

# Tractatus Numericus

*T. Prousalis – hriqtests.com, 2022*

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**Description** : Tractatus Numericus consists of 33 items, most of which are of sequential nature, whereas some of them are of alphanumerical/abstract nature and/or have to be encountered by parts.

**Knowledge required** : Nothing more than simple operations (addition, subtraction, multiplication, division). Advanced mathematical knowledge is not required and is not of any use regarding this test.

**Structure** : As one proceeds, items tend to get more difficult; that applies as a general rule and not necessarily on an item-by-item basis. In addition, there is strict stratification regarding ideas required and their complexity – one will easily understand that while solving through the test.

**Rules** : There is no time restriction. Discussing items with others and/or sharing them in any way (eg. public or private fora) is prohibited.

**Examples** : I) 1, 2, 3, 4, ?. Answer : 5. (+1)

II) 2, 4, 8, 16, ?. Answer : 32. (x2)

**Test begins.**

(1) 44, 88, 1212, 1616, ?

(2) 44, 88, ?, 176, 220

(3) 3, 3, 6, 18, ?

(4) 3, 4, 8, 11, 44, ?

(5) 567, 678, ?, 8910

(6) 468, 101, 214, 161, ?

(7) 55, 110, 210, ?, 365, 430

(8) 1839, 2186, 2929, 3276, ?

(9) 9, 8, 11, 6, 13, ?, ?, 2, 17

(10) 274, 911, 102, 12, ?

(11) 274, 928, 1116, ?, 37, 10, 1

(12) 389, 778, 2334, 4668, ?

(13) 172569, 1511798, 17168266, ?

(14) 91725, 33414, 95765, ?

(15) 100110, 010011, 101001, 110100, ?

(16) 110001, 011010, 001200, 001110, ?

(17) 4, P, 5, ?, 6, CF, ?, DI

(18) AF, 2E, 3F, 4I, ?

(19) 397, 794, 1191, 2382, 2779, ?

- (20) 9A, 12, 11E, 6, 13F, 7, ?, ?
- (21) 1927, 2463.5, 31854, 4927, 53708, ?
- (22) 12334, 11122314, 3122131114, ?
- (23) 5, 8, 4, 7, 10, 7, ?, ?, ?, 11, 14, 15.4
- (24) 139, 202, 341, 142, 304, 446, 145, 406, ?
- (25) 21, 121, 36, ?, 128, 144, 9, 7, 49, 194, 81, 64
- (26) 137269, 2684710, 4798820, 88109940, ?
- (27) 18490252, 21014369, 647011735, 1820560181, ?
- (28) 3405562, 1200253012, 20001015002, ?, ?
- (29) 10395, 10395, 6930, 4158, ?
- (30) 1096190, 0619601, 0109619, 6196010, 9010961, ?
- (31) 86217531, 26251090, 61631535, ?
- (32) 51672, 78297, 485751, 533346, ?
- (33) 13742, 211004, 42830, 04913, ?

**- End Of Tractatus Numericus –**

# Tractatus Numericus Statistical Report

*Final update : May 8<sup>th</sup>, 2023*

Tractatus Numericus is a numerical test, which can be taken under no time restriction. It consists of 33 numerical sequences, which step-by-step tend to increase in complexity and difficulty. It is both suitable for people that haven't tried such a test in the past and for people more acquainted with such tests. Knowledge required is set to bare minimum (addition, subtraction, multiplication, division); advanced mathematics aren't required and won't be of any help. In addition, sometimes sequences need to be encountered in a more abstract (as if one has to deal with simple symbols) – and even more culture-fair – way. Pattern recognition ability is the one required most in this test.

**Unfortunately**, as answers have been discussed on some online fora, no further norming will take place. It is strongly suggested that scores on this test received after the end of relevant contest (January 10<sup>th</sup>, 2023) should be revised thoroughly by any possibly interested third parties (eg. IQ societies). Quite a sad circumstance, as this test showed some strong psychometric properties. However, this test will continue to exist, for anyone who wishes to enjoy a numerical test or acquire a rather reliable estimation of their potential.

## 1-Fundamental Descriptive Statistics.

Mean and Median were calculated at 25.86 and 28, respectively. Standard deviation was calculated at 6.2 and standard error of measurement at 0.7. Lowest score was that of 5/33 and highest that of 33/33. Shapiro-Wilk test suggested that distribution of scores is not normal.

## 2-Reliability.

Cronbach's  $\alpha$  is calculated at 0,95. Current sample (N=68) is relatively sufficient for precise estimations.

## 3-Correlation with standard supervised psychometric batteries

Following figures are provided according to relevant scores reported by several candidates.

As one may easily notice, there is a pool of quite capable candidates, averaging an IQ over 138 (M=100, SD=15, >99% of total population).

Correlation of Tractatus Numericus with standard psychometric batteries is encouraging towards theoretical IQ estimation, as it provides a high positive correlation at every measure. Of course, more data would allow even safer conclusions to be drawn.

<i>Test</i>	<i>Pairs (IQ range)</i>	<i><math>\rho</math></i>	<i>MIQ</i>	<i>MTest</i>
<b>Supervised</b>	52 (114 - 170)	0,74	140,7	27,1
<b>Supervised*</b>	32 (114 - 160)	0,89	139,8	25,9
<b>WAIS</b>	17 (114 - 157)	0,90	140,2	26,3

*Standard tests used : WAIS, RAPM, IST70-R, FRT-A & B, BADyG, CCFIT III, MAT, WPT, SB 5, B53, IBF-S, Unknown Mensa Entrance Test.*

*Supervised\* : Ceiling scores excluded.*

*$\rho$  : Spearman's Rho.*

*MIQ : Mean IQ (M=100, SD=15).*

*Mtest : Mean raw score on Tractatus Numericus.*

*(Norm follows in the next page)*

#### 4-Norm

Presentation of Theoretical IQ (TIQ, M=100, SD=15) per raw score (RS) points follows.

<b>RS</b>	<b>TIQ</b>	<b>RS</b>	<b>TIQ</b>	<b>RS</b>	<b>TIQ</b>
<b>7</b>	<=110	<b>16</b>	113	<b>25</b>	134
<b>8</b>	<=110	<b>17</b>	118	<b>26</b>	136
<b>9</b>	<=110	<b>18</b>	119	<b>27</b>	139
<b>10</b>	<=110	<b>19</b>	119	<b>28</b>	141
<b>11</b>	<=110	<b>20</b>	122	<b>29</b>	143
<b>12</b>	<=110	<b>21</b>	125	<b>30</b>	145
<b>13</b>	<=110	<b>22</b>	128	<b>31</b>	147
<b>14</b>	<=110	<b>23</b>	130	<b>32</b>	>=150
<b>15</b>	110	<b>24</b>	131	<b>33</b>	>=150

# TN Answers

- 1) 2020
- 2) 132
- 3) 72
- 4) 49
- 5) 789
- 6) 820
- 7) 270
- 8) 4019
- 9) 4, 15
- 10) 3
- 11) 217
- 12) 14004
- 13) 1281014788
- 14) 73818
- 15) 011010
- 16) 010011
- 17)  $\pi$ , 7
- 18) F4
- 19) 5558
- 20) 15H, 9
- 21) 61854
- 22) 13112211133114
- 23) 9,12,10.8
- 24) 551
- 25) 64
- 26) 9920101080
- 27) 7838636311
- 28) (000000)5000, 0
- 29) 2376
- 30) 1960106
- 31) 89674628
- 32) 1866711
- 33) 301121