

2013

$$\begin{aligned}
 1 &= -2x(0+1)+3 = -2x(1)+3 = -2+3 = 1 \\
 2 &= -2+0+1+3 = -2+4 = 2 \\
 3 &= 2x0+1x3 = 0+3 = 3 \\
 4 &= 2x0+1+3 = 0+4 = 4 \\
 5 &= 2+0+1x3 = 2+3 = 5 \\
 6 &= 2+0+1+3 = 2+4 = 6 \\
 7 &= 20-13 = 7 \\
 8 &= 2x(0+1+3) = 2x4 = 8 \\
 9 &= (2+0+1)x3 = 3x3 = 9 \\
 10 &= 20/(-1+3) = 20/2 = 10 \\
 11 &= -2+0+13 = -2+13 = 11 \\
 12 &= -(2^0)+13 = -1+13 = 12 \\
 13 &= 2x0+13 = 0+13 = 13 \\
 14 &= 2^0+13 = 1+13 = 14 \\
 15 &= 2+0+13 = 2+13 = 15 \\
 16 &= 20-1-3 = 20-4 = 16 \\
 17 &= 20-(1x3) = 20-3 = 17 \\
 18 &= 20-(-1+3) = 20-2 = 18 \\
 19 &= 20-(1^3) = 20-1 = 19 \\
 20 &= 20x(1^3) = 20x1 = 20 \\
 21 &= 20+(1^3) = 20+1 = 21 \\
 22 &= 20-1+3 = 20+2 = 22 \\
 23 &= -(2^0)+(1+3)! = -1+4! = -1+24 = 23 \\
 24 &= 20+1+3 = 20+4 = 24 \\
 25 &= (2^0)+(1+3)! = 1+4! = 1+24 = 25 \\
 26 &= 2+0+(1+3)! = 2+4! = 2+24 = 26 \\
 27 &= (2+0+1)^3 = 3^3 = 27
 \end{aligned}$$

Dla jasności: znak ? to śląbnia - tj. suma kolejnych liczb naturalnych nie przekraczających n:	
$n? = 1+2+3+\dots+n$	
$n? = \frac{(1+n)n}{2}$	
Znak ?? to śląbnia podwójna - tj. suma kolejnych liczb naturalnych nie przekraczających n o tej samej parzystości co n	
Jeśli n jest liczbą parzystą, to	$n?? = 2 + 4 + 6 + \dots + n$
Jeśli n jest liczbą nieparzystą, to	$n?? = 1 + 3 + 5 + \dots + n$
Znak £ to supersśląbnia - tj. suma śląbni kolejnych liczb naturalnych nie przekraczających n	
$n£ = 1? + 2? + 3? + \dots + n?$	
Znak ! to silnia - tj. iloczyn kolejnych liczb naturalnych nie przekraczających n	
$n! = 1 \times 2 \times 3 \times \dots \times n$	
Znak !! to podwójna silnia - tj. iloczyn kolejnych liczb naturalnych nie przekraczających n o tej samej parzystości co n	
Jeśli n jest liczbą parzystą, to	$n!! = 2 \times 4 \times 6 \times \dots \times n$
Jeśli n jest liczbą nieparzystą, to	$n!! = 1 \times 3 \times 5 \times \dots \times n$
Znak \$ to supersilnia - tj. iloczyn silni kolejnych liczb naturalnych nie przekraczających n	
$n\$ = 1! \times 2! \times 3! \times \dots \times n!$	

$$28 = (20-13)? = 7? = 1+2+3+4+5+6+7 = 3+7+11+7 = 10+18 = 28$$

$$29 = -20+13?? = -20+1+3+5+7+9+11+13 = -20+4+12+20+13 = -20+16+33 = -20+49 = 29$$

$$30 = (2+0)!+(1+3)! = (2+1)!+4! = 3!+24 = 6+24 = 30$$

$$31 = [(2+0)!+1]?+3 = [(2+1)!+1]?+3 = [3!+1]?+3 = [6+1]?+3 = 7?+3 = 1+2+3+4+5+6+7+3 = 3+7+11+10 = 10+21 = 31$$

$$32 = 2^{(0-1+3)} = 2^{(-1+6)} = 2^5 = 32$$

$$33 = 20+13$$

$$34 = [(2+0)!+1]?+3! = [(2+1)!+1]?+6 = [3!+1]?+6 = [6+1]?+6 = 7?+6 = 1+2+3+4+5+6+7+6 = 3+7+11+13 = 10+24 = 34$$

$$35 = [(2+0)!]!!-13 = [(2+1)!]!!-13 = [3!]!!-13 = 6!!-13 = 2 \times 4 \times 6 - 13 = 48 - 13 = 35$$

$$36 = (2+0+1)! \times 3! = 3! \times 3! = 6 \times 6 = 36$$

$$37 = \{[(2?)!]??\}??-0!-1-3 = \{[3!]??\}??-1-4 = \{6??\}??-5 = \{2+4+6\}??-5 = 12??-5 = 2+4+6+8+10+12-5 = 6+14+22-5 = 20+17 = 37$$

$$38 = -[(2?)?]+[-(0!)+13]? = -[3?]+[-1+13]? = -[1+3]+[12]? = -4+2+4+6+8+10+12 = 2+14+22 = 16+22 = 38$$

$$39 = -(2?)+[-(0!)+13]? = -3+[-1+13]? = -3+12? = -3+2+4+6+8+10+12 = 3+14+22 = 17+22 = 39$$

$$40 = 20 \times (-1+3) = 20 \times 2 = 40$$

$$41 = \{[(2?)!]??\}??+0!+1-3 = \{[3!]??\}??+1-2 = \{6??\}??-1 = \{2+4+6\}??-1 = 12??-1 = 2+4+6+8+10+12-1 = 6+14+22-1 = 20+21 = 41$$

$$42 = [(2+0)!+1] \times 3! = [(2+1)!+1] \times 6 = [3!+1] \times 6 = [6+1] \times 6 = 7 \times 6 = 42$$

$$43 = -[(2+0)!]+13?? = -[(2+1)!]+1+3+5+7+9+11+13 = -[3!]+4+12+20+13 = -6+16+33 = 10+33 = 43$$

$$44 = 20+(1+3)! = 20+4! = 20+24 = 44$$

$$45 = [(2+0+1) \times 3]? = [3 \times 3]? = 9? = 1+2+3+4+5+6+7+8+9 = 3+7+11+15+9 = 10+26+9 = 36+9 = 45$$

$$46 = (2?)?+[-(0!)+13]? = 3?+[-1+13]? = 1+3+12? = 4+2+4+6+8+10+12 = 6+10+18+12 = 16+30 = 46$$

$$47 = -2+0+13?? = -2+1+3+5+7+9+11+13 = 2+12+20+13 = 14+33 = 47$$

$$48 = (2+0) \times [(1+3)!] = 2 \times [4!] = 2 \times 24 = 48$$

$$49 = (2 \times 0+13)? = (0+13)? = 13? = 1+3+5+7+9+11+13 = 4+12+20+13 = 16+33 = 49$$

$$50 = -[(2?)!]+(0!+13)? = -[3!]+(1+13)? = -6+14? = -6+2+4+6+8+10+12+14 = 0+14+22+14 = 14+36 = 50$$

$$51 = 2+0+13?? = 2+1+3+5+7+9+11+13 = 3+8+16+24 = 11+40 = 51$$

$$52 = 2+0!+13?? = 2+1+1+3+5+7+9+11+13 = 3+4+12+20+13 = 7+32+13 = 39+13 = 52$$

$$53 = -(2?)+(0!+13)? = -3+(1+13)? = -3+14? = -3+2+4+6+8+10+12+14 = -1+10+18+26 = 9+44 = 53$$

$$54 = -2+(0!+13)? = -2+14? = -2+2+4+6+8+10+12+14 = 0+10+18+26 = 10+44 = 54$$

Dla ułatwienia zapisu obliczmy pewne wyrażenia:

$$2? = 1+2 = 3$$

$$3? = 2?+3 = 6$$

$$4? = 3?+4 = 10$$

$$5? = 4?+5 = 15$$

$$6? = 5?+6 = 21$$

$$7? = 6?+7 = 28$$

$$8? = 7?+8 = 36$$

$$9? = 8?+9 = 45$$

$$10? = 9?+10 = 45+10 = 55$$

$$11? = 10?+11 = 55+11 = 66$$

$$12? = 11?+12 = 66+12 = 78$$

$$13? = 12?+13 = 78+13 = 91$$

$$14? = 13?+14 = 91+14 = 105$$

$$15? = 14?+15 = 120$$

$$16? = 15?+16 = 136$$

$$20? = 1+2+3+4+5+6+7+8+9+10+11+12+13+14+15+16+17+18+19+20 =$$

$$= 3+7+11+15+19+23+27+31+35+39 = 10+26+42+58+74 = 36+100+74 = 136+74 = 210$$

$$13?? = 1+3+5+7+9+11+13 = 4+12+20+13 = 16+33 = 49$$

$$14?? = 2+4+6+8+10+12+14 = 6+14+22+14 = 20+36 = 56$$

$$17?? = 13??+15+17 = 49+15+17 = 64+17 = 81$$

$$19?? = 17??+19 = 81+19 = 100$$

$$20?? = 2+4+6+8+10+12+14+16+18+20 = 6+14+22+30+38 = 20+52+38 = 20+90 = 110$$

$$21?? = 19??+21 = 100+21 = 121$$

$$22?? = 20??+22 = 110+22 = 132$$

$$23?? = 21??+23 = 121+23 = 144$$

$$24?? = 22??+24 = 132+24 = 156$$

$$25?? = 23??+25 = 144+25 = 169$$

$$26?? = 24??+26 = 156+26 = 182$$

$$27?? = 25??+27 = 169+27 = 196$$

$$28?? = 26??+28 = 182+28 = 210$$

$$29?? = 27??+29 = 196+29 = 225$$

$$55 = (2+0)!+13?? = (2+1)!+49 = 3!+49 = 6+49 = 55$$

$$56 = (2^0+13)?? = (1+13)?? = 14?? = 56$$

$$57 = (2?+0)!+13?? = (3+1)!+49 = 4!+49 = 8+49 = 57$$

$$58 = 2+(0!+13)?? = 2+(1+13)?? = 2+14?? = 2+56 = 58$$

$$59 = 2?+(0!+13)?? = 3+(1+13)?? = 3+14?? = 3+56 = 59$$

$$60 = 20^1 \times 3 = 20 \times 3 = 60$$

$$61 = 20??-13?? = 110-49 = 61$$

$$62 = (2?)!+(0!+13)?? = 3!+(1+13)?? = 6+14?? = 6+56 = 62$$

$$63 = (20+1) \times 3 = 21 \times 3 = 63$$

$$64 = 2^{(0 \times 1 + 3!)} = 2^{(0+6)} = 2^6 = 64$$

$$65 = \{[(2?)!]??\}?-0-13 = \{[3!]??\}?-13 = \{6??\}?-13 = 12?-13 = 78-13 = 65$$

$$66 = (-2+0+13)? = 11? = 66$$

$$67 = 201:3 = 67$$

$$68 = 2^{[(0!+1)2]!}+3?? = 2^{[(1+1)2]!}+4 = 2^{[2?]!}+4 = 2^{3!}+4 = 2^6+4 = 64+4 = 68$$

$$69 = 20+13?? = 20+49 = 69$$

$$70 = 20?/(1 \times 3) = 210/3 = 70$$

$$71 = -20+13? = -20+91 = 71$$

$$72 = (2+0!+1)! \times 3 = (2+1+1)! \times 3 = 4! \times 3 = 24 \times 3 = 72$$

Obliczmy wyrażenie:

$$[(3!)??]? = [6??]? = [2+4+6]? = 12? = 78$$

$$73 = -(2?)!-0!-1+[(3!)??]? = -3-1-1+78 = -5+78 = 73$$

$$74 = -2-0!-1+[(3!)??]? = -2-1-1+78 = -4+78 = 74$$

$$75 = -2+0-1+[(3!)??]? = -3+78 = 75$$

$$76 = -2+(-0!+13)? = -2+(-1+13)? = -2+12? = -2+78 = 76$$

$$77 = 2 \times 0-1+[(3!)??]? = 0-1+78 = 77$$

$$78 = 2 \times 0 \times 1+[(3!)??]? = 0+78 = 78$$

$$79 = 2 \times 0+1+[(3!)??]? = 0+1+78 = 79$$

$$80 = 20 \times (1+3) = 20 \times 4 = 80$$

$$81 = (2?+0!+13)?? = (3+1+13)?? = 17?? = 81$$

$$82 = 2+0!+1+[(3!)??]? = 2+1+1+78 = 4+78 = 82$$

$$83 = 2?+0!+1+[(3!)??]? = 3+1+1+78 = 5+78 = 83$$

$$84 = -(2?)!-0!+13? = -3!-1+91 = -6+90 = 84$$

$$\begin{aligned}
85 &= -(2?)!+0+13? = -3!+0+91 = -6+91 = 85 \\
86 &= -(2?)!+0!+13? = -3!+1+91 = -6+92 = 86 \\
87 &= -(2?)!-0!+13? = -3-1+91 = -4+91 = 87 \\
88 &= -(2?)!+0+13? = -3+0+91 = 88 \\
89 &= -2+0+13? = -2+91 = 89 \\
90 &= -(2^0)+13? = -1+91 = 90 \\
91 &= (2x0+13)? = (0+13)? = 13? = 91 \\
92 &= 2^0+13? = 1+91 = 92 \\
93 &= 2+0+13? = 2+91 = 93 \\
94 &= 2?+0+13? = 3+91 = 94 \\
95 &= 2?+0!+13? = 3+1+91 = 95 \\
96 &= (2?)!-0!+13? = 3!-1+91 = 6+90 = 96 \\
97 &= (2?)!+0+13? = 3!+0+91 = 6+91 = 97 \\
98 &= (2?)!+0!+13? = 3!+1+91 = 6+92 = 98 \\
99 &= -(2?)!+(0!+13)? = -3!+(1+13)? = -6+14? = -6+105 = 99 \\
100 &= (20-1^3)?? = (20-1)?? = 19?? = 100
\end{aligned}$$

Obliczmy wyrażenie:

$$(1+3!)!! = (1+6)!! = 7!! = 1 \times 3 \times 5 \times 7 = 3 \times 35 = 105$$

$$\begin{aligned}
101 &= -(2?)!-0!+(1+3!)!! = -3-1+105 = -4+105 = 101 \\
102 &= -2-0!+(1+3!)!! = -2-1+105 = -3+105 = 102 \\
103 &= -2+0+(1+3!)!! = -2+105 = 103 \\
104 &= -(2^0)+(1+3!)!! = -1+105 = 104 \\
105 &= 2x0+(1+3!)!! = 0+105 = 105 \\
106 &= 2^0+(1+3!)!! = 1+105 = 106 \\
107 &= 2+0+(1+3!)!! = 2+105 = 107 \\
108 &= 2+0!+(1+3!)!! = 2+1+105 = 108 \\
109 &= 2?+0!+(1+3!)!! = 3+1+105 = 109 \\
110 &= (2?)!-0!+(1+3!)!! = 3!-1+105 = 6-1+105 = 110 \\
111 &= (2?)!+0+(1+3!)!! = 3!+105 = 6+105 = 111 \\
112 &= (2?)!+0!+(1+3!)!! = 3!+1+105 = 6+1+105 = 112
\end{aligned}$$

Obliczmy wyrażenie:

$$(1+3??)! = (1+4)! = 5! = 120$$

$$\begin{aligned}
113 &= -[(2?)!]-0!+(1+3??)! = -[3!]-1+120 = -6-1+120 = 113 \\
114 &= -[(2?)!]+0+(1+3??)! = -[3!]+0+120 = -6+120 = 114 \\
115 &= -[(2?)??]-0!+(1+3??)! = -[3??]-1+120 = -4-1+120 = 115 \\
116 &= -(2?)!-0!+(1+3??)! = -3-1+120 = 116 \\
117 &= -2-0!+(1+3??)! = -2-1+120 = 117 \\
118 &= -2+0+(1+3??)! = -2+120 = 118 \\
119 &= -(2^0)+(1+3??)! = -1+120 = 119 \\
120 &= 2x0+(1+3??)! = 0+120 = 120 \\
121 &= 2^0+(1+3??)! = 1+120 = 121 \\
122 &= 2+0+(1+3??)! = 2+120 = 122 \\
123 &= 2+0!+(1+3??)! = 2+1+120 = 123 \\
124 &= 2?+0!+(1+3??)! = 3+1+120 = 124 \\
125 &= (2?)??+0!+(1+3??)! = 3??+1+120 = 4+1+120 = 125 \\
126 &= (2?)!+0+(1+3??)! = 3!+0+120 = 6+120 = 126 \\
127 &= (2?)!+0!+(1+3??)! = 3!+1+120 = 6+1+120 = 127 \\
128 &= (2?+0!)!!+(1+3??)! = (3+1)!!+120 = 4!!+120 = 8+120 = 128 \\
129 &= [(2?)??]!!+0!+(1+3??)! = [3??]!!+1+120 = 4!!+121 = 8+121 = 129 \\
130 &= (2?+0!)?+(1+3??)! = (3+1)?+120 = 4?+120 = 10+120 = 130 \\
131 &= [(2?)??]?+0!+(1+3??)! = [3??]?+1+120 = 4?+121 = 10+121 = 131
\end{aligned}$$

$$132 = (2?)\$+0+(1+3??)! = 3\$+120 = 2!x3!+120 = 2x6+120 = 12+120 = 132$$

$$133 = (2?)\$+0!+(1+3??)! = 3\$+1+120 = 12+121 = 133$$

Obliczmy wyrażenia:

$$7\text{£} = 1?+2?+3?+4?+5?+6?+7? = 1+3+6+10+15+21+28 = 4+16+36+28 = 20+64 = 84$$

$$8\text{£} = 7\text{£}+8? = 84+36 = 120$$

$$9\text{£} = 8\text{£}+9? = 120+45 = 165$$

$$10\text{£} = 9\text{£}+10? = 165+55 = 220$$

$$11\text{£} = 10\text{£}+11? = 220+66 = 286$$

$$[(3??)!]\text{£} = [4!]\text{£} = 8\text{£} = 120$$

$$\{[(2?)!-0!]?+1\}?? = \{[3!-1]?+1\}?? = \{[6-1]?+1\}?? = \{5?+1\}?? = \{15+1\}?? = 16? = 136$$

$$\{[(2?)??!]\}?? = \{[3??!]\}?? = \{4!\}?? = 24?? = 156$$

$$134 = (2?)\$+0!+1+[(3??)!]\text{£} = 3\$+1+1+120 = 12+122 = 134$$

$$135 = (2?+0!+1)!!+ [(3??)!]\text{£} = (3+1+1)!!+120 = 5!!+120 = 1x3x5+120 = 15+120 = 135$$

$$136 = [(2?)??+0!]!!+1+[(3??)!]\text{£} = [3??+1]!!+1+120 = [4+1]!!+121 = 5!!+121 = 15+121 = 136$$

$$137 = [(2?)!]?-[(0!+1)?]??+[(3??)!]\text{£} = [3!]?-[(1+1)?]??+120 = 6?-[2?]??+120 = 21-3??+120 = 21-4+120 = 17+120 = 137$$

$$138 = [(2?)!+0!]\text{£}-1+[(3??)?]?? = [3!+1]\text{£}-1+[4?]? = [6+1]\text{£}-1+10? = 7\text{£}-1+55 = 84+54 = 138$$

$$139 = \{[(2?)!-0!]?+1\}??+3 = 136+3 = 139$$

$$140 = \{[(2?)!-0!]?+1\}??+3?? = 136+4 = 140$$

$$141 = (20+1)??+(3??)\text{£} = 21??+4\text{£} = 121+20 = 141$$

$$142 = \{[(2?)!-0!]?+1\}??+3! = 136+6 = 142$$

$$143 = \{[(2?)??!]\}??-0-1-[(3!)?]?? = \{[3??!]\}??-1-[6??]?? = \{4!\}??-1-12 = 24??-13 = 156-13 = 143$$

$$144 = \{[(2?)??!]\}??-0x1-[(3!)?]?? = 156-0-[6??]?? = 156-12 = 144$$

$$145 = \{[(2?)??!]\}??-0+1-[(3!)?]?? = 156+1-[6??]?? = 157-12 = 145$$

$$146 = \{[(2?)??!]\}??-[(0!+1)?]??-3! = 156-[(1+1)?]??-6 = 156-[2?]??-6 = 156-3??-6 = 156-4-6 = 156-10 = 146$$

$$147 = \{[(2?)??!]\}??-(0!+1)?x3 = 156-(1+1)?x3 = 156-2?x3 = 156-3x3 = 156-9 = 147$$

$$148 = \{[(2?)??!]\}??-0!-1-3! = 156-1-1-6 = 156-8 = 148$$

$$149 = \{[(2?)??!]\}??-0-1-3! = 156-1-6 = 156-7 = 149$$

$$150 = \{[(2?)??!]\}??+0x1-3! = 156+0-6 = 150$$

$$151 = \{[(2?)??!]\}??-0!-1-3 = 156-1-1-3 = 156-5 = 151$$

$$152 = \{[(2?)??!]\}??+0-1-3 = 156-4 = 152$$

$$153 = \{[(2?)??!]\}??+0x1-3 = 156+0-3 = 153$$

$$154 = \{[(2?)??!]\}??+0+1-3 = 156-2 = 154$$

$$155 = \{[(2?)??!]\}??+0!+1-3 = 156+1-2 = 155$$

$$156 = (20+1+3)?? = 24?? = 156$$

$$157 = \{[(2?)??!]\}??-0!-1+3 = 156-1+2 = 157$$

$$158 = \{[(2?)??!]\}??+0-1+3 = 156+2 = 158$$

$$159 = \{[(2?)??!]\}??+0x1+3 = 156+0+3 = 159$$

$$160 = \{[(2?)??!]\}??+0+1+3 = 156+4 = 160$$

$$161 = \{[(2?)??!]\}??+0!+1+3 = 156+1+4 = 161$$

$$162 = \{[(2?)??!]\}??+0x1+3! = 156+0+6 = 162$$

$$163 = \{[(2?)??!]\}??+0+1+3! = 156+1+6 = 163$$

$$164 = \{[(2?)??!]\}??+0!+1+3! = 156+1+1+6 = 164$$

$$165 = \{[(2?)??!]\}??+(0!+1)?x3 = 156+(1+1)?x3 = 156+2?x3 = 156+3x3 = 156+9 = 165$$

$$166 = \{[(2?)??!]\}??+[(0!+1)?]??+3! = 156+[(1+1)?]??+6 = 162+[2?]?? = 162+3?? = 162+4 = 166$$

$$167 = \{[(2?)??!]\}??+0-1+(3!)? = 156-1+6?? = 155+12 = 167$$

$$168 = \{[(2?)??!]\}??+0!-1+(3!)? = 156+1-1+6?? = 156+12 = 168$$

$$169 = \{[(2?)??!]\}??+0+1+(3!)? = 156+1+6?? = 157+12 = 169$$

$$170 = \{[(2?)??!]\}??+0!+1+(3!)? = 156+1+1+6?? = 158+12 = 170$$

$$171 = \{[(2?)??!]\}??+(0!+1)?+(3!)? = 156+(1+1)?+6?? = 156+2?+12 = 168+3 = 171$$

$$172 = \{[(2?)??]!\}?? + [(0!+1)??]?? + (3!)?? = 156 + [(1+1)??]?? + 6?? = 156 + [2?]?? + 12 = 168 + 3?? = 168 + 4 = 172$$

Obliczmy wyrażenie:

$$[1+(3??)!!]£ = [1+4!!]£ = [1+8]£ = 9£ = 165$$

$$173 = (2?+0)!! + [1+(3??)!!]£ = (3+1)!! + 165 = 4!! + 165 = 8 + 165 = 173$$

$$174 = [(2?)??+0!]?? + [1+(3??)!!]£ = [3??+1]?? + 165 = [4+1]?? + 165 = 5?? + 165 = 9 + 165 = 174$$

$$175 = (2?+0!)? + [1+(3??)!!]£ = (3+1)? + 165 = 4? + 165 = 10 + 165 = 175$$

$$176 = [(2?)??]?+0! + [1+(3??)!!]£ = [3??]?+1 + 165 = 4? + 166 = 10 + 166 = 176$$

$$177 = (2?)$+0 + [1+(3??)!!]£ = 3$+0 + 165 = 12 + 165 = 177$$

$$178 = (2?)$+0! + [1+(3??)!!]£ = 3$+1 + 165 = 12 + 166 = 178$$

Obliczmy wyrażenie:

$$\{[(1+3??)??]??\}?? = \{[(1+4)??]??\}?? = \{[5??]??\}?? = \{9??\}?? = 25?? = 169$$

$$179 = (2?+0!)? + \{[(1+3??)??]??\}?? = (3+1)? + 169 = 4? + 169 = 10 + 169 = 179$$

$$180 = [(2?)??]?+0! + \{[(1+3??)??]??\}?? = [3??]?+1 + 169 = 4? + 170 = 10 + 170 = 180$$

$$181 = (2?)$+0 + \{[(1+3??)??]??\}?? = 3$+0 + 169 = 12 + 169 = 181$$

$$182 = (2?)$+0! + \{[(1+3??)??]??\}?? = 3$+1 + 169 = 12 + 170 = 182$$

Obliczmy wyrażenie:

$$(\{[(2?)??]!\}??-0!)? = (\{[3??]!\}??-1)? = (\{4!!\}??-1)? = (8??-1)? = (20-1)? = 19? = 190$$

$$183 = (\{[(2?)??]!\}??-0!)?-1-3! = 190-1-6 = 183$$

$$184 = (\{[(2?)??]!\}??-0!)?-(1 \times 3)! = 190-3! = 190-6 = 184$$

$$185 = (\{[(2?)??]!\}??-0!)?+1-3! = 190+1-6 = 185$$

$$186 = (\{[(2?)??]!\}??-0!)?-1-3 = 190-4 = 186$$

$$187 = (\{[(2?)??]!\}??-0!)?-1 \times 3 = 190-3 = 187$$

$$188 = (\{[(2?)??]!\}??-0!)?+1-3 = 190-2 = 188$$

$$189 = (\{[(2?)??]!\}??-0!)?-1^3 = 190-1 = 189$$

$$190 = (20+0!+1-3)? = (20+1-2)? = 19? = 190$$

$$191 = (\{[(2?)??]!\}??-0!)?+1^3 = 190+1 = 191$$

$$192 = (\{[(2?)??]!\}??-0!)?-1+3 = 190+2 = 192$$

$$193 = (\{[(2?)??]!\}??-0!)?+1 \times 3 = 190+3 = 193$$

$$194 = (\{[(2?)??]!\}??-0!)?+1+3 = 190+4 = 194$$

$$195 = (\{[(2?)??]!\}??-0!)?-1+3! = 190-1+6 = 195$$

$$196 = (\{[(2?)??]!\}??-0!)?+1 \times 3! = 190+6 = 196$$

$$197 = (\{[(2?)??]!\}??-0!)?+1+3! = 190+1+6 = 197$$

Obliczmy wyrażenie:

$$\{[(1+3)!!]??\}? = \{[4!!]??\}? = \{8??\}? = 20? = 210$$

$$198 = 201-3 = 198$$

$$199 = -\{[(2?)??]?\}-0! + \{[(1+3)!!]??\}? = -\{[3??]?\}-1+210 = -\{4?\}+209 = -10+209 = 199$$

$$200 = -[(2?+0!)?]+ \{[(1+3)!!]??\}? = -[(3+1)?]+210 = -[4?]+210 = -10+210 = 200$$

$$201 = -\{[(2?)??+0!]??\} + \{[(1+3)!!]??\}? = -\{[3??+1]??\}+210 = -\{[4+1]??\}+210 = -\{5??\}+210 = -9+210 = 201$$

$$202 = -[(2?+0)!!] + \{[(1+3)!!]??\}? = -[(3+1)!!]+210 = -[4!!]+210 = -8+210 = 202$$

$$203 = -(2?)!-0! + \{[(1+3)!!]??\}? = -3!-1+210 = -6+209 = 203$$

$$204 = 201+3 = 204$$

$$205 = 201+3?? = 201+4 = 205$$

$$206 = -[(2+0)??] + \{[(1+3)!!]??\}? = -[(2+1)??]+210 = -[3??]+210 = -4+210 = 206$$

$$207 = 201+3! = 201+6 = 207$$

$$208 = -2+0 + \{[(1+3)!!]??\}? = -2+210 = 208$$

$$209 = 201+(3??)!! = 201+4!! = 201+8 = 209$$

$$210 = [20+(1+3)!!]?? = [20+4!!]?? = [20+8]?? = 28?? = 210$$

$$211 = 201+3£ = 201+10 = 211$$

$$212 = 2-0 + \{[(1+3)!!]??\}? = 2+210 = 212$$

$$\begin{aligned}
213 &= 201+3\$ = 201+12 = 213 \\
214 &= (2+0!)??+\{[(1+3)!!]??\} = (2+1)??+210 = 3??+210 = 4+210 = 214 \\
215 &= (2?)??+0!+\{[(1+3)!!]??\} = 3??+1+210 = 4+211 = 215 \\
216 &= (2+0!)!+\{[(1+3)!!]??\} = (2+1)!+210 = 3!+210 = 6+210 = 216 \\
217 &= (2?)!+0!+\{[(1+3)!!]??\} = 3!+1+210 = 6+211 = 217 \\
218 &= (2?+0!)!!+\{[(1+3)!!]??\} = (3+1)!!+210 = 4!!+210 = 8+210 = 218 \\
219 &= [(2?)??+0!]??+\{[(1+3)!!]??\} = [3??+1]??+210 = [4+1]??+210 = 5??+210 = \\
&= 9+210 = 219 \\
220 &= (2?+0!)??+\{[(1+3)!!]??\} = (3+1)?+210 = 4?+210 = 10+210 = 220 \\
221 &= 201+(3??)\$ = 201+4\$ = 201+20 = 221 \\
222 &= 201+(3!)? = 201+6? = 201+21 = 222 \\
223 &= 20?+13 = 210+13 = 223
\end{aligned}$$

Obliczmy wyrażenie:

$$\{[(3??)!!]??\} = \{[4!!]??\} = \{8??\} = 20? = 210$$

$$224 = \{[(2?)??+0!]?-1+\{[(3??)!!]??\} = \{[3??+1]?-1+210 = \{4+1\}??+209 = 5??+209 = 15+209 = 224$$

$$225 = 201+(3??)! = 201+4! = 201+24 = 225$$

$$226 = \{[(2?)??+0!]?+1+\{[(3??)!!]??\} = \{[3??+1]?+1+210 = \{4+1\}??+211 = 5??+211 = 15+211 = 226$$

$$227 = 2+[0!+(1+3!)??]?? = 2+[1+(1+6)??]?? = 2+[1+7??]?? = 2+[1+28]?? = 2+29?? = 2+225 = 227$$

Obliczmy wyrażenia:

$$[(3??)]\$ = [4?]\$ = 10\$ = 220$$

$$[(3\$)??]?? = [10??]?? = 30?? = 28??+30 = 210+30 = 240$$

$$228 = (2?)!+0!+1+[(3??)]\$ = 3!+1+1+220 = 6+222 = 228$$

$$229 = -\{[(2+0!)??]??\}-1+[(3\$)??]?? = -\{[(2+1)??]??\}-1+240 = -\{[3??]??\}+239 = -\{4?\}+239 = -10+239 = 229$$

$$230 = -[(2+0!+1)?]+[(3\$)??]?? = -[(2+1+1)?]+240 = -[4?]+240 = -10+240 = 230$$

$$231 = -\{[(2+0!)??]??\}+1+[(3\$)??]?? = -\{[(2+1)??]??\}+1+240 = -\{[3??]??\}+241 = -\{4?\}+241 = -10+241 = 231$$

$$232 = -[(2+0!+1)!!]+[(3\$)??]?? = -[(2+1+1)!!]+240 = -[4!!]+240 = -8+240 = 232$$

$$233 = -(2?)!+0-1+[(3\$)??]?? = -3!-1+240 = -6+239 = 233$$

$$234 = (20+1)?+3 = 21?+3 = 231+3 = 234$$

$$235 = (20+1)?+3?? = 21?+4 = 231+4 = 235$$

$$236 = -2-0!-1+[(3\$)??]?? = -2-1-1+240 = 236$$

$$237 = 201+[(3??)!!]? = 201+[4!!]? = 201+8? = 201+36 = 237$$

$$238 = -2+0x1+[(3\$)??]?? = -2+0+240 = 238$$

$$239 = (20+1)?+(3??)!! = 21?+4!! = 231+8 = 239$$

$$240 = 2x0x1+[(3\$)??]?? = 0+240 = 240$$

$$241 = 2+0-1+[(3\$)??]?? = 1+240 = 241$$

$$242 = 2+0x1+[(3\$)??]?? = 2+0+240 = 242$$

$$243 = 2+0+1+[(3\$)??]?? = 3+240 = 243$$

$$244 = 2+0!+1+[(3\$)??]?? = 2+1+1+240 = 244$$

$$245 = 2?+0!+1+[(3\$)??]?? = 3+1+1+240 = 245$$

$$246 = (2+0+1)!+[(3\$)??]?? = 3!+240 = 6+240 = 246$$

$$247 = (2?)!+0+1+[(3\$)??]?? = 3!+1+240 = 6+241 = 247$$

$$248 = (2+0!+1)!!+[(3\$)??]?? = (2+1+1)!!+240 = 4!!+240 = 8+240 = 248$$

$$249 = [(2+0!)??]??-1+[(3\$)??]?? = [(2+1)??]??-1+240 = [3??]??+239 = 4?+239 = 10+239 = 249$$

$$250 = (2+0!+1)?+[(3\$)??]?? = (2+1+1)?+240 = 4?+240 = 10+240 = 250$$

$$251 = [(2+0!)??]??+1+[(3\$)??]?? = [(2+1)??]??+1+240 = [3??]??+241 = 4?+241 = 10+241 = 251$$

$$252 = (2+0+1)\$+[(3\$)??]?? = 3\$+240 = 12+240 = 252$$

$$253 = (2+0!)\$+1+[(3\$)??]?? = (2+1)\$+1+240 = 3\$+241 = 12+241 = 253$$

$$254 = [(2?)! - 0!]^{-1} + [(3\text{£})??]?? = [3! - 1]^{-1} + 240 = [6 - 1]^{-1} + 239 = 5^{-1} + 239 = 15 + 239 = 254$$

$$255 = [2? + 0! + 1]^{-1} + [(3\text{£})??]?? = [3 + 1 + 1]^{-1} + 240 = 5^{-1} + 240 = 15 + 240 = 255$$

$$256 = [(2?)! - 0!]^{-1} + 1 + [(3\text{£})??]?? = [3! - 1]^{-1} + 1 + 240 = [6 - 1]^{-1} + 241 = 5^{-1} + 241 = 15 + 241 = 256$$

$$257 = 201 + (3!)£ = 201 + 6£ = 201 + 56 = 257$$

Obliczmy wyrażenia:

$$31?? = 29?? + 31 = 225 + 31 = 256$$

$$[1 + (3\text{£})??]?? = [1 + 10??]?? = [1 + 30]?? = 31?? = 256$$

$$258 = 2 + 0 + [1 + (3\text{£})??]?? = 2 + 256 = 258$$

$$259 = 2 + 0! + [1 + (3\text{£})??]?? = 2 + 1 + 256 = 259$$

$$260 = 2? + 0! + [1 + (3\text{£})??]?? = 3 + 1 + 256 = 260$$

$$261 = (2?)! - 0! + [1 + (3\text{£})??]?? = 3! - 1 + 256 = 6 + 255 = 261$$

$$262 = (2?)! + 0 + [1 + (3\text{£})??]?? = 3! + 0 + 256 = 6 + 256 = 262$$

$$263 = (2?)! + 0! + [1 + (3\text{£})??]?? = 3! + 1 + 256 = 6 + 257 = 263$$

$$264 = [(2?) + 0!]!! + [1 + (3\text{£})??]?? = [3 + 1]!! + 256 = 4!! + 256 = 8 + 256 = 264$$

$$265 = 20? + 1 \times [(3\text{£})?] = 210 + 1 \times [10?] = 210 + 1 \times 55 = 210 + 55 = 265$$

$$266 = [(2?)??]^{-1} + 0 + [1 + (3\text{£})??]?? = [3??]^{-1} + 0 + 256 = 4^{-1} + 256 = 10 + 256 = 266$$

$$267 = [(2?)??]^{-1} + 0! + [1 + (3\text{£})??]?? = [3??]^{-1} + 1 + 256 = 4^{-1} + 257 = 10 + 257 = 267$$

$$268 = (2?)\$ + 0 + [1 + (3\text{£})??]?? = 3\$ + 0 + 256 = 12 + 256 = 268$$

$$269 = (2?)\$ + 0! + [1 + (3\text{£})??]?? = 3\$ + 1 + 256 = 12 + 257 = 269$$

$$270 = [20 + (0! + 1)??]^{-3}! = [20 + (1 + 1)??]^{-6} = [20 + 2??]^{-6} = [20 + 3]^{-6} = 23^{-6} = 276 - 6 = 270$$

$$271 = -(\{[(2?)??] + 0!\}!!) + [1 + (3??)]£ = -(\{[3??] + 1\}!!) + [1 + 4?]£ = -(\{4 + 1\}!!) + [1 + 10]£ = -5!! + 11£ = -15 + 286 = 271$$

$$272 = [20 + (0! + 1)??]^{-3} - (3??) = [20 + (1 + 1)??]^{-4} = [20 + 2??]^{-4} = [20 + 3]^{-4} = 23^{-4} = 276 - 4 = 272$$

$$273 = [20 + (0! + 1)??]^{-3} - 3 = [20 + (1 + 1)??]^{-3} - 3 = [20 + 2??]^{-3} - 3 = [20 + 3]^{-3} - 3 = 23^{-3} - 3 = 276 - 3 = 273$$

$$274 = -[(2 + 0!)\$] + [1 + (3??)]£ = -[(2 + 1)\$] + [1 + 4?]£ = -[3\$] + [1 + 10]£ = -12 + 11£ = -12 + 286 = 274$$

Obliczmy wyrażenia:

$$3\$ = 1! \times 2! \times 3! = 1 \times 2 \times 6 = 12$$

$$4\$ = 3\$ \times 4! = 12 \times 24 = 288$$

$$275 = -[(2?)\$] - 0! + (1 + 3)\$ = -[3\$] - 1 + 288 = -12 + 287 = 275$$

$$276 = -[(2 + 0!)\$] + (1 + 3)\$ = -[(2 + 1)\$] + 4\$ = -[3\$] + 288 = -12 + 288 = 276$$

$$277 = -\{[(2?)??]^{-1}\} - 0! + (1 + 3)\$ = -\{[3??]^{-1}\} - 1 + 288 = -\{4^{-1}\} + 287 = -10 + 287 = 277$$

$$278 = -\{[(2?)??]^{-1}\} + 0 + (1 + 3)\$ = -\{[3??]^{-1}\} + 0 + 288 = -\{4^{-1}\} + 288 = -10 + 288 = 278$$

$$279 = -\{[(2?)??]^{-1}\} + 0! + (1 + 3)\$ = -\{[3??]^{-1}\} + 1 + 288 = -\{4^{-1}\} + 289 = -10 + 289 = 279$$

$$280 = -[(2? + 0!)!!] + (1 + 3)\$ = -[(3 + 1)!!] + 4\$ = -[4!!] + 288 = -8 + 288 = 280$$

$$281 = -(2?)! - 0! + (1 + 3)\$ = -3! - 1 + 288 = -6 + 287 = 281$$

$$282 = -(2 + 0!)! + (1 + 3)\$ = -(2 + 1)! + 4\$ = -3! + 288 = -6 + 288 = 282$$

$$283 = -[(2?)??]^{-1} - 0! + (1 + 3)\$ = -[3??]^{-1} - 1 + 4\$ = -4 - 1 + 288 = 283$$

$$284 = -2? - 0! + (1 + 3)\$ = -3 - 1 + 4\$ = -4 + 288 = 284$$

$$285 = -2 - 0! + (1 + 3)\$ = -2 - 1 + 4\$ = -3 + 288 = 285$$

$$286 = -2 + 0 + (1 + 3)\$ = -2 + 4\$ = -2 + 288 = 286$$

$$287 = -2 + 0! + (1 + 3)\$ = -2 + 1 + 4\$ = -1 + 288 = 287$$

$$288 = 2 \times 0 + (1 + 3)\$ = 0 + 4\$ = 288$$

$$289 = 2 - 0! + (1 + 3)\$ = 2 - 1 + 4\$ = 1 + 288 = 289$$

$$290 = 2 + 0 + (1 + 3)\$ = 2 + 4\$ = 2 + 288 = 290$$

$$291 = 2 + 0! + (1 + 3)\$ = 2 + 1 + 4\$ = 3 + 288 = 291$$

$$292 = 2? + 0! + (1 + 3)\$ = 3 + 1 + 4\$ = 4 + 288 = 292$$

$$293 = (2?)?? + 0! + (1 + 3)\$ = 3?? + 1 + 4\$ = 4 + 1 + 288 = 293$$

$$294 = (2 + 0!)! + (1 + 3)\$ = (2 + 1)! + 4\$ = 3! + 288 = 6 + 288 = 294$$

$$295 = (2?)! + 0! + (1 + 3)\$ = 3! + 1 + 288 = 6 + 289 = 295$$

$$296 = (2? + 0!)!! + (1 + 3)\$ = (3 + 1)!! + 4\$ = 4!! + 288 = 8 + 288 = 296$$

$$297 = [(2?)??]^{-1} - 0! + (1 + 3)\$ = [3??]^{-1} - 1 + 288 = 4^{-1} + 287 = 10 + 287 = 297$$

$$\begin{aligned}
298 &= [(2?)??]?+0+(1+3)\$ = [3??]?+0+288 = 4?+288 = 10+288 = 298 \\
299 &= [(2?)??]?+0!+(1+3)\$ = [3??]?+1+288 = 4?+289 = 10+289 = 299 \\
300 &= (2+0!)\$+(1+3)\$ = (2+1)\$+4\$ = 3\$+288 = 12+288 = 300 \\
301 &= 20?+13? = 210+91 = 301 \\
302 &= [(2?)!-0!]?-1+(3??)\$ = [3!-1]?-1+4\$ = [6-1]?-1+288 = 5?+287 = 15+287 = 302 \\
303 &= [2?+0!+1]?+(3??)\$ = [3+1+1]?+4\$ = 5?+288 = 15+288 = 303 \\
304 &= [(2?)!-0!]?+1+(3??)\$ = [3!-1]?+1+4\$ = [6-1]?+1+288 = 5?+289 = 15+289 = 304 \\
305 &= [(2?)??]\$+{\{[(0!+1)?]??\}}\pounds-3 = [3??]\$+{\{[(1+1)?]??\}}\pounds-3 = 4\$+{\{[2?]??\}}\pounds-3 = \\
&= 288+{\{3??\}}\pounds-3 = 285+4\pounds = 285+20 = 305 \\
306 &= [(2?)??]\$+{\{[(0!+1)?]!\}}?-3 = [3??]\$+{\{[(1+1)?]!\}}?-3 = 4\$+{\{[2?]!\}}?-3 = 288+{\{3!\}}?-3 = \\
&= 285+6? = 285+21 = 306 \\
307 &= [(2?)??]\$-0!+[(1+3)!!]?? = [3??]\$-1+[4!!]?? = 4\$-1+8?? = 288-1+20 = 307
\end{aligned}$$

Wyliczmy:

$$32?? = 30??+32 = 240+32 = 272$$

$$34?? = 32??+34 = 272+34 = 306$$

$$\begin{aligned}
308 &= 2+[-0!+(1+3??)\pounds]?? = 2+[-1+(1+4)\pounds]?? = 2+[-1+5\pounds]?? = 2+[-1+35]?? = 2+34?? = \\
&= 2+306 = 308
\end{aligned}$$

$$\begin{aligned}
309 &= 2?+[-0!+(1+3??)\pounds]?? = 3+[-1+(1+4)\pounds]?? = 3+[-1+5\pounds]?? = 3+[-1+35]?? = 3+34?? = \\
&= 3+306 = 309
\end{aligned}$$

$$\begin{aligned}
310 &= (2?)??+[-0!+(1+3??)\pounds]?? = 3??+[-1+(1+4)\pounds]?? = 4+[-1+5\pounds]?? = 4+[-1+35]?? = 4+34?? = \\
&= 4+306 = 310
\end{aligned}$$

Obliczmy wyrażenia:

$$33?? = 31??+33 = 256+33 = 289$$

$$35?? = 33??+35 = 289+35 = 324$$

$$\{-1+[(3??)!!]??\}?? = \{-1+[4!!]??\}?? = \{-1+8??\}?? = \{-1+36\}?? = 35?? = 324$$

$$311 = -[(2?)\$]-0!+{\{-1+[(3??)!!]??\}}?? = -[3\$]-1+324 = -12+323 = 311$$

$$312 = -[(2+0!)\$]+{\{-1+[(3??)!!]??\}}?? = -[(2+1)\$]+324 = -[3\$]+324 = -12+324 = 312$$

$$313 = -{\{[(2?)??]?\}}-0!+{\{-1+[(3??)!!]??\}}?? = -{\{[3??]?\}}-1+324 = -{\{4?\}}+323 = -10+323 = 313$$

$$314 = -[(2?+0!)?]+{\{-1+[(3??)!!]??\}}?? = -[(3+1)?]+324 = -[4?]+324 = -10+324 = 314$$

$$\begin{aligned}
315 &= -{\{[(2?)!-0!]??\}}+{\{-1+[(3??)!!]??\}}?? = -{\{[3!-1]??\}}+324 = -{\{[6-1]??\}}+324 = -{\{5??\}}+324 = \\
&= -9+324 = 315
\end{aligned}$$

$$316 = -[(2?+0!)!!]+{\{-1+[(3??)!!]??\}}?? = -[(3+1)!!]+324 = -[4!!]+324 = -8+324 = 316$$

$$317 = -(2?)!-0!+{\{-1+[(3??)!!]??\}}?? = -3!-1+324 = -6+323 = 317$$

$$318 = -(2?)!+0+{\{-1+[(3??)!!]??\}}?? = -3!+0+324 = -6+324 = 318$$

$$319 = -(2?)!+0!+{\{-1+[(3??)!!]??\}}?? = -3!+1+324 = -6+325 = 319$$

$$320 = -(2?)!-0!+{\{-1+[(3??)!!]??\}}?? = -3-1+324 = 320$$

$$321 = -2-0!+{\{-1+[(3??)!!]??\}}?? = -2-1+324 = 321$$

$$322 = -2+0+{\{-1+[(3??)!!]??\}}?? = -2+324 = 322$$

$$323 = -2+0!+{\{-1+[(3??)!!]??\}}?? = -2+1+324 = 323$$

$$324 = 2x0+{\{-1+[(3??)!!]??\}}?? = 0+324 = 324$$

$$325 = 2-0!+{\{-1+[(3??)!!]??\}}?? = 2-1+324 = 325$$

$$326 = 2+0+{\{-1+[(3??)!!]??\}}?? = 2+324 = 326$$

$$327 = 2+0!+{\{-1+[(3??)!!]??\}}?? = 2+1+324 = 327$$

$$328 = 2?+0!+{\{-1+[(3??)!!]??\}}?? = 3+1+324 = 328$$

$$329 = (2?)!-0!+{\{-1+[(3??)!!]??\}}?? = 3!-1+324 = 6+323 = 329$$

$$330 = 20?+[(1+3)!!]\pounds = 210+[4!!]\pounds = 210+8\pounds = 210+120 = 330$$

$$331 = (2?)!+0!+{\{-1+[(3??)!!]??\}}?? = 3!+1+324 = 6+325 = 331$$

$$332 = (2?+0!)!!+{\{-1+[(3??)!!]??\}}?? = (3+1)!!+324 = 4!!+324 = 8+324 = 332$$

$$333 = [(2?)!-0!]??+{\{-1+[(3??)!!]??\}}?? = [3!-1]??+324 = [6-1]??+324 = 5??+324 = 9+324 = 333$$

$$334 = (2?+0!)?+{\{-1+[(3??)!!]??\}}?? = (3+1)?+324 = 4?+324 = 10+324 = 334$$

$$335 = [(2?)??]?+0!+{\{-1+[(3??)!!]??\}}?? = [3??]?+1+324 = 4?+325 = 10+325 = 335$$

$$336 = (2+0!)^{\$} + \{-1 + [(3??)!!]?\}?? = (2+1)^{\$} + 324 = 3^{\$} + 324 = 12 + 324 = 336$$

$$337 = (2?)^{\$} + 0! + \{-1 + [(3??)!!]?\}?? = 3^{\$} + 1 + 324 = 12 + 325 = 337$$