Numeureka

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Test Information:

Numeureka is a high-range numerical IQ test comprising 40 items, each worth one point. Item 38 has two parts, each worth half a point.

To solve these items, you need:
- An ability to recognise the patterns therein, discovering the strictest and simplest rules.
- Familiarity with digits and arithmetic.

Send your solutions to nilxsubmissions@gmail.com. Please include a scan of a photo ID showing your name, age, and country of residence, along with any scores you have from other high-range tests. Following this, your submission will be graded free of charge, and you will receive a score report within a few days at most.
You can make as many submissions as you like, but only the first two will be considered official.
Items are ordered very roughly by ascending difficulty.
When an item asks you to explain, you MUST provide an explanation for your solution. If you do not, you will get no point, regardless of whether your solution is correct.
A preliminary norm is included after the end of the test.

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The test items:

1) 123, 234, 456, 789, 1233, ?

2) 1, 31, 531, 7531, ?

3) 96, 42, 34, 22, ?, ?

4) /(358241): 0.6, 0.625, ?, ?, 4

5) 0, 23, 464, 6969, 92929, 115115, ?, ?

6) 1202, 6230, 1234, 5204, ?, 2674, ?, 9728

7) 541, 413, 14-3, 413, 13-2, ?, 14-3, ?, -34-7, ?

8) [5][6][7][8][9][10][11][12][13][14][15]: 11111, 33, 1111111, 44, ?, 55, ?, 66, ?, ?, 555

9) .^^(!), ..^^^(!!!!!!!!), ...^^^^(!!!!!!!!(!)), ...^^^^^(!((!!(!!!!)))), ?, ?, ?

10) 3405671258: 3405671258, ?, 71888, ?, 1823, ?, ?, 2813, ?, 41

11) 6, 222, 444444, 28, ?, ?, 024, ?

12) 0, 123456789, 2468101, 369121518212427, ?, ?, ?, 71421283542495663, ?, 91827364554637281

13) -.-, 26, --., ?, .--, 23, -...-, ?, --..., 4140, ...--, ?

14) 12345, 12345, 13524, 12345, 15432, ?

15) 1, 512, ?, ?, 18125, ?, ?, 12518, ?, 1000

16) 16, 224, 354, 416, 50, 616, 78, 848, ?

17) [34, 45, 56, 64, 79, 94]: 456, 56, 678, 785678, ?, ?

18) 456, 8312536, 12.734, 1162775.3548, ?, ?, -51.952.74

19) 16(1, 279936), 27(256, 78125), 38(2187, 1), 49(?, ?)

20) 129, 243, 3627, 481.5, 6054, 725.(142857), ?, ?, ?, 120X

21) 0149, 16, 25, 36, 49, 6, ?, ?, 0012, ?, ?, ?, ?, 225

22) 11826•11826, 3678•3678, 5116•5116, ?, ?, ?, 111•111, 11•11, 1•1

23) 102132435496(11)3: 1, 03, 000000005, 0003.503.5, 030033, ?, 707

24] ..., .(.....), .(.....), ., ., ., (.......(.....)), (.......(.....)), (.......(.....)), (.......(.....)), ?, ?, ?, ?, ?, ?, ?, ?, ?, ?, ? Explain.

25) 123456789, 02356789, 03478, 0257, ?, 7, ?

26) 135792468, 642975313, 135429753, ?

27) 1232549, 369413811, 60671325, ?

28) [10]6[11]4937852: 106114937852, 6114937852106, 1149, 49378, (937852106114), ?, ?, ?, ?, ?

29) 163452789, 125436789, 123654789, 123496785, 123756489, ?

30) 1, ?, 369151066, ?, 5, 612739101, 71, 8, 918109919, 1020, ?, ?

31) 1{6}, 1176498{6498235}, a{b}, 823cd, 240, b, c{d}, 35, 9823, -, 6

$$a = ?, b = ?, c = ?, d = ?$$
Explain.

32) 24579(10), 16, 38, 2457, 6, ?, ?, X
Explain.
33) 29, 12, 2345678, 234567, 345634567, ?, ?, 455, 5
Explain.

34) 0, 21, ?, ?, ?, ?, 28, ?, 8, 20.(3), 0

35) 123456, 357911, 1149046114, ?, 25332537, 79057

36) 400, 404, 413, 414, 415, 422, 426, 428, 431, ?, ?, ?, ?, ?, 500

37) 2, 36, 512, 0966, 16807, 096156, ?, ?, ?

38a) 164795328: 22, 60, 81, 47, 93, 100, ?
38b) 164795328: 92, 79, 55, 50, 22, 95, ?

39) [123456789(10)....], 1, 1, 12, ?, ?, ?, ?, 12
Explain.

40) 49289, 64, 81, 1, |, 1, 112144196116812601372150416561, 11214419611681260137215041, ?
Explain.

END

[Numeureka] Preliminary Norm

Raw Score	IQ (SD = 15)
0	<130
1	<130
2	<130
3	<130
4	<130
5	<130
6	130
7	132
8	135
9	137
10	140
11	142
12	143
13	144
14	145
15	147
16	148
17	149
18	150
19	153
20	155
21	156
22	158

23	159
24	160
25	162
26	164
27	165
28	166
29	167
30	169
31	170
32	172
33	173
34	175
35	176
36	178
37	179
38	180
39	183
40	≥185