



RBI • NABARD • SEBI

REASONING

NUMBER SERIES



Top 30 Questions Based on Number Series

Directions (Q. 1-30): find the missing number in the following number series?

Q1. 125, 152, 161, 169, 173, ?, 175

- A) 180
- B) 174
- C) 176
- D) 184
- E) 173

Q2. 161, 320, 636, ?, 2512, 4992

- A) 1329
- B) 1340
- C) 1264
- D) 1380
- E) 1348

Q3. 4032, 4290, 4556, 4830, 5112, ?

- A) 5329
- B) 5402
- C) 5302
- D) 5529
- E) 5482

Q4. 16, ?, 296, 1192, 4776, 19112

- A) 90
- B) 80
- C) 100
- D) 75
- E) 72

Q5. 584, 559, 608, 527, ?, 479

- A) 627
- B) 648
- C) 623
- D) 608
- E) 671

Q6. 36, 90, ?, 1417.5, 7796.25, 50675.625

- A) 275
- B) 517

- C) 364
- D) 315
- E) 385

Q7. 28, 29, ?, 195, 796, 4005

- A) 62
- B) 68
- C) 81
- D) 83
- E) 74

Q8. 205, 989, 364, 848, 487, ?

- A) 748
- B) 745
- C) 643
- D) 648
- E) 743

Q9. 3, 72, 129, 173, 203, ?

- A) 248
- B) 227
- C) 254
- D) 252
- E) 218

Q10. 3, 3, 12, 108, ?, 43200

- A) 2700
- B) 1728
- C) 972
- D) 432
- E) 650

Q11. 24, 12, 12, 18, 36, ?

- A) 92
- B) 90
- C) 94.5
- D) 81.5
- E) 108

Q12. 126, 64, 34, 20, ?, 12

- A) 18
- B) 12
- C) 14
- D) 16

E) 15

Q13. 45, 57, 67, 75, 81, ?

- A) 89
- B) 85
- C) 105
- D) 91
- E) 78

Q14. 5, 7.5, 15, 37.5, ?, 393.75

- A) 80
- B) 112.5
- C) 160
- D) 48
- E) 72

Q15. 82, 93, ?, 148, 192, 247

- A) 124
- B) 122
- C) 117
- D) 115
- E) 120

Q16. 5, 9, 25, 89, ?, 1369

- A) 343
- B) 355
- C) 349
- D) 341
- E) 345

Q17. 6, 17, 50, 149, ?, 1337

- A) 454
- B) 446
- C) 442
- D) 452
- E) 432

Q18. 61, 62, 54, 81, 17, ?

- A) 142
- B) 145
- C) 138
- D) 144
- E) 140

Q19. 163, ?, 188, 216, 253, 298

- A) 175
- B) 168
- C) 171
- D) 170
- E) 169

Q20. 5, ?, 41, 191, 941, 4691

- A) 12
- B) 15
- C) 18
- D) 21
- E) 11

Q21. 5000, 2508, 1262, 639, ?, 171.75

- A) 329.6
- B) 339
- C) 327.5
- D) 326
- E) 335.5

Q22. 551, 600, 636, 661, 677 ?

- A) 686
- B) 676
- C) 689
- D) 645
- E) 690

Q23. 5, 2.75, ?, 7.87, 19.75, 55.625

- A) 7.5
- B) 7.875
- C) 3.75
- D) 7.1
- E) 8.5

Q24. 16, 18, 27, 55, 120, ?

- A) 232
- B) 246
- C) 254
- D) 242
- E) 248

Q25. 4, 19, 64, 139, ?, 379

- A) 254

- B) 233
- C) 236
- D) 244
- E) 262

Q26. 7, 17, 37, 77, ?, 317

- A) 167
- B) 160
- C) 157
- D) 147
- E) 151

Q27. 12, 8, 10, 17, 36, ?

- A) 92
- B) 84
- C) 76
- D) 98
- E) 104

Q28. 4, 5, ?, 88, 620, 5585

- A) 16
- B) 18
- C) 17
- D) 20
- E) 22

Q29. 4, 14, ?, 149, 295, 293

- A) 40
- B) 45
- C) 50
- D) 51
- E) 48

Q30. ?, 256, 3375, 196, 2197, 144

- A) 4319
- B) 4923
- C) 4913
- D) 4139
- E) 4096

Solution With Answer Key:

1) B

The series is $+3^3, +3^2, +2^3, +2^2, +1^3, +1^2, \dots$

$$125 + (3)^3 = 152; \quad 152 + (3)^2 = 161; \quad 161 + (2)^3 = 169; \quad 169 + (2)^2 = 173$$

$$173 + (1)^3 = 174; \quad 174 + (1)^2 = 175$$

2) C

The series is $x2 - 2^1, x2 - 2^2, x2 - 2^3, x2 - 2^4, \dots$

$$\text{ie } 161 \times 2 - 2 = 320,$$

$$320 \times 2 - 2^2 = 636,$$

$$636 \times 2 - 2^3 = 1264,$$

$$1264 \times 2 - 2^4 = 2512,$$

$$2512 \times 2 - 2^5 = 4992,$$

3) B

The series is $63^2 + 63 = 4032,$

$$65^2 + 65 = 4290, \quad 67^2 + 67 = 4556,$$

$$69^2 + 69 = 4830, \quad 71^2 + 71 = 5112,$$

$$73^2 + 73 = 5402, \dots$$

4) E

The series is

$$16 \times 4 + 8 = 72$$

$$72 \times 4 + 8 = 296$$

$$296 \times 4 + 8 = 1192$$

$$1192 \times 4 + 8 = 4776$$

$$4776 \times 4 + 8 = 19112$$

5) B

The series is $-(5)^2, +(7)^2 - (9)^2, +(11)^2, -(13)^2, \dots$

$$\text{ie } 584 - 5^2 = 559,$$

$$559 + 7^2 = 608,$$

$$608 - 9^2 = 527,$$

$$527 + 11^2 = 648,$$

$$648 - 13^2 = 479,$$

6) D

The series is

$$36 \times 2.5 = 90$$

$$90 \times 3.5 = 315$$

$$315 \times 4.5 = 1417.5$$

$$1417.5 \times 5.5 = 7796.25$$

$$7796.25 \times 6.5 = 5.675.625$$

7) A

The series is $x_1 + 1^2, x_2 + 2^2, x_3 + 3^2, x_4 + 4^2,$

$$\text{je } 28 \times 1 + 1^2 = 29,$$

$$29 \times 2 + 2^2 = 62,$$

$$62 \times 3 + 3^2 = 195,$$

$$195 \times 4 + 4^2 = 796,$$

$$796 \times 5 + 5^2 = 4005,$$

8) E

The series is $205 + (28)^2 = 989,$

$$989 - (25)^2 = 364,$$

$$364 + (22)^2 = 848.$$

$$848 - (19)^2 = 487,$$

$$487 + (16)^2 = 743,$$

9) E

The series is

$$3 + 69 = 72; 72 + 57 = 129; 129 + 44 = 173; 173 + 30 = 203; 203 + 15 = 218$$

$$69 - 57 = 12; 57 - 44 = 13; 44 - 30 = 14; 30 - 15 = 15$$

10) B

The series is

$$3 \times (1)^2 = 3; 3 \times (2)^2 = 12; 12 \times (3)^2 = 108; 108 \times (4)^2 = 1728; 1728 \times (5)^2 = 43200$$

11) B

The series is

$$24 \times 0.5 = 12; 12 \times 1 = 12; 12 \times 1.5 = 18; 18 \times 2 = 36; 36 \times 2.5 = 90$$

12) C

The series is

$$126 \times (1/2) + 1 = 64$$

$$64 \times (1/2) + 2 = 34$$

$$34 \times (1/2) + 3 = 20$$

$$20 \times (1/2) + 4 = 14$$

$$14 \times (1/2) + 5 = 12$$

13) B**The series is**

$$45 + 12 = 57; 57 + 10 = 67; 67 + 8 = 75; 75 + 6 = 81; 81 + 4 = 85$$

14) B**The series is**

$$5 \times 1.5 = 7.5; 7.5 \times 2 = 15; 15 \times 2.5 = 37.5; 37.5 \times 3 = 112.5; 112.5 \times 3.5 = 393.75$$

15) D**The series is**

$$82 + 11 = 93$$

$$93 + 22 = 115$$

$$115 + 33 = 148$$

$$148 + 44 = 192$$

$$192 + 55 = 247$$

16) E

The series is +4, +16, +64, +256, +1042,...

$$\text{ie } 5 + 4 = 9; 9 + 16 = 25, 25 + 64 = 89$$

$$89 + 256 = 345, 345 + 1024 = 1369$$

17) B

The series is $\times 3 - 1$, (repeated)

$$\text{ie } 6 \times 3 - 1 = 17, 17 \times 3 - 1 = 50, 50 \times 3 - 1 = 149, 149 \times 3 - 1 = 446, 446 \times 3 - 1 = 1337$$

18) A

The Series $+(1)^3, -(2)^3, +(3)^3, \dots$

$$\text{ie } 61 + 1^3 = 62, 62 - 2^3 = 54, 54 + 3^3 = 81$$

$$81 - 4^3 = 17, 17 + 5^3 = 142$$

19) D

The Series is

$$163 + 7 = 170 ; 170 + 18 = 188 ; 188 + 28 = 216 ; 216 + 37 = 253 ; 253 + 45 = 298$$

$$7 + 11 = 18 ; 18 + 10 = 28 ; 28 + 9 = 37 ; 37 + 8 = 45$$

20) E

The series is

$$5 + [(6/5) \times 5] = 11, \quad 11 + (6 \times 5) = 41, \quad 41 + (30 \times 5) = 191$$

$$191 + (150 \times 5) = 941, \quad 941 + (750 \times 5) = 4691$$

21) C

The series is $5000 \div 2 + 8 = 2508$, $2508 \div 2 + 8 = 1262$, $1262 \div 2 + 8 = 639$, $639 \div 2 + 8 = 327.5$, $327.5 \div 2 + 8 = 171.75, \dots$.

22) A

The series is $+7^2, +6^2, +5^2, \dots$.

$$551 + 49 = 600, \quad 6$$

$$00 + 36 = 636, \quad 636 + 25 = 661, \quad 661 + 16 = 677, \quad 677 + 9 = 686$$

23) C

The series is

$$5 \times 0.5 + 0.25 \times 1^2 = 2.75,$$

$$2.75 \times 1 + 0.25 \times 2^2 = 3.75,$$

$$3.75 \times 1.5 + 0.25 \times 3^2 = 7.875,$$

$$7.875 \times 2 + 0.25 \times 4^2 = 19.75,$$

$$19.75 \times 2.5 + 0.25 \times 5^2 = 55.625, \dots$$

24) B

The series is $+1^3 + 1, +2^3 + 1, +3^3 + 1, +4^3 + 1, +5^3 + 1, \dots$

$$\text{ie } 18 + 2^3 + 1 = 27,$$

$$27 + 3^3 + 1 = 55,$$

$$55 + 4^3 + 1 = 120,$$

$$120 + 5^3 + 1 = 246, \dots$$

25) D

The series is $+15 \times 1, +15 \times 3, +15 \times 5, +15 \times 7, +15 \times 9, \dots$

$$\text{ie } 4 + 15 \times 1 = 19,$$

$$19 + 15 \times 3 = 64,$$

$$64 + 15 \times 5 = 139,$$

$$139 + 15 \times 7 = 244,$$

$$244 + 15 \times 9 = 379, \dots$$

26) C

The series is $+10, +20, +40, +80, +160,$

$$\text{ie } 7 + 10 = 17,$$

$$17 + 20 = 37,$$

$$37 + 40 = 77,$$

$$77 + 80 = 157,$$

$$157 + 160 = 317, \dots$$

27) A

The series is $x0.5 + 2, x1 + 2, x1.5 + 2, x2 + 2, \dots$

$$\text{ie } 12 \times 0.5 + 2 = 8,$$

$$8 \times 1 + 2 = 10,$$

$$10 \times 1.5 + 2 = 17,$$

$$17 \times 2 + 2 = 36,$$

$$36 \times 2.5 + 2 = 92, \dots$$

28) C

The series is $x1 + 1, x3 + 2, x5 + 3, x7 + 4, x9 + 5, x11 + 6,$

$$\text{ie } 4 \times 1 + 1 = 5,$$

$$5 \times 3 + 2 = 17,$$

$$17 \times 5 + 3 = 88,$$

$$88 \times 7 + 4 = 620,$$

$$620 \times 9 + 5 = 5585,$$

29) D

The series is $4 \times 5 - 6 = 14,$

$$14 \times 4 - 5 = 51, 51 \times 3 - 4 = 149, 149 \times 2 - 3 = 295, 295 \times 1 - 2 = 293, \dots$$

30) C

The series is $(17)^3, (16)^2, (15)^3, (14)^2, (13)^3, (12)^2, \dots$

ie 4913, 256, 3375, 196, 2197, 144



EduTap