2) 2913 (3) 2915 (4) 2917 (5) 2919

84. 27, 38, 64, 86, 125, ?
(1) 152 (2) 154 (3) 156 (4) 158 (5) 160

85. 12, 39, 120, 363, 1092, ?
(1) 3275 (2) 3279 (3) 3284 (4) 3287 (5) 3291

Directions (Q. 86-88) : What will come in place of question mark (?) in the following number series?

86. 5 15 35 75 155 (?)
(1) 295 (2) 315 (3) 275 (4) 305 (5) None of these

87. 3 6 18 72 360 (?)
(1) 2160 (2) 1800 (3) 2520 (4) 1440 (5) None of these

88. 688 472 347 283 256 (?)
(1) 236 (2) 229 (3) 255 (4) 248 (5) None of these

Directions (Q. 89-93): Find out the next number in place of question mark (?) in the following number series.

89. 25, 42, 85, 174, 335, ?
(1) 525 (2) 575 (3) 600 (4) 612 (5) 650

90. 365, 728, 2160, 8532, 42340, ?
(1) 253275 . (2) 253280 (3) 253285 (4) 253290 (5) 253295

91. 62, 177, 512, 1507, 4482, ?
(1) 13396 (2) 13397 (3) 13398 (4) 13399 (5) 13400

92. 21, 12342, 22543, 30824, 37385, ?
(1) 42422 (2) 42424 (3) 42426 (4) 42428 (5) 42430'

93. 800, 160, 48, 19.2, 9.6 ?
(1) 6.48 (2) 5.76 (3) 5.12 (4) 4.84 (5) 4.56

Directions (Q. 94-98): Find the next number in place of question mark (?) in the following number series.

94. 57, 66, 101, 192, 381, ?
(1) 722 (2) 724 (3) 726 (4) 728 (5) 730'

95. 7, 19, 55, 163, 487, ?
(1) 1451 (2) 1453 (3) 1455 (4) 1457 (5) 1459

96. 12, 28, 92, 236, 492, 892, ?
(1) 1458 (2) 1468 (3) 1478 (4) 1488 (5) 1498

97. 8400, 7376, 6592, 6016, 5616, ?
(1) 5360 (2) 5370 (3) 5380 (4) 5390 (5) 5400

98. 7.8, 20.6, 51.2, 117.4, 254.8, ?

(1) 530.6 (2) 532.6 (3) 534.6 (4) 536.6 (5) 538.6

Directions (Q. 99-103) : Find the next number in the following number series.

99. 63 95 119 135 143 ?
(1) 151 (2) 157 (3) 162 (4) 168 (5) None of these

100. 4 20 101 357 982 ?
(1) 1632 (2) 1848 (3) 2040 (4) 2278 (5) 2412

101. 14 50 166 522 1598 ?
(1) 4832 (2) 4834 (3) 4836 (4) 4838 (5) 4840

102. 4830 4556 4290 4032 3782 ?
(1) 3510 (2) 3520 (3) 3530 (4) 3540 (5) 3550

103. 1320 1313 1288 1227 1106 ?
(1) 875 (2) 880 (3) 885 (4) 890 (5) 895

Directions (Q.104-108) In each of these questions a number series is given. In each series only one number is wrong. Find out the wrong number.

104. 5531 5506 5425 5304 5135 4910 4621
(1) 5531 (2) 5425 (3) 4621 (4) 5135 (5) 5506

105. 6 7 9 13 26 37 69
(1) 7 (2) 26 (3) 69 (4) 37 (5) 9

106. 1 3 10 36 152 760 4632
(1) 3 (2) 36 (3) 4632 (4) 760 (5) 152

107. 4 3 9 34 96 219 435
(1) 4 (2) 9 (3) 34 (4) 435 (5) 219

108. 157.5 45 15 6 3 2 1
(1) 1 (2) 2 (3) 6 (4) 157.5 (5) 45

Directions (Q. 109-113) : Find out the next number in place of question mark (?) in the following number series.

109. 27, 50, 192, 1140, 9104, ?
(1) 90080 (2) 91020 (3) 92410 (4) 92740 (5) None of these

110. 16, 49, 345, 3798, ?
(1) 56974 (2) 56812 (3) 55784 (4) 54312 (5) None of these

111. 5, 47, 417, 3327, 23277, ?
(1) 131642 (2) 133712 (3) 135416 (4) 139647 (5) None of these

112. 3, 37, 285, 1749, 8797, ?
(1) 34856 (2) 35062 (3) 35253 (4) 35416 (5) 35622

113. 7, 736, 1248, 1591, 1807, ?
(1) 1932 (2) 2008 (3) 2140 (4) 2190 (5) 2216

Directions (Q. 114-118) : What will come in place of question mark (?) in the following number series?

114. 161 199 241 287 337 ?
(1) 391 (2) 401 (3) 412 (4) 416 (5) 421

115. 141 2885 4613 5613 6125 ?
(1) 6311 (2) 6321 (3) 6331 (4) 6341 (5) 6351

116. 1664 4160 1040 2600 ? 1625
(1) 630 (2) 640 (3) 650 (4) 660 (5) 675

117. 43.5 57 70.5 84 97.5 ?
(1) 109 (2) 111 (3) 115 (4) 121 (5) 124

118. 5 87 601 ? 10785 26415
(1) 2775 (2) 2848 (3) 2915 (4) 3005 (5) 3135

Directions (Q. 119-123): What will be the next number in the question mark (?) in the following number series?

119. 7922, 7746, 7572, 7400, 7230, ?
(1) 7060 (2) 7062 (3) 7064 (4) 7066 (5) 7068

120. 54, 68, 84, 102, 122, 144, ?
(1) 162 (2) 164 (3) 166 (4) 168 (5) 170

121. 18, 32, 74, 200, 578, 1712, ?
(1) 5110 (2) 5112 (3) 5114 (4) 5116 (5) 5118

122. 7, 1338, 2067, 2410, 2535, 2562, ?
(1) 2563 (2) 2572 (3) 2584 (4) 2590 (5) None of these

123. 36, 77, 241, 979, 4915, ?
(1) 29505 (2) 29510 (3) 29515 (4) 29520 (5) 29525

Directions (Q. 124-128) : Find out the next number in place of question mark(?) in the following number series.

124. 1320 990 720 504 336 ?
(1) 204 (2) 206 (3) 208 (4) 210 (5) 212

125. 8 73 587 4114 24691 ?
(1) 123456 (2) 123464 (3) 123454 (4) 123446 (5) None of these

126. 81 512 2401 7776 ?
(1) 12525 (2) 14275 (3) 15625 (4) 17525 (5) 18250

127. 5679 5560 5322 4965 4489 ?
(1) 3890 (2) 3891 (3) 3892 (4) 3893 (5) 3894

128. 12 27 73 212 630 1885 ?
(1) 5651 (2) 5652 (3) 5653 (4) 5654 (5) 5655

Directions (Q. 129-133) : Find out the next number in the following number series.

129. 840 1112 1322 1478 1588 ?
(1) 1672 (2) 1668 (3) 1665 (4) 1662 (5) 1660

130. 76 588 2316 6412 14412 ?
(1) 28216 (2) 28226 (3) 28236 (4) 28246 (5) 28256

131. 20 100 244 452 724 1060 ?
(1) 1450 (2) 1460 (3) 1470 (4) 1480 (5) 1490

132. 4984 4408 3967 3643 3418 3274 ?
(1) 3193 (2) 3183 (3) 3173 (4) 3163 (5) 3153

133. 1338 2328 3048 3552 3888 4098 ?
(1) 4332 (2) 4223 (3) 4218 (4) 4232 (5) 4323

Directions (Q. 134-136) : What will come in place of question mark (?) in the following number series?

134. 987, 587 331 187 123 ?
(1) 104 (2) 113 (3) 107 (4) 114 (5) None of these

135. 125 171 263 401 585 ?
(1) 835 (2) 815 (3) 792 (4) 788 (5) None of these

136. 121 132 167 226 309 ?
(1) 424 (2) 413 (3) 427 (4) 416 (5) None of these

Directions (Q. 137-138) : In the following number series, only one is wrong. Find out the wrong number.

137. 454 327 648 524 842 713 1036
(1) 327 (2) 648 (3) 521 (4) 842 (5) 713

138. 72.5 86 113 168 275 491 923
(1) 86 (2) 113 (3) 168 (4) 275 (5) 491

Directions (Q. 139 - 143) : Find out the number in place of question mark(?) in the following number series.

139. 112 121 146 195 276 ? 566
(1) 381 (2) 392 (3) 397 (4) 403 (5) 411

140. 1365 2590 4190 6215 ? 11740
(1) 8525 (2) 8715 (3) 8945 (4) 9175 (5) 9295

141. 5 153 2430 ? 350053 3150801
(1) 29615 (2) 29832 (3) 30640 (4) 30998 (5) 31798

142. 240 163 108 75 64 ?
(1) 55 (2) 52 (3) 51 (4) 45 (5) None of these

143. 12.8 11.52 10.16 8.82 7.5 ? 4.92
(1) 6.20 (2) 6.14 (3) 5.84 (4) 5.44 (5) 5.12

Directions (Q. 144-148) : Find out the next number in place of question mark (?) in the following number series.

144. 1 8 21 42 73 116 ?
(1) 173 (2) 177 (3) 181 (4) 184 (5) 187

145. 15 96 160 209 245 ?
(1) 295 (2) 286 (3) 278 (4) 270 (5) 264

146. 5 16 25.8 37.8 52 68.4 ?
(1) 82.8 (2) 84 (3) 85.4 (4) 87 (5) 89.2

147. 12 37 43 92 100 ?
(1) 132 (2) 158 (3) 164 (4) 181 (5) 195

148. 1 28 92 217 433 776 ?
(1) 924 (2) 1148 (3) 1288 (4) 1304 (5) 1321

Directions (Q. 149–153) : In each of these questions a number series is given. In each series only one number is wrong. Find out the wrong number.

149. 4 11 36 96 218 429
(1) 11 (2) 36 (3) 96 (4) 218 (5) 429

150. 68 127 333 1232 5985 35640
(1) 127 (2) 333 (3) 1232 (4) 5985 (5) 35640

151. 14 17 35 83 188 379
(1) 17 (2) 35 (3) 83 (4) 188 (5) 379

152. 1248 1872 4680 16380 73712 405405
(1) 1872 (2) 4680 (3) 16380 (4) 73712 (5) 405405

153. 36 20 44 28 64 40 96 62
(1) 20 (2) 44 (3) 28 (4) 64 (5) 40

Directions (Q, 154-158) : What will come in place of question mark (?) in the following number series?

154. 123 277 459 669 907 ?
(1) 1179 (2) 1173 (3) 1167 (4) 1169 (5) None of these

155. 456.5 407 368.5 341 324.5 ?
(1) 321 (2) 319 (3) 317 (4) 323 (5) None of these

156. 23 42.2 80.6 157.4 311 ?
(1) 618.2 (2) 623.6 (3) 624.2 (4) 616.6 (5) None of these

157. 36 154 232 278 300 ?
(1) 304 (2) 313 (3) 308 (4) 307 (5) None of these

158. 24 536 487 703 678 ?
(1) 768 (2) 748 (3) 764 (4) 742 (5) None of these

Directions (Q. 159-163) : Find out the number in place of question mark(?) in the following number series.

159. 232 360 530 748 1020 ?
(1) 1350 (2) 1352 (3) 1354 (4) 1356 (5) 1358

160. 6 21 101 601 4201 ?
(1) 33601 (2) 33602 (3) 33603 (4) 33604 (5) 33605

161. 117 365 861 1853 3837 ?
(1) 7801 (2) 7802 (3) 7803 (4) 7804 (5) 7805

162. 15 66 321 1596 7971 ?
(1) 39842 (2) 39844 (3) 39846 (4) 39848 (5) 39850

163. 27 370 1099 2430 4627 ?
(1) 8002 (2) 8004 (3) 8006 (4) 8008 (5) 8010

Directions (Q. 164-168) : Find out the number in place of question mark(?) in the following number series.

164. 2 29 93 218 434 777 1289 ?
(1) 2015 (2) 2016 (3) 2017 (4) 2018 (5) 2019

165. 3 10 46 284 2282 22832 ?
(1) 273994 (2) 273996 (3) 273998 (4) 273992 (5) 273990

166. 13 39 73 115 165 223 ?
(1) 289 (2) 287 (3) 285 (4) 283 (5) 281

167. 13 19 50 168 696 3510 ?
(1) 21090 (2) 21092 (3) 21094 (4) 21096 (5) 21098

168. 11 31 55 83 115 151 ?
(1) 190 (2) 191 (3) 192 (4) 193 (5) 194

Directions (Q. 169-173) : Find out the number in place of question mark(?) in the following number series.

169. 429 351 281 219 165 ?
(1) 72 (2) 119 (3) 64 (4) 123 (5) 72

170. 900 810 448 392 180 ?
(1) 48 (2) 150 (3) 90 (4) 45 (5) 78

171. 330 261 200 147 102 ?
(1) 105 (2) 103 (3) 102 (4) 98 (5) 65

172. 66.5 93.5 112.5 123.5 126.5 ?
(1) 121.5 (2) 108.5 (3) 138.9 (4) 136.9 (5) 135.9

173. 39 48 53 54 51 ?
(1) 59 (2) 44 (3) 33 (4) 46 (5) 48

Directions (Q. 174-178) : Find out the next number in place of question mark (?) in the following number series.

174. 150 252 392 576 810 ?
(1) 1100 (2) 1200 (3) 1300 (4) 1089 (5) 1144

175. 100 3700 10900 21700 36100 ?
(1) 37528 (2) 44881 (3) 95964 (4) 78873 (5) 54100

176. 1482 1406 1332 ? 1190 1122
(1) 1352 (2) 1781 (3) 1260 (4) 3192 (5) 1159

177. 2 12 30 56 ? 132
(1) 78 (2) 88 (3) 90 (4) 84 (5) 81

178. 1023 1224 ? 1680 1935 2208
(1) 1395 (2) 1482 (3) 1443 (4) 1485 (5) 1681

Directions (Q. 179-183): In each of these questions a number series is given. In each series only one number is wrong. Find out the wrong number.

179. 1716 1320 1000 720 504 336 210
(1) 720 (2) 504 (3) 1000 (4) 210 (5) 336

180. 1217 1083 957 833 720 618 524
(1) 720 (2) 833 (3) 618 (4) 524 (5) 957

181. 16 47 199 771 2283 4585 4581
(1) 4581 (2) 199 (3) 4585 (4) 2283 (5) 771

182. 2769 2213 1737 1335 1000 810 576
(1) 810 (2) 1335 (3) 2213 (4) 576 (5) 1000

183. 165 286 363 396 385 350 231

(1) 350 (2) 363 (3) 396 (4) 231 (5) 286

Directions (Q. 184-188) : In each of these questions a number series is given. In each series only one number is wrong. Find out the wrong number.

184. 6821 5868 4879 4130 3345 2272 2171
(1) 4879 (2) 4130 (3) 2171 (4) 3345 (5) 2272

185. 1095 1217 1379 1508 1686 1842 2034
(1) 1508 (2) 1686 (3) 1842 (4) 2034 (5) 1379

186. 31.5 47.5 59.5 67.5 71.5 79.5 67.5
(1) 71.5 (2) 79.5 (3) 31.5 (4) 59.5 (5) 47.5

187. 15 8 35 24 63 49 99
(1) 35 (2) 63 (3) 49 (4) 24 (5) 8

188. 132 200 253 288 308 312 300
(1) 132 (2) 253 (3) 288 (4) 312 (5) 308

Directions (Q. 189-191) : What will come in place of question mark (?) in the following number series.

189. 53 74 123 100 145 ?
(1) 196 (2) 172 (3) 136 (4) 96 (5) 78

190. 145 180 395 444 813 ?
(1) 900 (2) 948 (3) 975 (4) 1015 (5) 1125

191. 12 24 84 112 220 ?
(1) 248 (2) 264 (3) 278 (4) 284 (5) 296

Directions (Q. 192-194): What will come in place of question mark (?) in the following number series?

192. 180 364 528 648 700 ?
(1) 840 (2) 800 (3) 760 (4) 720 (5) 660

193. 1 33 161 513 1249 ?
(1) 2213 (2) 2353 (3) 2463 (4) 2593 (5) 2603

194. 28 126 378 860 1720 ?
(1) 3066 (2) 2066 (3) 3056 (4) 3266 (5) None of these

195. What will come in place of question mark (?) in the given number series
7, 15, 53, 239, 1259, ?
(1) 7246 (2) 7312 (3) 7468 (4) 7549 (5) 7679

Directions (Q. 196-200) : Find out the number in place of question mark (?) in the following number series.

196. 529 841 961 1369 1681 1849 ?
(1) 2809 (2) 3249 (3) 2208 (4) 6424 (5) 2209

197. 1108 1117 1142 1191 ? 1481
(1) 1312 (2) 1272 (3) 1300 (4) 1204 (5) None of these

198. 841 961 1089 1225 1369 1521 ?
(1) 1785 (2) 1581 (3) 1681 (4) 1881 (5) 1781

199. 12 14 32 102' 416 2090 ?
(1) 15522 (2) 12552 (3) 13525 (4) 17552 (5) None of these

200. 384 381 372 345 264 ?
(1) 25 (2) 27 (3) 44 (4) 49 (5) None of these

Directions (Q. 201-205) : Find the number in place of question mark (?) in the following number series.

201. 3 81 ? 1029 2187 3993
(1) 375 (2) 648 (3) 192 (4) 575 (5) 243

202. 30 45 75 105 165 ?
(1) 185 (2) 205 (3) 215 (4) 195 (5) 230

203. 8 24 12 36 18 54 ?
(1) 64 (2) 79 (3) 34 (4) 37 (5) 27

204. 4320 720 144 ? 12 6 6
(1) 56 (2) 60 (3) 26 (4) 36 (5) 16

205. 26 63 124 215 342 ?
(1) 511 (2) 509 (3) 504 (4) 515 (5) 525

Directions (Q. 206-210): Find the number that will come in place of question mark (?) in the following number series.

206. 90 110 132 156 182 ?
(1) 207 (2) 307 (3) 309 (4) 323 (5) 210

207. 2 18 95 384 1155 ?
(1) 2212 (2) 2629 (3) 2735 (4) 2312 (5) 2412

208. 7 18 51 106 183 ?
(1) 282 (2) 395 (3) 295 (4) 280 (5) None of these

209. 37 42 57 82 117 ?
(1) 166 (2) 162 (3) 157 (4) 159 (5) None of these

210. 33 321 465 537 573 591 ?
(1) 600 (2) 610 (3) 590 (4) 595 (5) None of these

Directions (Q. 211-215): In each of these questions a number series is given. In each series only one number is wrong. Find out the wrong number,

211. 17 20 46 147 599 3015 18108
(1) 20 (2) 46 (3) 599 (4) 147 (5) 3015

212. 9 14 40 129 536 2705 16260
(1) 14 (2) 40 (3) 536 (4) 9 (5) 129

213. 8 18 64 272 1395 8424 59045
(1) 18 (2) 64 (3) 272 (4) 1395 (5) 8424

214. 90 135 286 750 2160 6405 19155
(1) 90 (2) 750 (3) 6405 (4) 286 (5) 2160

215. 17 36 132 635 3500 21750 153762
(1) 635 (2) 700 (3) 132 (4) 3500 (5) 36

Directions (Q. 216-220): In each of these questions a number series is given. In each series only one number is wrong. Find out the wrong number.

216. 3 14 40 84 155 258
(1) 84 (2) 14 (3) 40 (4) 155 (5) 258

217. $\frac{3}{2}$ $\frac{2}{3}$ $\frac{5}{12}$ $\frac{3}{14}$ $\frac{7}{30}$ $\frac{4}{21}$ $\frac{9}{56}$
(1) $\frac{3}{2}$ (2) $\frac{3}{14}$ (3) $\frac{5}{12}$ (4) $\frac{7}{30}$ (5) $\frac{9}{56}$

218. 6 6 $\frac{20}{3}$ $\frac{15}{2}$ $\frac{42}{5}$ $\frac{28}{3}$ $\frac{72}{11}$
(1) 6 (2) $\frac{20}{3}$ (3) $\frac{15}{2}$ (4) $\frac{28}{3}$ (5) $\frac{72}{11}$

219. 6 24 60 120 210 340 504
(1) 24 (2) 60 (3) 340 (4) 210 (5) 504

220. 3 4 16 75 366 1945 11886
(1) 16 (2) 366 (3) 75 (4) 1945 (5) 11886

Directions (Q. 221-225): In each of these questions a number series is given. In each series only one number is wrong. Find out that number.

221. 5 22 56 116 205 330 497
(1) 5 (2) 56 (3) 116 (4) 330 (5) 497

222. 14 29 50 77 110 150 194
(1) 14 (2) 29 (3) 77 (4) 150 (5) 194

223. 176 275 396 539 704 891 998
(1) 176 (2) 275 (3) 539 (4) 704 (5) 998

224. $\frac{10}{3}$ 10 $\frac{50}{3}$ $\frac{70}{3}$ 30 $\frac{118}{3}$ $\frac{130}{3}$
(1) 10 (2) $\frac{70}{3}$ (3) 30 (4) $\frac{118}{3}$ (5) $\frac{130}{3}$

225. $\sqrt{5625}$ $\sqrt{5776}$ $\sqrt{5929}$ $\sqrt{6085}$ $\sqrt{6241}$ $\sqrt{6400}$ $\sqrt{6561}$
(1) $\sqrt{5625}$ (2) $\sqrt{5929}$ (3) $\sqrt{6085}$ (4) $\sqrt{6400}$ (5) $\sqrt{6561}$

Directions (Q. 226-2230): What will come in place of question mark (?) in the following number series?

226. 2 123 223 ? 368 417
(1) 392 (2) 304 (3) 287 (4) 225 (5) 227

267. 16 896 1336 ? 1666 1721
(1) 1556 (2) 1566 (3) 1586 (4) 1436 (5) None of these

228. 19 46 110 235 ? 794
(1) 351 (2) 551 (3) 451 (4) 345 (5) 349

229. 13 36 70 ? 179 258
(1) 115 (2) 106 (3) 109 (4) 117 (5) 128

230. 679 1230 2332 3985 ? 8944
(1) 6819 (2) 6198 (3) 6109 (4) 6289 (5) 6189

Directions (Q. 231-233): In the following number series, only one number is wrong. Find out that number.

231. 2 6 9 36 39 200 205
(1) 6 (2) 36 (3) 205 (4) 200 (5) 39

232. 169 183 223 292 389 514 667
(1) 183 (2) 223 (3) 389 (4) 667 (5) 292

233. 243 258 288 334 393 468 558
(1) 558 (2) 258 (3) 334 (4) 393 (5) 468

Directions (Q. 234-238): In each of these questions a number series is given. In each series only one number is Wrong. Find out that number.

234. 32 75 144 244 567 800 1089
1) 32 (2) 75 (3) 244 (4) 800 (5) 1089

235. 15 $\frac{35}{8}$ $\frac{105}{16}$ $\frac{693}{80}$ $\frac{429}{40}$ $\frac{715}{56}$ $\frac{1615}{96}$

(1) $\frac{15}{8}$ (2) $\frac{105}{16}$ (3) $\frac{693}{80}$ (4) $\frac{715}{56}$ (5) $\frac{1615}{96}$

236. 12 13 25 38 63 104 164 265
(1) 63 (2) 25 (3) 38 (4) 104 (5) 265

237. 287496 274625 262144 246078 238328 226981 216000
(1) 287496 (2) 274625 (3) 262144 (4) 246078 (5) 216000

238. 42 63 94.5 141.75 212.92 318.9375 478.40625
(1) 94.5 (2) 63 (3) 42 (4) 212.92 (5) 478.40625

Directions (Q. 239-243): In each question a number series is given. In each series only one number is wrong. Find out that number.

239. $\frac{25}{12}$ $\frac{41}{20}$ $\frac{61}{30}$ $\frac{85}{40}$ $\frac{113}{56}$ $\frac{145}{72}$ $\frac{181}{90}$

(1) $\frac{25}{12}$ (2) $\frac{61}{30}$ (3) $\frac{113}{56}$ (4) $\frac{181}{90}$ (5) $\frac{85}{40}$

240. 14 39 84 156 258 399 584
(1) 14 (2) 156 (3) 84 (4) 258 (5) 584

241. 421875 438976 456533 474551 493039 512000 531441
(1) 421875 (2) 493039 (3) 474551 (4) 531441 (5) 512000

242. $\frac{9}{5}$ $\frac{35}{13}$ $\frac{94}{25}$ $\frac{189}{41}$ $\frac{341}{61}$ $\frac{559}{85}$ $\frac{855}{113}$

(1) $\frac{855}{113}$ (2) $\frac{35}{13}$ (3) $\frac{94}{25}$ (4) $\frac{341}{61}$ (5) $\frac{559}{85}$

243. $\frac{9}{4}$ 4 $\frac{35}{6}$ $\frac{59}{7}$ $\frac{77}{8}$ $\frac{104}{9}$ 13.5

(1) $\frac{9}{4}$ (2) $\frac{77}{8}$ (3) $\frac{35}{6}$ (4) $\frac{104}{9}$ (5) $\frac{59}{7}$

Directions (Q. 244-246): In the following number series, only one number is wrong. Find out that number.

244. 2 36 150 393 810 1452 2366
(1) 810 (2) 393 (3) 36 (4) 2 (5) 1452

245. 88 115 145 175 208 243 280
(1) 88 (2) 175 (3) 145 (4) 243 (5) 280

246. 448 294 180 100 48 19 4
(1) 4 (2) 180 (3) 294 (4) 100 (5) 19

Directions (Q. 247-251): In each of these questions a number series is given. In each series only one number is wrong. Find out that number.

247. 6 60 210 500 990 1716 2730
(1) 60 (2) 210 (3) 500 (4) 990 (5) 1716

248. 4 12 24 36 52 69 84
(1) 84 (2) 24 (3) 36 (4) 52 (5) 69

249. 8 12 18 27 40.5 60 91.125
(1) 60 (2) 18 (3) 40.5 (4) 91.125 (5) 27

250. 999 1331 1727 1098 2743 3375 4095
(1) 3374 (2) 1331 (3) 1098 (4) 3300 (5) 4095

251. 89 87 91 84 99 67 131

(1) 131 (2) 91 (3) 87 (4) 84 (5) 67

Directions (Q. 252-256): What will come in place of question mark (?) in the following number series?

252. 17 45 172 ? 5088 35602

(1) 712 (2) 784 (3) 804 (4) 850 (5) 904

253. 9 333 ? 785 929 1029

(1) 572 (2) 589 (3) 596 (4) 602 (5) 616

254. 1328 1722 2188 2732 3360 ?

(1) 4072 (2) 4075 (3) 4078 (4) 4081 (5) 4084

255. 13 ? 570 2846 11376 34116

(1) 84 (2) 91 (3) 95 (4) 98 (5) 102

256. 34 47 41 44 55 38 76 ?

(1) 29 (2) 27 (3) 25 (4) 22 (5) 18

Directions (Q. 257-259): What should come in place of question mark (?) in the following number series.

257. 10 22 8 24 6 ?

(1) 16 (2) 18 (3) 12 (4) 26 (5) None of these

258. 60.5 72 84.5 98 112.5 ?

(1) 125 (2) 122 (3) 126 (4) 127 (5) None of these

259. 96 107 129 162 206 ?

(1) 258 (2) 261 (3) 256 (4) 260 (5) 252

Directions (Q. 260-264): In each of these questions a number series is given. In each series only one number is wrong. Find out that number.

260. 2 12 36 81 150 252

(1) 2 (2) 81 (3) 36 (4) 150 (5) 252

261. 5 16 27 44 65 90

(1) 16 (2) 5 (3) 44 (4) 65 (5) 90

262. 4 2 0 -5 -12 -21

(1) 0 (2) 4 (3) 2 (4) -5 (5) -21

263. 101 123 149 179 218 251

(1) 251 (2) 123 (3) 179 (4) 218 (5) 101

264. 9 21 45 101 211 433 879

(1) 21 (2) 45 (3) 211 (4) 433 (5) 101

SHORT ANSWER

1. (2)	2. (4)	3. (2)	4. (5)	5. (1)	6. (2)	7. (3)	8. (4)
9. (2)	10. (1)	11. (4)	12. (4)	13. (1)	14. (5)	15. (3)	16. (3)
17. (5)	18. (5)	19. (1)	20. (3)	21. (3)	22. (1)	23. (4)	24. (5)
25. (1)	26. (3)	27. (1)	28. (2)	29. (3)	30. (4)	31. (2)	32. (3)
33. (1)	34. (5)	35. (2)	36. (3)	37. (4)	38. (1)	39. (2)	40. (2)
41. (1)	42. (2)	43. (3)	44. (1)	45. (3)	46. (2)	47. (5)	48. (2)
49. (1)	50. (3)	51. (3)	52. (2)	53. (1)	54. (5)	55. (1)	56. (5)
57. (3)	58. (1)	59. (3)	60. (2)	61. (3)	62. (2)	63. (1)	64. (2)
65. (5)	66. (4)	67. (2)	68. (1)	69. (4)	70. (3)	71. (3)	72. (5)
73. (2)	74. (4)	75. (3)	76. (2)	77. (1)	78. (5)	79. (1)	80. (4)
81. (2)	82. (1)	83. (2)	84. (4)	85. (2)	86. (2)	87. (1)	88. (4)
89. (3)	90. (4)	91. (2)	92. (3)	93. (2)	94. (1)	95. (5)	96. (2)
97. (1)	98. (3)	99. (5)	100. (4)	101. (2)	102. (4)	103. (5)	104. (1)
105. (2)	106. (4)	107. (4)	108. (1)	109. (2)	110. (1)	111. (4)	112. (3)
113. (1)	114. (1)	115. (4)	116. (3)	117. (2)	118. (4)	119. (2)	120. (4)
121. (3)	122. (1)	123. (3)	124. (4)	125. (2)	126. (3)	127. (5)	128. (1)
129. (5)	130. (3)	131. (2)	132. (1)	133. (3)	134. (3)	135. (2)	136. (4)
137. (5)	138. (3)	139. (3)	140. (2)	141. (5)	142. (5)	143. (1)	144. (1)
145. (4)	146. (4)	147. (4)	148. (3)	149. (3)	150. (1)	151. (2)	152. (4)
153. (5)	154. (2)	155. (2)	156. (1)	157. (5)	158. (4)	159. (2)	160. (1)
161. (5)	162. (3)	163. (1)	164. (4)	165. (3)	166. (1)	167. (4)	168. (2)
169. (2)	170. (2)	171. (3)	172. (1)	173. (2)	174. (1)	175. (5)	176. (3)
177. (3)	178. (3)	179. (3)	180. (2)	181. (4)	182. (5)	183. (1)	184. (2)
185. (1)	186. (1)	187. (4)	188. (2)	189. (5)	190. (1)	191. (2)	192. (5)
193. (4)	194. (1)	195. (5)	196. (5)	197. (1)	198. (3)	199. (2)	200. (5)
201. (1)	202. (4)	203. (5)	204. (4)	205. (1)	206. (5)	207. (4)	208. (1)
209. (2)	210. (1)	211. (3)	212. (2)	213. (2)	214. (4)	215. (1)	216. (3)
217. (2)	218. (5)	219. (3)	220. (2)	221. (2)	222. (4)	223. (5)	224. (4)
225. (3)	226. (2)	227. (1)	228. (3)	229. (4)	230. (5)	231. (5)	232. (1)
233. (3)	234. (3)	235. (5)	236. (4)	237. (4)	238. (4)	239. (5)	240. (2)
241. (4)	242. (3)	243. (5)	244. (2)	245. (3)	246. (5)	247. (3)	248. (5)
249. (1)	250. (2)	251. (4)	252. (4)	253. (2)	254. (3)	255. (3)	256. (1)
257. (4)	258. (5)	259. (2)	260. (2)	261. (1)	262. (3)	263. (4)	264. (2)

DETAIL - EXPLANATIONS

1. 2; The number should be 60.
   $+ 3^2 + 2, +4^2 + 3, + 5^2 + 4$ ...
2. 4; The number should be 416.
   $\times 1 + 5, \times 2 + 10, \times 3 + 15, \times 4 + 20$ ...
3. 2; The number should be 63.
   $(1 \times 2 \times 3) + 1, (2 \times 3 \times 4) + 2, (3 \times 4 \times 5) + 3$ ...
4. 5; The number should be 324.
   $1 \times 2^2 + 5, 2 \times 3^2 + 10, 3 \times 4^2 + 15, 4 \times 5^2 + 20$
5. 1; The number should be 58.
   $1^3 + 25, 2^3 + 50, 3^3 + 75, 4^3 + 100$ ...
6. 2; The number should be 738.
   $3^3 + 3, 6^3 - 6, 9^3 + 9, 12^3 - 12$...
7. 3; The number should be 652.
   $1440, 1440 - (17)^2 + 1, 1440 -,(15)^2 + 3, 1440 - (13)^2 + 5, 1440 - (11)^2 + 7$
8. 4; The number should be 174.
   $\times 3 + 5, \times 3 + 10, \times 3 + 15$
9. 2; The number should be 217.
   $\times 1 + 15, \times 2 + 20, \times 3 + 25, \times 4 + 30$
10. 1; The number should be 9277.
    $+(21)^3, +(18)^3, +(15)^3$
11. 4; $1 \times 7 = 7$
    $7 \times 7 = 49$
    $49 \times 7 = 343$
    $343 \times 7 = 2401$
12. 4; $13 + 2^2 + 3 = 20$
    $20 + 4^2 + 3 = 39$
    $39 + 6^2 + 3 = 78$
    $78 + 8^2 + 3 = 145$
    $145 + 10^2 + 3 = 248$
13. 1; $12 \times 2 + 11 = 35$
    $35 \times 2 + 11 = 81$
    $81 \times 2 + 11 = 173$
    $173 \times 2 + 11 = 357$
    $357 \times 2 + 11 = 725$
14. 5; $3 + 97 = 100$
    $100 + 197 = 297$
    $297 + 297 = 594$
    $597 + 397 = 991$
    $991 + 497 = 1488$
15. 3; $112 + 7 \times 1 = 119$
    $119 + 7 \times 3 = 140$
    $140 + 7 \times 5 = 175$
    $175 + 7 \times 7 = 224$
    $224 + 7 \times 9 = 287$
16. 3; The number should be 81.
    The series is $+ 1^2 \times 1, + 2^2 \times 2, + 3^2 \times 3$...
17. 5; The number should be 247.
    The series is $21 + 1^2, 42 + 3^2, 63 + 5^2, 84 + 7^2$...
18. 5; The number should be 287.
    The series is $+ 1^2 + 1^3, + 2^2 + 2^3, + 3^2 + 3^3$...
19. 1; The number should be 19.
    The series is $\times 2 + 13, \times 3 + 26, \times 4 + 39$...
20. 3; The number should be 106.
    The series is $+ 1^4 + {}^{24}, + 3^4, + 4^4$...
21. 3; The number should be 1092.
    $\times 5 + 9, \times 5 + 18, \times 5 + 27$ ...
22. 1; The number should be 142.
    $+ 5^3, + 6^3, + 7^3, + 8^3$...
23. 4; The number should be 1487.
    $\times 3 - 4, \times 4 - 5, \times 5 - 6$ ...
24. 5; The number should be 888.
    $+ 4^2, + 8^2, + 12^2$...
25. 1; The number should be 22.
    $\times 3 - 2, \times 4 - 3, \times 5 - 4$ ...
26. 3; The number should be 123.
    $\times 1 + 3, \times 2 + 6, \times 3 + 9$ ...
27. 1; The number should be 11.
    $\times 1 + 5, \times 2 + 10, \times 3 + 15$ ...
28. 2; The number should be 63.
    $+ 1 \times 2, + 3 \times 3 + 5 \times 4 + 7 \times 5$ ...
29. 3; The number should be 480.
    $- 45 \times 3, - 40 \times 3, - 35 \times 3$ ...
30. 4; The number should be 2420.
    $+1^3 \times 2, + 2^3 \times 3, + 3^3 \times 4$ ...
31. 2; $-16^3, + 15^3, - 14^3, + 13^3, - 12^3$
32. 3; $\times 2 - 3, \times 4 - 6, \times 6 - 10,$
    $\times 8 - 15, \times 10 - 21$
33. 1; $\times 9 - 1, \times 8 - 3, \times 7 - 5, \times 6 - 7, \times 5 - 9$
34. 5; $+ 1^3, + 2, + 3^3, + 4, + 5^3$
35. 2; $+ 10, + 2^3, + 12, + 4^3, + 14, + 6^3$
36. 3; 17 19 33 67 129 227
    $+ 2^2 - 2 + 4^2 - 2 + 6^2 - 2 + 8^2 - 2 + 10^2 - 2$
37. 4; 35 256 451 620 763 880
    221 195 169 143 117
    $- 26 \quad - 26 \quad - 26 \quad - 26$

38. 1
39. 2
40. 2
41. 1; Series is ×1 + 6;×2 + 12, ×3 + 18 ...
42. 2; Series is ×1 + 9^2, ×2 + 8^2, ×3 + 7^2, ×4 + 6^2...
43. 3; Series is ×0.2, ×1.2, ×2.2, ×3.2 ...
44. 1; Series is + 978, + 1956, + 2934, + 3912 ...
45. 3; Series is ×3 - 6, ×3 - 12, ×3 - 18, ×3 - 24 ...
46. 2; +11^3, + 12^3, + 13^3, + 14^3...
47. 5; ×1 + 51, ×2 + 102, ×3 + 153 ...
48. 2; ×1.5, ×3, ×4.5, ×6 ...
49. 1; + 8 ×1, + 16 × 2, + 24 × 3 ...
50. 3; + 2^5, + 3^5, + 4^5 ...
51. 3; This series is a combination of two series:

+117, +57, +234, +114, +351, +171

52. 2; ×2 + 4, ×3 + 8, ×4 + 12 ...
53. 1; ×1.5, ×2, ×2.5, ×3
54. 5; +4^3, +8^3, +12^3, +16^3
55. 1; -2^4, -3^4, -4^4, -5^4
56. 5; The number is 494.
    10^2, +11, +12^2, +13, +14^2, +15 ...
57. 3; The number is 2268.
    +17^2, +19^2, +21^2, +23^2, +25^2 ...
58. 1; The number is 14612.
    ×2 + 16, ×3 + 26, ×4 + 36, ×5 + 46, ×6 + 56 ...
59. 3; The number is ×2 + 27, ×2 + 54, ×2 + 81, ×2 + 108, ×2 +135 ...
60. 2; The number is + (4 × 3), +(5 × 4), +(6 × 5), +(7 × 6), +(8 × 7) ...
61. 3; The number is 1377.
    215 × 1 + 87; 215 × 2 + 87; 215 × 3 + 87; 215 × 4 + 87; 215 × 5 + 87; 215 × 6 + 87...
62. 2; The number is 772.
    192 + 100 = 292
    292 + 108 = 400
    400 + 116 = 516
    516 + 124 = 640
    640 + 132 = 772
63. 1; The number is 89.
    19; + 10; + 12; + 14; + 16, + 18...
64. 2; The series is:
    3 × 2^8 = 768
    4 × 2^7 = 512
    5 × 2^6 = 320
    6 × 2^5 = 192
    7 × 2^4 = 112
    8 × 23 = 64
65. 5; The series is:
    1^3 + 17
    2^3 + 34
    3^3 + 51
    4^3 + 68
66. 4; × 3 + 1, × 4 + 2, × 5 + 3...
67. 2; + 4 × 2, + 8 × 3, + 12 × 4
68. 1; The series is based on' combination of two series. S_1= +13, +26, +39... and S_2 = +7, +14, +21...
69. 4; +36, +72, +144, +288...
70. 3; $(22)^2$, $(27)^2$, $(32)^2$, $(37)^2$...
71. 3; The series is + 7^2 + 14^2, + 21^2, + ...
72. 5; The series is 40 × 1.7, 80 × 2.7, 120 × 3.7, 160 × 4.7...
73. 2; The series is 2^2 + 3, 4^2 + 5, 6^2 + 7, 8^2 + 9...
74. 4; The series is 1 × 3, 5 × 7, 9 × 11, 13 × 15...
75. 3; The series is 1^2 + 1, 3^2 + 3, 5^2 + 5, 7^2 + 7...
76. 2; +4^2, +6^2, +8^2, +10^2, +12^2,
77. 1; × 12 - 11, × 10 - 9, × 8 - 7, × 6 - 5
78. 5; × 3 - 5, × 3 - 5, × 3 - 5, × 3 - 5
79. 1; 99^2, 98^2, 97^2, 96^2, 95^2, 94^2
80. 4; 7^3 - 4 = 339
    9^3 + 4 = 733
    11^3 - 4 = 1327
    13^3 + 4 = 2201
    15^3 - 4 = 3371
    17^3 + 4 = 4917
81. 2; $(1)^4$ + 2, $(2)^4$ - 2, $(3)^4$ + 2, $(4)^4$ - 2
82. 1; × 2 - 5, × 3 - 10, × 4 - 15
83. 2; 2^4 + 3^3, 3^4 + 4^3, 4^4 + 5^3, 5^4, 5^3 + 6^3
84. 4; 3^3, 3^3 + 11, 4^3, 4^3 + 22, 5^3 + 33
85. 2; 12, 12 + (12 × 2 + 3) = 12 + 27 = 39
    39 + (39 × 2 + 3) = 39 + 81 = 120
    120 + (120 × 2 + 3) = 120 + 243 = 363
86. 2;

5 15 35 75 155 (?)

+10 +20 +40 +80 +160

87. 1;

3 6 18 72 360 ?

×2 ×3 ×4 ×5 ×6

88. 4; 88 472 347 283 256 (?)

-216 -215 -64 -27 -8
$(6)^3$ $(5)^3$ $(4)^3$ $(3)^3$ $(2)^3$

89. 3; The series is + 1^3 + 2^2, + 2^3 + 3^2, + 3^3 + 4^2...
90. 4; The series is – 1^3 × 2, –2^3 × 3, – 3^3 × 4...
91. 2; The series is ×3 – 9, × 3 – 19, × 3 – 29...
92. 3; The series is + $(111)^2$, + $(101)^2$, + $(91)^2$, + $(81)^2$...
93. 2; The series is × 0.2, × 0.3, × 0.4, × 0.5...
94. 1; The series is +(1^3 + 2^3), +(2^3 + 3^3), + (3^3 + 4^3)...
95. 5; The series is + (6 × 2), + (18 × 2), + (54 × 2)...
96. 2; The series is +4^2, +8^2, +12^2, + 16^2...
97. 1; The series is -32^2, -28^2, -24^2, -20^2...
98. 3; The series is ×2 + 5, ×2 + 10, ×2 + 15...
99. 5; The series is 3 × 24, 5 × 19, 7 × 17, 9 × 15, 11 × 13, 13 × 11...
100. 4; The series is +2^4, +3^4, +4^4, +5^4...
101. 2; The series is ×3 + 8, ×3 + 16, ×3 + 24...
102. 4; The series is 69^2 + 69, 67^2 + 67, 65^2 + 65, 63^2 + 63...
103. 5; The series is -2^3 + 1, -3^3 + 2, -4^3 + 3, -5^3 + 4...
104. 1; The number should be 5555 in place of 5531. -7^2, -9^2, -11^2, -13^2, -15^2, -17^2 ...
105. 2; The number should be 21 in place of 426. +1, +2, +4, +8, +16, +32
106. 4; The number should be 770 in place of 760. ×1 + 2, ×2 + 4, ×3 + 6, ×4 + 8, ×5 + 10, ×6+ 12, ...
107. 4; The series is 0^2 + 4, 1^2 + 2, 3^2 + 0, 6^2 -2, 10^2 - 4, 15^2 - 6, 21^2 - 8 ...
Hence, 435 should be replaced with 433
108. 1; The number should be 2 in place of 1 ÷ 3.5, ÷3, ÷2.5, ÷2, ÷1.5, ÷1, ...
109. 2; The series is ×2 - 4, ×4 - 8, ×6 - 12, ×8 - 16, ×10 - 20...
110. 1; The series is ×3 + 1, ×7 + 2, ×11 + 3, ×15 + 4...
111. 4; The series is ×10 - 3, ×9 - 6, ×8 - 9, ×7- 12, ×6 - 15...
112. 3; The series is ×8 + 13, ×7 + 26, ×6 + 39, ×5 + 52, ×4 + 65
113. 1; The series is +9^3, +8^3, +7^3, +6^3, +5^3...
114. 1; The series is 2 × 9^2 - 1, 2 × 10^2 - 1, 2 × 11^2 -1, 2 × 12^2 -1, 2 × 13^2 - 1, 2 × 14^2 - 1,
115. 4; The series is 141, +$(14)^3$, +$(12)^3$, +$(10)^3$...
116. 3; The series is ×2.5, +4, ×2.5, +4...
117. 2; 15 × 2.9 = 43.5
15 × 3.8 = 57
15 × 4.7 = 70.5
15 × 5.6 = 84
15 × 6.5 = 97.5
15 × 7.4 = 111
118. 4; The series is 5, 5 + 9^2 + 1 = 87, 87 + 8^3 + 2 = 601, 601 + 7^4 + 3 = 3005, 3005 + 6^5 + 4 = 10785, 10785 + 5^6 + 5
119. 2; The series is 89^2 + 1, 88^2 + 2, 87^2 + 3,..
120. 4; The series is 7 + 7^2- 2, 8 + 8^2- 4, 9 + 9^2-6, 10+10^2 - 8...
121. 3; The series is +14, +42, +126, +378...
122. 1; The series is +11^3, +9^3, +7^3, +5^3...
123. 3; 36 × 2 + 5 = 77,
∴ 77 × 3 + 10 = 241,
∴ 241 × 4 + 15 = 979, ...
124. 4; The series is $(11)^3$ - 11, $(10)^3$ - 10, $(9)^3$ - 9...
125. 2; The series is × 9 + 1, × 8 + 3, × 7 + 5...
126. 3; The series is 9^2, 8^3, 7^4, 6^5, 5^6...
127. 5; The series is -119, -238, -357, -476...
128. 1; The series is × 3 - 9, × 3 - 8, × 3 - 7, × 3 - 6...
129. 5; The series is + 17^2 - 17, + 15^2 - 15, + 13^2 - 13 ...
130. 3; The series is +8^3, +12^3, +16^3, +20^3, ...
131. 2; The series is 2^2 + 4^2, 6^2 + 8^2, 10^2 + 12^2, 14^2 + 16^2 ...
132. 1; The series is -24^2, -21^2, -18^2, -$I5^2$ ...
133. 3; The series is +10^3 - 10, 9^3 - 9, +8^3 -8 ...
134. 3; - 20^2, - 16^2, -12^2, - 8^2, - 4^2
135. 2; + 46, + 92, + 138, + 184, + 230
136. 4; +(11×1+0), +(11×3+2), +(11×5+4), +(11×7+6), +(11×9+8), ...
137. 5; The given series is a combination of two series.
Pattern I: 454 648 842 1036
194 added in each subsequent term.
Pattern II: 327 521 715
194 added in each subsequent term.
Hence 713 should be replaced with 715.
138. 3; +13.5, +27, +54, +108, +216, +432
Hence, 168 should be replaced with 167.
139. 3; The series is +3^2, +5^2, +7^2, +9^2, +11^2, + 13^2, +15^2 ...
140. 2; The series is +35^2, +40^2, +45^2, +50^2, + 55^2 ...
141. 5; The series is (+2^2) × 17, (+3^2) × 15, (+4^2) × 13 ...
142. 5; The series is 240, (240 + 2^2) - 9^2 = 163,
(163 + 3^2) - 8^2 = 108,
(108 + 4^2) - 7^2 = 75, (75 + 5^2) - 6^2 = 64, (64 + 6^2) - 5^2 = 75
143. 1; The series is 12.8 × 0.9, 12.7 × 0.8, 12.6 ×

0.7, 12.5 × 0.6...

144. 1; The series is + (2^2 + 3), + (3^2 + 4), + (4^2 + 5), + (6^2 + 7) ...

145. 4; The series is +9^2, +8^2, +7^2 ...

146. 4; The series is 5, 5 × 3.2, 6 × 4.3, 7 × 5.4, 8 × 6.5, 9 × 7.6, 10 × 8.7 ...

147. 4; The series is +5^2, +6, +7^2, +8, +9^2, + 10...

148. 3; 1 + 3^3 = 28; 28 + 4^3 = 92; 92 + 5^3 = 217; 217 + 6^3 = 443; 443 + 7^3 = 779; 779 + 8^3 = 1288

149. 3; The series is +2^3 – 1, +3^3 – 2, +4^3 – 3...

150. 1; The series is (68 – 5) × 2, (126 – 15) ×13, (333 –25)× 4, ...

151. 2; The series is (+2^3 – 5), (+3^3 – 10), (+4^3 – 15), ...

152. 4; The series is ×1.5, ×2.5, ×3.5 ×4.5...

153. 5; The series is ×0.5 + 2, ×2 + 4, ×0.5 + 6, ×2 + 8...

154. 2; The series is +154, +182, +210, +238, +266 ...

155. 2; The series is -49.5, – 38.5, – 27.5, – 16.5, – 5.5 ...

156. 1; The series is +19.2, + 38.4, + 76.8, +153.6 ...

157. 5; The series is +118, +78, +46, +22, +6 ...
The number should be 300 + 6 = 306

158. 4; The series is +8^3, – 7^2, +6^3, – 5^2, +4^3 ... The number should be 678 + 64 = 742

159. 2; The series is 6^3 + 16, 7^3 + 17, 8^3 + 18, 9^3 + 19 ...

160. 1; The series is ×4 - 3, × 5 -4, ×6 - 5 ...

161. 5; The series is +248, +496, +992, +1984

162. 3; The series is ×5 - 9

163. 1; The series is 27
27 + 7^3 = 370
370 + 9^3 = 1099
1099 + 11^3 = 2430
2430 + 13^3 = 4627
4627 + 15^3 = 8002

164. 4; The series is +3^3, +4^3, +5^3, +6^3 ...

165. 3; The series is × 2 + 4, × 4 + 6, × 6 + 8, × 8 + 10 ...

166. 1; The series is (2 × 4) + 5 = 13
(4 × 6) + 15 = 39, (6 × 8) + 25 = 73
(8 × 10) + 35 = 115, (10 × 12) + 45 = 165 ...

167. 4; The series is ×1 + 6, ×2 + 12, ×3 + 18, × 4 + 24 ...

168. 2; The series is (5 × 1.2) + 5 = 11, (15 × 1.4) + 10 = 31, (25 × 1.6) + 15 = 55, (35 × 1.8) + 20 = 83
(45 × 2.0) + 25 = 115, (55 × 2.2) + 30 = 151
(65 × 2.4) + 35 =191

169. 2; The series is (21^2 – 12, (19^2 – 10 (17^2 – 8, (15^2 – 6, (13^2 – 4, (11^2 – 2, ...

170. 2; The series is (10^3 – (10^2, (9^3 + (9^2 (8^3 – (8^2, (7^3 + (7^2, (6^3 – (6^2, (5^3 + (5^2...

171. 3; The series is (17 × 19 + 7), (15 × 17 + 6), (13 × 15 + 5), (11 × 13 + 4), (9 × 11 + 3),

172. 1; The series is 7 × 9.5, 11 × 8.5, 15 × 7.5, 19 × 6.5, 23 × 5.5, 27 × 4.5, ...

173. 2; The series is (6 × 9 - 15), (8 × 8 - 16), (10 × 7 - 17), (12 × 6 - 18), (14 × 5 - 19) (16 × 4 - 20), (18 × 3 - 21), ...

174. l; The series is 5^3 + 5^2, 6^3 + 6^2, 7^3 + 7^2, 8^3 + 8^2, 9^3 + 9^2, 10^3 + 10^2 ...
There should be 1100 in place of (?) mark.

175. 5; The series is + (3600 × 1), + (3600 × 2), + (3600 × 3), + (3600 × 4), + (3600 × 5), ...
There should be 54100 in place of (?) mark.

176. 3; The series is (39^2 - 39), (38^2 - 38), (37^2 - 37), (36^2 - 36), (35^2 - 35), (34^2 - 34)
There should be 1260 in place of (?) mark.

177. 3; The series is (1 × 2), (3 × 4), (5 × 6), [7 × 8), (9 × 10), (11 × 12), ...
There should be 90 in place of (?) mark.

178. 3; The series is (31 × 33), (34 × 36), (37 × 39), (40 × 42), (43 × 45), ...
There should be 1443 in place of (?) mark.

179. 3; The series is (12^3 - 12), (11^3 - 11), (10^3 - 10), (9^3 - 9), (8^3 - 8), (7^3 - 7), (6^3 - 6),....
There should be 990 in place of 1000.

180. 2; The series is 35^2 - (3 + 5), 33^2 - (3 + 3), 31^2 - (3 + 1), 29^2 - (2 + 9), 27^2 - (2 + 7), 25^2 - (2 + 5), 23^2 - (2 + 3) ...
There should be 830 in place of 833.

181. 4; The series is 16 × 6 - 7^2, 47 × 5 - 6^2, 199 × 4 - 5^2, 771 × 3 - 4^2, 2297 × 2 - 3^2, 4585 × 1 - 2^2
There should be 2297 in place of 2283.

182. 5; The series is 14^3 + (1 + 4)^2, 13^2 + (1 + 3)^2, 12^3 + (1 + 2)^2, 11^3 + (1 + l)^2, 10^3 + (1 + 0)^2, 9^3 + (9 + 0)^2, 8^3 + 8^2
There should be 1001 in place of 10001.

183. 1; The series is 15 × 11,13 × 22, 11 × 33, 9 × 44, 7 × 55, 5 × 66, 3 × 77.
There should be 330 in place of 350.

184. 2; The series is 19^3 - 38, 18^3 + 36, 17^3 - 34, 16^3 + 32, 15^3 - 30, 14^3 + 28, 13^3 - 26 ...
There should be 4128 in place of 4130

185. 1; The series is 33^2 + (3 + 3), 35^2 - (3 + 5), 37^2 + (3 + 7), 39^2 - (3 + 9), 41^2 + (4 + 1), 43^2 - (4 + 3), 45^2 + (4 + 5) ...
There should be 1509 in place of 1508

186. 1; The series is 21 × 1.5, 19 × 2.5, 17 × 3.5; 15 × 4.5, 13 × 5.5, 11 × 6.5, 9 × 7.5 ...
There should be 71.5 in place of 79.5

187. 4; The series is 3^2 + 6, 4^2 - 8, 5^2 + 10, 6^2 - 12, 7^2 + 14, 8^2 - 16, 9^2 + 18, ...
There should be 48 in place of 49.

188. 2; The series is 44 × 3, 40 × 5, 36 × 7, 32 × 9, 28 × 11, 24 × 13, 20 × 15 ...
There should be 252 in place of 253.

189. 5; The series is 16 × 3 + 5, 14 × 6 - 10, 12 × 9 + 15, 10 × 12-20 ...

190. 1; The series is $5^3 + 5 + 15$, $6^3 - 6 - 30$, $7^3 + 7 + 45$, $8^3 - 8 - 60$, $9^3 + 9 + 75$ ...

191. 2; The series is 16 × 0.5 + 4, 32 × 1.0 - 8, 48 × 1.5 + 12, 64 × 2 - 16 ...

192. 5; The series is (12 × 7.5) × 2, (14 × 6.5) × 4, (16 × 5.5) × 6, (18 × 4.5) × 8 ...

193. 4; The series is $(1^4 \times 2) - 1$, $(2^4 \times 2) + 1$, $(3^4 \times 2) - 1$, $(4^4 \times 2) + 1$ ...

194. 1; The series is $(3^3 \times 1) + 1$, $(4^3 \times 2) - 2$, $(5^3 \times 3) + 3$, $(6^3 \times 4) - 4$

195. 5; The series is $\times 2 + 1^3$, $\times 3 + 2^3$, $\times 4 + 3^3$, $\times 5 + 4^3$...

196. 5; The series is 23^2, 29^2, 31^2, 37^2 ...

197. 1; The series is $+3^2$, $+5^2$, $+7^2$, $+11^2$, $+13^2$, ...

198. 3; The series is +120, + 128, + 136, +... + 160, ...

199. 2; The series is ×1 + 2, ×2 + 4, ×3 + 6, ×4 + 8, ×5 + 10, ×6 + 12 ...

200. 5; The series is -3, -9, -27, -81, -243 ...

201. 1; The series is $1^3 \times 3$, $3^3 \times 3$ $5^3 \times 3$, $7^3 \times 3$, ...

202. 4; Each number is a prime number multiplied by 15.
Thus, the series is 15 × 2, 15 × 3, 15 × 5, 15 × 7, 15 × 11, ...

203. 5; The series is ×3, ÷2, ×3, ÷2, ...

204. 4; The series is ÷6, ÷5, ÷4, ÷3 ...

205. 1; The series is $(3^3 - 1)$, $(4^3 - 1)$, $(5^3 - 1)$, $(6^3 - 1)$, $(7^3 - 1)$ ...

206. 5; The series is +20, +22, +24, +26, +28 ...

207. 4; The series is 2 × 6 + 6 = 18
18 × 5 + 5 = 95
95 × 4 + 4 = 384
384 × 3 + 3 = 1155
1155 × 2 + 2 = 2312

208. 1; The series is +(11 × 1), +(11 × 3), +(11 × 5), +(11 × 7)...

209. 2; The series is 37 + (5 × 1) = 42
42 + (5 × 3) = 57
57 + (5 × 5) = 82
82 + (5 × 7) = 117
117 + (5 × 9) = 162

210. 1; The series is +(9 × 32), +(9 × 16), +(9 × 8), +(9 × 4), (9 × 2) ...

211. 3; The number should be 600 in place of 599.
The series is ×1 + 3, ×2 + 6, ×3 + 9, ...

212. 2; The number should be 38 in place of 40.
The series is ×1 + 5, ×2 + 10, ×3 + 15 ...

213. 2; The number should be 63 in place of 64.
The series is (8 + 1) × 2, (18 + 3) × 3, (63 + 5) × 4, ...

214. 4; The number should be 285 in place of 286.
The series is (90 - 45) × 3, (135 - 40) × 3, (285 -35) × 3, ...

215. 1; The number should be 636 in place of 635.
The series is $(17 + 1^3) \times 2$, $(36 + 2^3) \times 3$, $(132 + 3^3) \times 4$, $(636 + 4^3) \times 5$, ...

216. 3; The series is $1 + 1^2 + 1^3$, $2 + 2^2 + 2^3$, $3 + 3^2 + 3^3$, $4 + 4^2 + 4^3$, $5 + 5^2 + 5^3$, $6 + 6^2 + 6^3$.
There should be 39 in place of 40.

217. 2; The series is
$\frac{3}{1\times 2} = 3, \frac{4}{2\times 3} = \frac{2}{3}, \frac{5}{3\times 4} = \frac{5}{12},$
$\frac{6}{4\times 5} = \frac{3}{10}, \frac{7}{5\times 6} = \frac{7}{30}, \frac{8}{6\times 7} = \frac{4}{21}, \frac{9}{7\times 8} = \frac{9}{56}.$
There should be $\frac{3}{10}$ in place of $\frac{3}{14}$.

218. 5; The series is
$\frac{3\times 2}{1} = 6, \frac{4\times 3}{2} = 6, \frac{5\times 4}{3} = \frac{20}{3},$
$\frac{6\times 5}{4} = \frac{15}{2}, \frac{7\times 6}{5} = \frac{42}{5}, \frac{8\times 7}{6} = \frac{28}{3}, \frac{9\times 8}{7} = \frac{72}{7}$
There should be $\frac{72}{7}$ in place of $\frac{72}{11}$.

219. 3; The series is $2^3 - 2 = 6$, $3^3 - 3 = 24$, $4^3 - 4 = 60$, $5^3 - 5 = 120$, $6^3 - 6 = 210$, $7^3 - 7 = 336$, $8^3 - 8 = 504$
There should be 336 in place of 340.

220. 2; The series is $3 \times 1 + 1^3 = 4$, $4 \times 2 + 2^3 = 16$, $16 \times 3 + 3^3 = 75$, $75 \times 4 + 4^3 = 364$, $364 \times 5 + 5^3 = 1945$, $1945 \times 6 + 6^3 = 11886$
There should be 364 in place of 366.

221. 2; The series is 3 × 2 × 1 - 1 = 5, 4 × 3 × 2 - 2 = 22, 5 × 4 × 3 - 3 = 57,6 × 5 × 4 - 4 = 116, 7 × 6 × 5 - 5 = 205, 8 × 7 × 6 - 6 = 330, 9 × 8 × 7 - 7 = 497. Hence, 56 should be replaced by 57.

222. 4; The series is $3^2 + 2^2 + 1^2 = 14$, $4^2 + 3^2 + 2^2 = 29$, $5^2 + 4^2 + 3^2 = 50$, $6^2 + 5^2 + 4^2 = 77$, $7^2 + 6^2 + 5^2 = 110$, $8^2 + 7^2 + 6^2 = 149$, $9^2 + 8^2 + 7^2 = 194$. Hence, 150 should be replaced by 149.

223. 5; The series is 44 × 4 = 176, 55 × 5 = 275, 66 × 6 = 396, 77 × 7 = 539, 88 × 8 = 704, 99 × 9 = 891, 110 × 10 = 1100.

Hence, 998 should be replaced by 1100.

224. 4; The series is $\frac{5\times2}{3}=\frac{10}{3}, \frac{15\times2}{3}=10,$

$\frac{25\times2}{3}=\frac{50}{3}, \frac{35\times2}{3}=\frac{70}{3}, \frac{45\times2}{3}=30,$

$\frac{55\times2}{3}=\frac{110}{3}, \frac{65\times2}{3}=\frac{130}{3}$

There should be $\frac{110}{3}$ in place of $\frac{118}{3}$.

225. 3; The series is $\sqrt{(75)^2}=\sqrt{625},$

$\sqrt{(76)^2}=\sqrt{5776}, \sqrt{(77)^2}=\sqrt{5929},$

$\sqrt{(78)^2}=\sqrt{6084}, \sqrt{(79)^2}=\sqrt{6241},$

$\sqrt{(80)^2}=\sqrt{6400}, \sqrt{(81)^2}=\sqrt{6561}$

There should be $\sqrt{6084}$ in place of $\sqrt{6085}$.

226. 2; The series is $+11^2, +10^2, +9^2, +8^2, +7^2 \ldots$
Hence, there should be 304 in place of question mark.

227. 1; The series is + 880, + 440, + 220, + 110, + 55, ...
Hence, there should be 1556 in place of question mark.

228. 3; The series is $+3^3, +4^3, +5^3, +6^3, +7^3, \ldots$
Hence, there should be 451 in place of question mark.

229. 4; The series is $+(5^2-2), +(6^2-2), +(7^2-2), +(8^2-2), \ldots$
Hence, there should be 117 in place of question mark.

230. 5; The series is + 551, + 1102, + 1653, + 2204, + 2755, ...
There should be 6189 in place of question mark.

231. 5; The series is ×3, +3, ×4, +4, ×5, +5...
There should be 40 in place of 39.

232. 1; +(13 × 1 + 0), +(13 × 3 + 2), +(13 × 5 + 4), +(13 × 7 + 6), ...
Hence, 183 should be replaced with 182.

233. 3; The series is + 15, + 30, + 45, + 60, + 75,
Hence, 334 should be replaced with 333.

234. 3; The series is $1 + 2^2 + 3^3 = 32$, $2 + 3^2 + 4^3 = 75$, $3 + 4^2 + 5^3 = 144$, $4 + 5^2 + 6^3 = 245$, $6 + 7^2 + 8^3 = 567$, $7 + 8^2 + 9^3 = 800$, $8 + 9^2 + 10^3 = 1089$.
Hence, there should be 245 in place of 244.

235. 5; The series is

$\frac{1\times3\times5}{2\times4}, \frac{3\times5\times7}{4\times6}, \frac{5\times7\times9}{6\times8}, \frac{7\times9\times11}{8\times10}$

$\frac{9\times11\times13}{10\times12}, \frac{11\times13\times15}{12\times14}, \frac{13\times15\times17}{14\times16}$

$=\frac{15}{8}, \frac{35}{8}, \frac{105}{16}, \frac{693}{80}, \frac{429}{40}, \frac{715}{56}, \frac{3315}{224}$

Hence, there should be $\frac{3315}{224}$

in place of $\frac{1615}{96}$

236. 4; The series is 12, 13, 13 + 12 = 25, 25 + 13 = 38, 38 + 25 = 63, 63 + 38 = 101, 101 + 63 = 164, 164 + 101 = 265
Hence there should be 101 in place of 104.

237. 4; The series is $66^3 = 287496$, $65^3 = 274625$, $64^3 = 262144$, $63^3 = 250047$, $62^3 = 238328$, $61^3 = 226981$, $60^3 = 216000$
The re should be 250047 in place of 246078.

238. 4; The series is 42 × 1.5 = 63,
63 × 1.5 = 94.5, 94.5 × 1.5 = 141.75,
141.75 × 1.5 = 212.625, 212.625 × 1.5 = 318.9375,
318.9375 × 1.5 = 478.40625
Hence, there should be 212.625 in place of 212.92.

239. 5; The series is

$\frac{3^2+4^2}{3\times4}, \frac{4^2+5^2}{4\times5}, \frac{5^2+6^2}{5\times6},$

$\frac{6^2+7^2}{6\times7}, \frac{7^2+8^2}{7\times8}, \frac{8^2+9^2}{8\times9}, \frac{9^2+10^2}{9\times10}$

So, $\frac{25}{12}, \frac{41}{20}, \frac{61}{30}, \frac{85}{42}, \frac{113}{56}, \frac{145}{72}, \frac{181}{90}$

$\therefore$ Hence, there should be $\frac{85}{42}$ in place of

$\frac{85}{40}$.

240. 2; The series is $2^3 + 2^2 + 2$, $3^3 + 3^2 + 3$, $4^3 + 4^2 + 4$, $5^3 + 5^2 + 5$, $6^3 + 6^2 + 6$, $7^3 + 7^2 + 7$, $8^3 + 8^2 + 8$ Thus, 14, 39, 84, 155, 258, 399,584.
Hence, there should be 155 in place of 156.

241. 4; The series is $(75)^3$, $(76)^3$, $(77)^3$, $(78)^3$ $(79)^3$, $(80)^3$, $(81)^3$
The re should be 474552 in place of 474551.

242. 3; The series is

$$\frac{1^3+2^3}{1^2+2^2}, \frac{2^3+3^3}{2^2+3^2}, \frac{3^3+4^3}{3^2+4^2}, \frac{4^3+5^3}{4^2+5^2},$$

$$\frac{5^3+6^3}{5^2+6^2}, \frac{6^3+7^3}{6^2+7^2}, \frac{7^3+8^3}{7^2+8^2}$$

The series is

$$\frac{9}{5}, \frac{35}{13}, \frac{91}{25}, \frac{189}{41}, \frac{341}{61}, \frac{559}{85}, \frac{855}{113}$$

Hence, there should be $\frac{91}{25}$ in place of $\frac{94}{25}$.

243. 5; The series is

$$\frac{(1+2)\times 3}{4}, \frac{(2+3)\times 4}{5}, \frac{(3+4)\times 5}{6},$$

$$\frac{(4+5)\times 6}{7}, \frac{(5+6)\times 7}{8}, \frac{(6+7)\times 8}{9}, \frac{(7+8)\times 9}{10}$$

$$= \frac{9}{4}, \frac{20}{5}, \frac{35}{6}, \frac{54}{7}, \frac{77}{8}, \frac{104}{9}, \frac{135}{10}$$

There should be $\frac{54}{7}$ in place of $\frac{59}{7}$.

244. 2; The series is $1^3 + 1^2 = 2$, $3^3 + 3^2 = 36$, $5^3 + 5^2 = 150$, $7^3 + 7^2 = 392$, $9^3 + 9^2 = 810$, $11^3 + 11^2 = 1452$, $13^3 + 13^2 = 2366$.
There should be 392 in place of 393.

245. 3; The series is $22 \times (2 + 2) = 88$, $23 \times (2 + 3) = 115$, $24 \times (2 + 4) = 144$, $25 \times (2 + 5) = 175$, $26 \times (2 + 6) = 208$, $27 \times (2 + 7) = 243$, $28 \times (2 + 8) = 280$.
There should be 144 in place of 145.

246. 5; The series is $8^3 - 8^2$, $7^3 - 7^2$, $6^3 - 6^2$, $5^3 - 5^2$, $4^3 - 4^2$, $3^3 - 3^2$, $2^3 - 2^2$.
There should be 18 in place of 19.

247. 3; The series is $1 \times 2 \times 3 = 6$, $3 \times 4 \times 5 = 60$, $5 \times 6 \times 7 = 210$, $7 \times 8 \times 9 = 504$, $9 \times 10 \times 11 = 990$, $11 \times 12 \times 13 = 1716$, $13 \times 14 \times 15 = 2730$. Hence, 500 should be replaced with 504.

248. 5; The series is $1 + 3 = 4$, $5 + 7 = 12$, $11 + 13 = 24$, $17 + 19 = 36$, $23 + 29 = 52$, $31 + 37 = 68$, $41 + 43 = 84$. Hence, 69 should be replaced with 68.

249. 1; The series is $8 \times 1.5 = 12$, $12 \times 1.5 = 18$, $18 \times 1.5 = 27$, $27 \times 1.5 = 40.5$, $40.5 \times 1.5 = 60.75$, $60.75 \times 1.5 = 91.125$. Hence, 60 should be replaced with 60.75.

250. 2; $10^3 - 1$, $11^3 - 1$, $12^3 - 1$, $13^3 - 1$, $14^3 - 1$, $15^3 - 1$, $16^3 - 1$.
Hence, 1331 should be replaced with 1330.

251. 4; 89 - 2 = 87, 87 + 4 = 91, 91 - 8 = 83, 83 + 16 = 99, 99 - 32 = 67, 67 + 64 = 131.
Hence, 84 should be replaced with 83.

252. 4; The series is ×3 - 6, ×4 - 8, ×5 - 10, ...

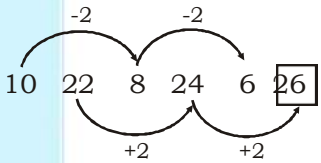
253. 2; The series is $+18^2$, $+16^2$, $+14^2$, ...

254. 3; The series is $11^3 - 3$, $12^3 - 6$, $13^3 - 9$ ...

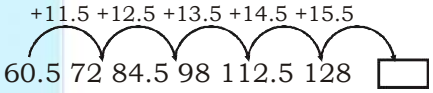
255. 3; The series is ×7 + 4, ×6 + 0, ×5 - 4 ×4 - 8, ...

256. 1; The series is a combination of two series. The first series is 34, 34 + 7 = 41, 41 + 14 = 55, 55 + 21 = 76 and the second series is 47, 47 - 3 = 44, 44 - 6 = 38, 38 - 9 = 29 ...

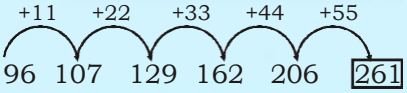
257. 4; The series follows the pattern as:



258. 5; The series is



259. 2; The series is



260. 2; The series is $1^2 \times 2 = 2$, $2^2 \times 3 = 12$, $3^2 \times 4 = 36$, $4^2 \times 5 = 80$, $5^2 \times 6 = 150$, $6^2 \times 7 = 252$
Hence, 81 should be replaced by 80.

261. 1; The series is $1 \times (2 + 3) = 5$, $2 \times (3 + 4) = 14$, $3 \times (4 + 5) = 27$, $4 \times (5 + 6) = 44$, $5 \times (6 + 7) = 65$, $6 \times (7 + 8) = 90$.
Hence, 16 should be replaced by 14.

262. 3; The series is $3^2 - 2^2 - 1^2 = 4$, $4^2 - 3^2 - 2^2 = 3$, $5^2 - 4^2 - 3^2 = 0$, $6^2 - 5^2 - 4^2 = -5$, $7^2 - 6^2 - 5^2 = -12$, $8^2 - 7^2 - 6^2 = -21$. Hence, 2 should be replaced by 3.

263. 4; The series is $10^2 + 1^2 + 0^2 = 101$, $11^2 + 1^2 + 1^2 = 123$, $12^2 + 1^2 + 2^2 = 149$, $13^2 + 1^2 + 3^2 = 179$, $14^2 + 1^2 + 4^2 = 213$, $15^2 + 1^2 + 5^2 = 251$
Hence, 218 should be replaced by 213.

264. 2; The series is × 2 + 3, × 2 + 5, × 2 + 7, × 2 + 9, × 2 + 11 ...
Hence, 45 should be replaced by 47.