

SERIES

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

1. 0 5 18 43 84 145 ?
 (1) 220 (2) 240
 (3) 260 (4) 280
 (5) None of these
2. 10 17 48 165 688 3475 ?
 (1) 27584 (2) 25670
 (3) 21369 (4) 20892
 (5) None of these
3. 1 3 24 360 8640 302400 ?
 (1) 14525100 (2) 154152000
 (3) 14515200 (4) 15425100
 (5) None of these
4. 12 14 32 102 416 2090 ?
 (1) 15522 (2) 12552
 (3) 13525 (4) 17552
 (5) None of these
5. 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
6. 12 16 24 40 ?
 (1) 76 (2) 72
 (3) 84 (4) 88
 (5) None of these
7. 9 19 39 79 ?
 (1) 139 (2) 129
 (3) 159 (4) 149
 (5) None of these
8. 8 17 42 91 ?
 (1) 170 (2) 142
 (3) 140 (4) 172
 (5) None of these
9. 7 8 18 57 ?
 (1) 244 (2) 174
 (3) 186 (4) 226
 (5) None of these
10. 3840 960 240 60 ?
 (1) 20 (2) 18
 (3) 12 (4) 22
 (5) None of these
11. 8 39 155 464 ?
 (1) 231 (2) 463
 (3) 1391 (4) 927
 (5) None of these
12. 4 5 14 51 ?
 (1) 158 (2) 156
 (3) 260 (4) 208
 (5) None of these
13. 7 8 17 42 ?
 (1) 67 (2) 78
 (3) 91 (4) 106
 (5) None of these
14. 5 6 15 50 ?
 (1) 207 (2) 157
 (3) 155 (4) 205
 (5) None of these
15. 729 243 81 27 ?
 (1) 18 (2) 9
 (3) 3 (4) 15
 (5) None of these
16. 11 12 26 81 ?
 (1) 324 (2) 328
 (3) 320 (4) 280
 (5) None of these
17. 5120 1280 320 80 ?
 (1) 16 (2) 24
 (3) 30 (4) 40
 (5) None of these
18. 7 11 27 63 ?
 (1) 96 (2) 118
 (3) 99 (4) 127
 (5) None of these
19. 6 10 18 34 ?
 (1) 62 (2) 64
 (3) 66 (4) 50
 (5) None of these
20. 5 11 23 47 ?
 (1) 95 (2) 93
 (3) 96 (4) 97
 (5) None of these
21. 87 76 66 57 49 ?
 (1) 41 (2) 42
 (3) 38 (4) 37
 (5) None of these
22. 4 8 24 96 ? 2880
 (1) 480 (2) 384
 (3) 288 (4) 420
 (5) None of these
23. 16 22 38 60 98 158 ?
 (1) 218 (2) 316
 (3) 256 (4) 308
 (5) None of these

24. 11 12 ? 20 27 36
 (1) 18 (2) 14
 (3) 19 (4) 15
 (5) None of these
25. 343 216 125 ? 27 8
 (1) 64 (2) 61
 (3) 58 (4) 46
 (5) None of these
26. 3 8 20 46 ? 210
 (1) 96 (2) 98
 (3) 100 (4) 105
 (5) None of these
27. 9 15 ? 143.5 650.25
 (1) 43.5 (2) 32
 (3) 30 (4) 40
 (5) None of these
28. 7 9 21 67 273 ?
 (1) 1097 (2) 1370
 (3) 1096 (4) 1377
 (5) None of these
29. 2 13 67 271 817 ?
 (1) 1638 (2) 1639
 (3) 1642 (4) 1643
 (5) None of these
30. 7 8 24 ? 460 2425
 (1) 93 (2) 81
 (3) 99 (4) 84
 (5) None of these

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

31. 5 9 18 34 59 95 ?
 (1) 272 (2) 168
 (3) 116 (4) 148
 (5) 144
32. 1200 480 192 76.8 30.72 12.288 ?
 (1) 4.9152 (2) 5.8192
 (3) 6.7112 (4) 7.6132
 (5) 8.5172
33. 963 927 855 747 603 423 ?
 (1) 209 (2) 208
 (3) 207 (4) 206
 (5) 205
34. 841 961 1089 1225 1369 1521 ?
 (1) 1581 (2) 1681
 (3) 1781 (4) 1881
 (5) 1981
35. 18 20 44 138 560 2810 ?
 (1) 16818 (2) 16836

- (3) 16854 (4) 16872
 (5) 16890
36. 15 25 40 130 ?
 (1) 500 (2) 520
 (3) 490 (4) 480
 (5) None of these
37. 186 94 48 25 ?
 (1) 13.5 (2) 14.8
 (3) 12.5 (4) 14
 (5) None of these
38. 124 112 176 420 1488 ?
 (1) 8568 (2) 7140
 (3) 5712 (4) 6150
 (5) None of these
39. 384 381 372 345 264 ?
 (1) 23 (2) 25
 (3) 43 (4) 24
 (5) None of these
40. 282 286 302 ? 502
 (1) 366 (2) 318
 (3) 326 (4) 338
 (5) None of these

Directions: In the following number series only one number is wrong. Find out the wrong number.

41. 6 18 49 201 1011
 (1) 1011 (2) 201
 (3) 18 (4) 49
 (5) None of these
42. 48 72 108 162 243 366
 (1) 72 (2) 108
 (3) 162 (4) 243
 (5) None of these
43. 2 54 300 1220 3674 7350
 (1) 3674 (2) 1220
 (3) 300 (4) 54
 (5) None of these
44. 8 27 64 125 218 343
 (1) 27 (2) 218
 (3) 125 (4) 343
 (5) None of these
45. 19 68 9 145 154
 (1) 154 (2) 129
 (3) 145 (4) 102
 (5) None of these
46. 1 4 27 256 3125 46658

- (1) 46658 (2) 4
(3) 27 (4) 3125
(5) None of these
47. 18000 3600 720 142.2 28.8 5.76
(1) 28.8 (2) 3600
(3) 5.76 (4) 142.2
(5) None of these
48. 12 237 406 527 604 657
(1) 237 (2) 406
(3) 527 (4) 657
(5) None of these
49. 3 35 226 1160 4660 13998
(1) 13998 (2) 4660
(3) 226 (4) 1160
(5) None of these
50. 18 119 708 3534 14136 42405
(1) 708 (2) 3534
(3) 14136 (4) 42405
(5) None of these
51. 6 12 36 144 722 4320 30240
(1) 36 (2) 144
(3) 722 (4) 4320
(5) None of these
52. 9261 6859 4913 3375 2197 1321 729
(1) 1321 (2) 6859
(3) 2197 (4) 4913
(5) None of these
53. 3 5 8 75 1125 84375 94921875
(1) 94921875 (2) 8
(3) 75 (4) 1125
(5) None of these
54. 4 5 9 20 34 59 95
(1) 9 (2) 34
(3) 59 (4) 95
(5) None of these
55. 2 13 76 377 1506 4507 9008
(1) 13 (2) 9008
(3) 4507 (4) 1506
(5) None of these
56. 6, 4, 5.5, 10.25, 22.5, 60.5
(1) 22.5 (2) 10.25
(3) 5.5 (4) 4
(5) None of these
57. 900, 450, 180, 90, 38, 18
(1) 180 (2) 450
(3) 90 (4) 18
(5) None of these
58. 2, 6, 12, 72, 865, 62208
(1) 72 (2) 12
(3) 62208 (4) 865
(5) None of these
59. 3, 4, 12, 38, 103, 228
(1) 103 (2) 12
(3) 38 (4) 228
(5) None of these
60. 14, 24, 68, 236, 1155, 6894
(1) 24 (2) 68
(3) 236 (4) 1155
(5) None of these
61. 13 15 17 18 21 23
(1) 17 (2) 15
(3) 21 (4) 18
(5) None of these
62. 3.5 4 14 56 782 43904
(1) 14 (2) 56
(3) 782 (4) 43904
(5) None of these
63. 128 640 981 1199 1324 1388
(1) 640 (2) 1199
(3) 1324 (4) 1388
(5) None of these
64. 12 114 600 2428 7272 14550
(1) 2428 (2) 7272
(3) 600 (4) 114
(5) None of these
65. 828 424 220 116 64 33
(1) 220 (2) 64
(3) 33 (4) 116
(5) None of these

Answers with explanations

1.5; $0 + 5 = 5$

$5 + 13 = 18$

$18 + 25 = 43$

$43 + 41 = 84$

$84 + 61 = 145$

$\therefore ? = 145 + 85 = 230$

2.4; $10 \times 1 + 1 \times 7 = 10 + 7 = 17$

$17 \times 2 + 2 \times 7 = 34 + 14 = 48$

$48 \times 3 + 3 \times 7 = 144 + 21 = 165$

$165 \times 4 + 4 \times 7 = 660 + 28 = 688$

$688 \times 5 + 5 \times 7 = 3440 + 35 = 3475$

$\therefore ? = 3475 \times 6 + 6 \times 7$

$= 3475 \times 6 + 6 \times 7$

$= 20850 + 42 = 20892$

3.3; $1 \times 3 = 3$

$3 \times 8 = 24$

$24 \times 15 = 360$

$360 \times 24 = 8640$

$8640 \times 35 = 302400$

$\therefore ? = 302400 \times 24 = 14515200$

4.2; $12 \times 1 + 2 \times 1 = 12 + 2 = 14$

$14 \times 2 + 2 \times 2 = 28 + 4 = 32$

$32 \times 3 + 2 \times 3 = 96 + 6 = 102$

$102 \times 4 + 2 \times 4 = 408 + 8 = 416$

$416 \times 5 + 2 \times 5 = 2080 + 10 = 2090$

$\therefore ? = 2090 \times 6 + 2 \times 6$

$= 12540 + 12 = 12552$

5.1; $10 \times \frac{3}{2} = 15$

$15 \times \frac{4}{4} = 15$

$15 \times \frac{5}{6} = 12.5$

$12.5 \times \frac{6}{8} = 9.375$

$9.375 \times \frac{7}{10} = 6.5625$

$\therefore ? = 6.5625 \times \frac{8}{12} = 4.375$

6.2; $12 \times 2 - 8$ $16 \times 2 - 8$ $24 \times 2 - 8$ $40 \times 2 - 8$ $\boxed{72}$

7.3; $9 \times 2 + 1$ $19 \times 2 + 1$ $39 \times 2 + 1$ $79 \times 2 + 1$ $\boxed{159}$

8.4; $8 + (3)^2$ $17 + (5)^2$ $42 + (7)^2$ $91 + (9)^2$ $\boxed{172}$

9.5; $7 \times 1 + 1$ $8 \times 2 + 2$ $18 \times 3 + 3$ $57 \times 4 + 4$ $\boxed{232}$

10.5; $3840 \times \frac{1}{4}$ $960 \times \frac{1}{4}$ $240 \times \frac{1}{4}$ $60 \times \frac{1}{4}$ $\boxed{15}$

11.4; $8 \times 5 - 1$ $39 \times 4 - 1$ $155 \times 3 - 1$ $464 \times 2 - 1$ $\boxed{927}$

12.5; $4 \times 1 + 1^2$ $5 \times 2 + 2^2$ $14 \times 3 + 3^2$ $51 \times 4 + 4^2$ $\boxed{220}$

13.2; $7 + 1^2$ $8 + 3^2$ $17 + 5^2$ $42 + 6^2$ $\boxed{78}$

14.1; $5 \times 1 + 1$ $6 \times 2 + 3$ $15 \times 3 + 5$ $50 \times 4 + 7$ $\boxed{207}$

15.2; $729 \div 3$ $243 \div 3$ $81 \div 3$ $27 \div 3$ $\boxed{9}$

16.2; $11 \times 1 + 1$ $12 \times 2 + 2$ $26 \times 3 + 3$ $81 \times 4 + 4$ $\boxed{328}$

17.5; $5120 \div 4$ $1280 \div 4$ $320 \div 4$ $80 \div 4$ $\boxed{20}$

18.4; $7 + (2)^2$ $11 + (4)^2$ $27 + (6)^2$ $63 + (8)^2$ $\boxed{127}$

19.3; $6 + 4$ $10 + 8$ $18 + 16$ $34 + 32$ $\boxed{66}$

20.1; $5 \times 2 + 1$ $11 \times 2 + 1$ $23 \times 2 + 1$ $47 \times 2 + 1$ $\boxed{95}$

21.2; The series is:

$-11, -10, -9, -8, -7$

Hence, 42 will come in place of the question mark.

22.1; The series is:

$\times 2, \times 3, \times 4, \times 5, \times 6$

Hence, 480 will come in place of question mark.

23.3; The given series is based on the following pattern:

$38 = 16 + 22$

$60 = 22 + 38$

$98 = 38 + 60$

$158 = 60 + 98$

$\therefore ? = 98 + 158 = 256$

Hence, 256 will come in place of the question mark.

24.4; The given series is based on following pattern:

$+1, +3, +5, +7, +9$

Hence, 15 will come in place of the question mark.

25.1; The given series is based on the following pattern:

$343 = 7^3$

$216 = 6^3$

$125 = 5^3$

$\therefore ? = 4^3 = 64$

Hence, 64 will come in place of the question mark.

26.3 27.4 28.5 29.2 30.3

31.5; The series is:

$+2^2, +3^2, +4^2, \dots +7^2$

32.1; In the series each successive term is $\frac{2}{5}$ of the previous term.

33. 3; The series is:
 $-(36 \times 1), -(36 \times 2), \dots, -(36 \times 6)$

34. 2; The series is:
 $+120, 128, +136, \dots, +160$

35. 4; The series is:
 $\times 1 + 2, \times 2 + 4, \times 3 + 6, \dots, \times 6 + 12$

36. 5; The series is:
 $\times 1 + 10, \times 2 - 10, \times 3 + 10, \times 4 - 10, \times 5 + 10$
 $130 \times 4 - 10 = 520 - 10 = 510$

37. 1; The series is $\div 2 + 1$.

$$\frac{25}{2} + 1 = 13.5$$

38. 1

39. 5; The series is:
 $-3, -9, -27, -81, -243$
 $264 - 243 = 21$

40. 4; The series is:
 $+2^2, +4^2, +6^2, +8^2, 10^2, \dots$
 $302 + 6^2 = 302 + 36 = 338$

41. 3; $4 \times 1 + 2 = 4 + 2 = 6$
 $6 \times 2 + 3 = 12 + 3 = 15 \rightarrow 18$
 $15 \times 3 + 4 = 45 + 4 = 49$
 $49 \times 4 + 5 = 196 + 5 = 201$
 $201 \times 5 + 6 = 1005 + 6 = 1011$

42. 5; $48 \times \frac{3}{2} = 72$;

$$72 \times \frac{3}{2} = 108$$

$$108 \times \frac{3}{2} = 162$$

$$162 \times \frac{3}{2} = 243$$

$$243 \times \frac{3}{2} = 364.5 \neq 366$$

43. 1; $2 \times 6 + 7 \times 6 = 12 + 42 = 54$
 $54 \times 5 + 6 \times 5 = 270 + 30 = 300$
 $300 \times 4 + 5 \times 4 = 1200 + 20 = 1220$
 $1220 \times 3 + 4 \times 3 = 3660 + 12 = 3672 \rightarrow 3674$
 $3674 \times 2 + 3 \times 2 = 7344 + 6 = 7350$

44. 2; $2^3 = 8 : 3^3 = 27$
 $4^3 = 64 : 5^3 = 125$
 $6^3 = 216 \rightarrow 218$
 $7^3 = 343$

45. 4; $19 + 7^2 = 19 + 49 = 68$
 $68 + 6^2 = 68 + 36 = 104 \rightarrow 102$
 $104 + 5^2 = 104 + 25 = 129$
 $129 + 4^2 = 129 + 16 = 145$
 $145 + 3^2 = 145 + 9 = 154$

46. 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.

47. 4; The given number series is based on the following pattern:

$$18000 \div 5 = 3600$$

$$3600 \div 5 = 720$$

$$720 \div 5 = 144 \rightarrow 142.2$$

$$144 \div 5 = 28.8$$

$$28.8 \div 5 = 5.76$$

Hence 142.2 is the wrong number.

48. 5; The given number series is based on the following pattern:

$$12 + 15^2 = 12 + 225 = 237$$

$$237 + 132 = 237 + 169 = 406$$

$$406 + 112 = 406 + 121 = 527$$

$$527 + 92 = 527 + 81 = 608 \rightarrow 604$$

$$608 + 7^2 = 608 + 49 = 657$$

Hence 604 is the wrong number.

49. 3; The given number series is based on the following pattern:

$$3 \times 7 + 2 \times 7 = 21 + 14 = 35$$

$$35 \times 6 + 3 \times 6 = 210 + 18 = 228 \rightarrow 226$$

$$228 \times 5 + 4 \times 5 = 1140 + 20 = 1160$$

$$1160 \times 4 + 5 \times 4 = 4640 + 20 = 4660$$

$$4660 \times 3 + 6 \times 3 = 13980 + 18 = 13998$$

Hence 226 is the wrong number.

50. 2; The given number series is based on the following pattern:

$$18 \times 7 - 7 = 126 - 7 = 119$$

$$119 \times 6 - 6 = 714 - 6 = 708$$

$$708 \times 5 - 5 = 3540 - 5 = 3535 \rightarrow 3534$$

$$3535 \times 4 - 4 = 14140 - 4 = 14136$$

Hence 3534 is the wrong number.

51. 3; The given number series is based on the following pattern:

$$6 \times 2 = 12$$

$$12 \times 3 = 36$$

$$36 \times 4 = 144$$

$$144 \times 5 = 720 \rightarrow 722$$

$$720 \times 6 = 4320$$

Hence, the wrong number is 722.

52. 1; The given number series is based on the following pattern:

$$21 \times 21 \times 21 = 9261$$

$$19 \times 19 \times 19 = 6859$$

$$17 \times 17 \times 17 = 4913$$

$$15 \times 15 \times 15 = 3375$$

$$13 \times 13 \times 13 = 2197$$

$$11 \times 11 \times 11 = 1331 \rightarrow 1321$$

Hence, the wrong number is 1321.

53. 2; The given number series is based on the following pattern:

$$3 \times 5 = 15 \rightarrow 8$$

$$5 \times 15 = 75$$

$$15 \times 75 = 1125$$

$$1125 \times 75 = 84375$$

Hence, the wrong number is 8.

54. 5; The given number series is based on the following pattern:

$$4 + 1^2 = 5$$

$$5 + 2^2 = 9$$

$$9 + 3^2 = 18 \neq 20$$

$$18 + 4^2 = 34$$

$$34 + 5^2 = 59$$

$$59 + 6^2 = 95$$

Hence, the wrong number is 20.

55. 4; The given number series is based on the following pattern:

$$2 \times 7 - 1 = 13$$

$$13 \times 6 - 2 = 76$$

$$76 \times 5 - 3 = 377$$

$$377 \times 4 - 4 = 1504 \neq 1506$$

$$1504 \times 3 - 5 = 4507$$

Hence, the wrong number is 1506.

56. 1; $6 \times 0.5 + 1 = 4$,

$$4 \times 1.0 + 1.5 = 5.5,$$

$$5.5 \times 1.5 + 2.0 = 10.25,$$

$$10.25 \times 2.0 + 2.5 = 23,$$

$$23 \times 2.5 + 3.0 = 60.5$$

Hence, the wrong number is 22.5

57. 5; The series is: $\times \frac{1}{2}, \times \frac{1}{2}, \times \frac{1}{2}, \times \frac{1}{2}, \dots$

58. 4; $2 \times 6 = 12$

$$6 \times 12 = 72$$

$$12 \times 72 = 864$$

$$72 \times 864 = 62208$$

\therefore Wrong number is 865.

59. 3; $(0)^2 + 3 = 3$

$$(1)^2 + 3 = 4$$

$$(3)^2 + 3 = 12$$

$$(6)^2 + 3 = 39$$

$$(10)^2 + 3 = 103$$

$$(15)^2 + 3 = 228$$

Hence, wrong number is 38.

60. 2

61. 4

62. 3

63. 5

64. 1 65. 2
