

# Different Types of Pretty Wild Narcissistic Numbers: Selfie Representations - I

Inder J. Taneja<sup>1</sup>

**ABSTRACT.** In this work, the numbers have been written in order of digits and their reverse, generally famous as "pretty wild narcissistic numbers". To write these numbers, the operations used are: *addition, subtraction, multiplication, potentiation, division, factorial, square-root*. For simplicity, these representations are named as *selfie numbers*. These representations have same digits on both sides of the expressions with the properties that, they are either in order of digits or in reverse order. The work is separated in different types, such as, Palindromic, Symmetrical consecutive, Sequential selfies, etc.

## 1. INTRODUCTION

An  $n$ -digit number that is the sum of the  $n^{\text{th}}$  powers of its digits is called an  $n$ -narcissistic number. It is also sometimes known as an Armstrong number, perfect digital invariant (Madachy 1979 [9]), or plus perfect number. Hardy in 1940 [7] (pg. 25) wrote, there are just four numbers, after unity, which are the sums of the cubes of their digits:

- $153 = 1^3 + 5^3 + 3^3$ ;
- $370 = 3^3 + 7^3 + 0^3$ ;
- $371 = 3^3 + 7^3 + 1^3$ ;
- $407 = 4^3 + 0^3 + 7^3$ .

The above four numbers have the same digits on both sides except the power 3. In 1962, Madachy [9], pages 163–175, studied in more details above numbers. Later, many authors [8] [15] [16] came across in this direction and produced very interesting results. A good list of numbers having same digits on both sides of the expressions with the operations as *addition, subtraction, multiplication, potentiation* and *division* are called *Freidman numbers*, and can be seen at [5] [6]. In some situations, numbers having more operations like *square-root*, *factorial* etc., are named "*wild or pretty wild or radical narcissistic numbers*" [12] [13] [14]. These numbers are of type:

- $24 = (2 \times \sqrt{4})!$ ;
- $71 = \sqrt{7! + 1}$ ;
- $936 = (\sqrt{9!})^3 + 6!$ ;
- $1296 = \sqrt{(1 + 2)!^9 / 6}$ ;
- $2896 = 2 \times (8 + (\sqrt{9})!! + 6!)$ , etc.

These numbers are with digits on both sides, while narcissistic numbers have extra as a power on each numbers. Above representations are according to digits' order. Let us imagine the reverse way, i.e., to write numbers in reverse order of digits, for examples,

- $24 = \sqrt{(4!)^2}$ ;
- $71 = \sqrt{1 + 7!}$ ;
- $936 = 6! + (3!)^{\sqrt{9}}$ ;
- $1296 = 6^{(\sqrt{9+2-1})}$ ;
- $2896 = (6! + (\sqrt{9})!! + 8) \times 2$ .

The reverse order representations are not known in the literature and are written here for the first time. It is not necessary that every number has its representation. The aim of this work is to study extensively "*pretty wild or radical narcissistic numbers*" having the operations, *addition, subtraction, multiplication, potentiation, division, factorial and square-root* i.e.,  $[+, -, \times, ^, /, \sqrt, !]$ . These studies are made in both ways, i.e, following the order of digits of the numbers and reverse order, as specified above. For simplicity, we shall call these numbers as "*selfie numbers*".

<sup>1</sup>Formerly, Professor of Mathematics, Universidade Federal de Santa Catarina, 88.040-900 Florianópolis, SC, Brazil. e-mail: [ijtaneja@gmail.com](mailto:ijtaneja@gmail.com).

## 2. SELFIE NUMBERS

Instead calling "*pretty wild or radical narcissistic numbers*", let us call them as "*selfie numbers or selfie representations*", i.e., the numbers that can be represented by same digits with operations  $[+, -, \times, ^, /, \sqrt, !]$ . Below are divides the different categories of "*selfie numbers*" followed by respective examples:

### Type 1: In order of digits and reverse orders.

- (i)  $12969 = 1 \times 2 \times 9 \times 6! + 9.$
- (ii)  $20167 = 7 + (6 + 1 + 0)!/2.$

The first example is in order of digits as of number and the second example is in reverse order of digits.

### Type 2: Increasing and decreasing orders of digits.

- (i)  $573846 = -3!! - (\sqrt{4} - (5! - 6) \times 7! - 8).$
- (ii)  $241965 = (1 + (2 \times 4)! + 5) \times 6 + 9.$
- (iii)  $435609 = 9 + (6! - 5!/\sqrt{4})^{(3-0!)}.$
- (iv)  $13287456 = (8 + 76) \times (54^3 + (2 + 1)!).$

The first two examples are in the increasing order of digits and the last two examples are in decreasing order of digits. In the first and forth examples, the digits are consecutive.

### Type 3: Without any order.

- (i)  $34562 = 2 - (3 - 5) \times 6! \times 4!.$
- (ii)  $87369 = (3! + 7) \times 8!/6 + 9.$

Here we have same digits as of number but there is no order in their representations.

### Type 4: Palindromic.

- (i)  $14641 = (1 + 4 + 6)^4 \times 1.$
- (ii)  $43634 = ((4!)^3 + 6!) \times 3 + \sqrt{4}.$

Here the numbers are palindromic.

### Type 5: Factorian representations.

- (i)  $143 = -1! + 4! \times 3!.$
- (ii)  $144 = (1 + 4)! + 4!.$
- (iii)  $145 = 1! + 4! + 5!.$
- (iv)  $40585 = 4! + 0! + 5! + 8! + 5!.$
- (v)  $80518 = 8! - 0! - 5! - 1! + 8!.$

This representation contain numbers with factorial expressions  $\boxed{3}$  on the left side.

### Type 6: Symmetrical consecutive.

$$\begin{aligned} 72590 &= 0 + 9!/5 + 2 \times 7. \\ 72591 &= 1 + 9!/5 + 2 \times 7. \\ 72592 &= 2 + 9!/5 + 2 \times 7. \\ 72593 &= 3 + 9!/5 + 2 \times 7. \\ 72594 &= 4 + 9!/5 + 2 \times 7. \\ 72595 &= 5 + 9!/5 + 2 \times 7. \\ 72596 &= 6 + 9!/5 + 2 \times 7. \\ 72597 &= 7 + 9!/5 + 2 \times 7. \\ 72598 &= 8 + 9!/5 + 2 \times 7. \\ 72599 &= 9 + 9!/5 + 2 \times 7. \end{aligned}$$

Here we have consecutive numbers represented in symmetrical way with same digits.

### Type 7: Twin selfies.

$$\begin{aligned} 645879 &= 4^5 \times (6 + 7!)/8 - 9. \\ 645897 &= 4^5 \times (6 + 7!)/8 + 9. \end{aligned}$$

$$\begin{aligned} 8469357 &= 9 \times 8 \times (7^6 + 5 - 4!) - 3. \\ 8479653 &= 9 \times 8 \times (7^6 + 5! + 4) - 3. \end{aligned}$$

**Type 8: Sequential selfies.**

Here we shall give three examples of sequential representations. First two are on power of 5 and 6, while third example is connected with 0, 3 and 6.

• **Power of 5**

$$\begin{aligned}
 5^1 &:= 5 = 5^1. \\
 5^2 &:= 25 = 5^2. \\
 5^3 &:= 125 = 5^{2+1}. \\
 5^4 &:= 625 = 5^{-2+6}. \\
 5^5 &:= 3125 = 5^{2+1 \times 3}. \\
 5^6 &:= 15625 = 5^{(2 \times 6 - 5 - 1)}. \\
 5^7 &:= 78125 = 5^{2 + \sqrt{18+7}}. \\
 5^8 &:= 390625 = 5^{2+6+0 \times 9 \times 3}. \\
 5^9 &:= 1953125 = 5^{2 + \sqrt{1+3+5} + \sqrt{9} + 1}. \\
 5^{10} &:= 9765625 = 5^{2-6+5+(-6+7) \times 9}. \\
 5^{11} &:= 48828125 = 5^{(2-1)^8 - 2+8+8-4}. \\
 5^{12} &:= 244140625 = 5^{2 \times 6 + 0 \times 4 \times 1 \times 4 \times 4 \times 2}. \\
 &\dots \\
 &\dots
 \end{aligned}$$

• **Power of 6**

$$\begin{aligned}
 6^1 &:= 6 = 6^1. \\
 6^2 &:= 36 = 6 \times 3!. \\
 6^3 &:= 216 = 6^{1+2}. \\
 6^4 &:= 1296 = 6^{\sqrt{9}+2-1}. \\
 6^5 &:= 7776 = \\
 6^6 &:= 46656 = 6^{(5 \times 6 - 6 \times 4)}. \\
 6^7 &:= 279936 = 6^{3!+9-\sqrt{9+7} \times 2}, \\
 6^8 &:= 1679616 = 6^{1-69+76 \times 1}. \\
 6^9 &:= 10077696 = 6^{9+6 \times 7 \times 7 \times 0 \times 0 \times 1}. \\
 6^{10} &:= 60466176 = 6^{7-1-6+6+4+0 \times 6}. \\
 6^{11} &:= 362797056 = 6^{5 \times 0 \times 7 \times 9 \times 7 + 2 + 6 + 3}. \\
 6^{12} &:= 2176782336 = 6^{3+3 \times 2 - 8 + 7 - 6 + 7 + 1 + 2}. \\
 &\dots \\
 &\dots
 \end{aligned}$$

In case of power of 6, we don't have all the representations, specially for 6<sup>5</sup>, and for 6<sup>2</sup>, the representation is different from others. The following example is little different. It gives sequential representation connecting the numbers 0, 3 and 6, except first one, i.e., only with 3 and 6:

• **3, 6 and 0**

$$\begin{aligned}
 36 &:= 3! \times 6. \\
 360 &:= 3! \times 60. \\
 3600 &:= 3! \times 600. \\
 36000 &:= 3! \times 6000. \\
 360000 &:= 3! \times 60000. \\
 3600000 &:= 3! \times 600000. \\
 36000000 &:= 3! \times 6000000. \\
 &\dots \\
 &\dots
 \end{aligned}$$

In this paper, the aim is to find numbers from 10 to 99999 according to Types 1, 4, 5, and 6 (except Types 2, 3 and 7). The table below give the quantity of existing numbers that we are able to bring:

digits	Total numbers	Selfie numbers	%
2	90 (10-99)	8	8,89
3	900 (100-999)	66	7,33
4	9000 (1000-9999)	520	5,78
5	90000 (10000-99999)	5326	5,92

We observe that in case of 4 and 5 digits, we found approximately, 6% of numbers. In case of 6 digits, it is expected that there should be at least 50000 numbers. Its too much to put in a papers. This we shall deal elsewhere along with higher orders. If we relax the operations, *factorial* and *square-root* these possibilities reduces approximately to 10000. This work can be seen in [5] including the numbers based on Type 3.

In this paper, we worked with all types except Types 2, 3 and 7. The results connected with “factorian type” are jointly with Type 1. In Type 2, there are two kinds of representations, one in consecutive order and another in nonconsecutive order of digits. In both the situations, the representations are in increasing and decreasing orders of digits. Author’s more work on numbers can be seen in [17, 18, 19, 20]. Some comments can be seen at [1, 2, 10, 11].

### 3. SELFIE REPRESENTATIONS OF PALINDROMIC NUMBERS

This section deals with the selfie representation of symmetric numbers known by Palindromic numbers. In 3 to 5 digits representations, we have very few numbers given below:

$$\begin{array}{ll}
 343 := (3 + 4)^3. & 44544 := 4! \times 4 \times (5! - 4) \times 4. \\
 595 := -5! + (\sqrt{9})!! - 5. & 44944 := (4 \times (49 + 4))^{\sqrt{4}}. \\
 727 := (\sqrt{7+2})!! + 7. & 46464 := (4 + 6! + \sqrt{4}) \times 64. \\
 & 46564 := 4! + 65 \times (6! - 4). \\
 1441 := 1 + \sqrt{4} \times (4 - 1)!!. & 46664 := 4!/6 + 6^6 + 4. \\
 4334 := (\sqrt{4} + 3!!) \times 3! + \sqrt{4}. & 48384 := 4! \times 8 \times 3 \times 84. \\
 & 48984 := (4 + 8) \times (\sqrt{9})!! + 8! + 4!. \\
 14441 := (1 + 4)!^{\sqrt{4}} + 41. & 59095 := 5 \times 9 + 0! + 9^5. \\
 14641 := (1 + 4 + 6)^4 \times 1. & 59295 := (5! + \sqrt{9}) \times 2 + 9^5. \\
 23332 := (2^3 + 3!^{3!})/2. & 59395 := (5! + 9 \times 3!!) \times 9 - 5. \\
 37173 := 3^7 \times 17 - 3!. & 64846 := 6 + 4^8 + 4! - 6!. \\
 38883 := -3!! \times \sqrt{\sqrt{8+8} + 8!} + 3. & 69696 := 6 + (9 - 6)!! \times 96. \\
 38983 := -3! + 8! - (\sqrt{9} + 8)^3. & 86968 := 8! + 6^{(9-6)!} - 8. \\
 43634 := (4!^3 + 6!) \times 3 + \sqrt{4}. &
 \end{array}$$

### 4. SYMMETRICAL CONSECUTIVE REPRESENTATIONS OF SELFIE NUMBERS

This section deals with the representations of numbers appearing in consecutive way. When the representations are in consecutive and symmetrical way, we shall call them as “Symmetrical consecutive” representations. These may be either digit’s order or reverse or both. This is divide in three subsections. The first one is in both way, second one is in digit’s orders and third subsection is in reverse order.

#### 4.1. Symmetrical consecutive representations in both ways

$$\begin{array}{ll}
 720 := (\sqrt{7+2})!! + 0 = 0 + (\sqrt{2+7})!!. & 2165 := (2 + 1) \times 6! + 5 = 5 + 6! \times (1 + 2). \\
 721 := (\sqrt{7+2})!! + 1 = 1 + (\sqrt{2+7})!!. & 2166 := (2 + 1) \times 6! + 6 = 6 + 6! \times (1 + 2). \\
 722 := (\sqrt{7+2})!! + 2 = 2 + (\sqrt{2+7})!!. & 2167 := (2 + 1) \times 6! + 7 = 7 + 6! \times (1 + 2). \\
 723 := (\sqrt{7+2})!! + 3 = 3 + (\sqrt{2+7})!!. & 2168 := (2 + 1) \times 6! + 8 = 8 + 6! \times (1 + 2). \\
 724 := (\sqrt{7+2})!! + 4 = 4 + (\sqrt{2+7})!!. & 2169 := (2 + 1) \times 6! + 9 = 9 + 6! \times (1 + 2). \\
 725 := (\sqrt{7+2})!! + 5 = 5 + (\sqrt{2+7})!!. & \\
 726 := (\sqrt{7+2})!! + 6 = 6 + (\sqrt{2+7})!!. & 2520 := (2 + 5)!/2 + 0 = 0 + (2 + 5)!/2. \\
 727 := (\sqrt{7+2})!! + 7 = 7 + (\sqrt{2+7})!!. & 2521 := (2 + 5)!/2 + 1 = 1 + (2 + 5)!/2. \\
 728 := (\sqrt{7+2})!! + 8 = 8 + (\sqrt{2+7})!!. & 2522 := (2 + 5)!/2 + 2 = 2 + (2 + 5)!/2. \\
 729 := (\sqrt{7+2})!! + 9 = 9 + (\sqrt{2+7})!!. & 2523 := (2 + 5)!/2 + 3 = 3 + (2 + 5)!/2. \\
 & 2524 := (2 + 5)!/2 + 4 = 4 + (2 + 5)!/2. \\
 1440 := (-1 + 4)!! \times \sqrt{4} + 0 = 0 + \sqrt{4} \times (4 - 1)!!. & 2525 := (2 + 5)!/2 + 5 = 5 + (2 + 5)!/2. \\
 1441 := (-1 + 4)!! \times \sqrt{4} + 1 = 1 + \sqrt{4} \times (4 - 1)!!. & 2526 := (2 + 5)!/2 + 6 = 6 + (2 + 5)!/2. \\
 1442 := (-1 + 4)!! \times \sqrt{4} + 2 = 2 + \sqrt{4} \times (4 - 1)!!. & 2527 := (2 + 5)!/2 + 7 = 7 + (2 + 5)!/2. \\
 1443 := (-1 + 4)!! \times \sqrt{4} + 3 = 3 + \sqrt{4} \times (4 - 1)!!. & 2528 := (2 + 5)!/2 + 8 = 8 + (2 + 5)!/2. \\
 1444 := (-1 + 4)!! \times \sqrt{4} + 4 = 4 + \sqrt{4} \times (4 - 1)!!. & 2529 := (2 + 5)!/2 + 9 = 9 + (2 + 5)!/2. \\
 1445 := (-1 + 4)!! \times \sqrt{4} + 5 = 5 + \sqrt{4} \times (4 - 1)!!. & \\
 1446 := (-1 + 4)!! \times \sqrt{4} + 6 = 6 + \sqrt{4} \times (4 - 1)!!. & 3600 := 3!! \times (6 - 0!) + 0 = 0 + (-0! + 6) \times 3!!. \\
 1447 := (-1 + 4)!! \times \sqrt{4} + 7 = 7 + \sqrt{4} \times (4 - 1)!!. & 3601 := 3!! \times (6 - 0!) + 1 = 1 + (-0! + 6) \times 3!!. \\
 1448 := (-1 + 4)!! \times \sqrt{4} + 8 = 8 + \sqrt{4} \times (4 - 1)!!. & 3602 := 3!! \times (6 - 0!) + 2 = 2 + (-0! + 6) \times 3!!. \\
 1449 := (-1 + 4)!! \times \sqrt{4} + 9 = 9 + \sqrt{4} \times (4 - 1)!!. & 3603 := 3!! \times (6 - 0!) + 3 = 3 + (-0! + 6) \times 3!!. \\
 & 3604 := 3!! \times (6 - 0!) + 4 = 4 + (-0! + 6) \times 3!!. \\
 2160 := (2 + 1) \times 6! + 0 = 0 + 6! \times (1 + 2). & 3605 := 3!! \times (6 - 0!) + 5 = 5 + (-0! + 6) \times 3!!. \\
 2161 := (2 + 1) \times 6! + 1 = 1 + 6! \times (1 + 2). & 3606 := 3!! \times (6 - 0!) + 6 = 6 + (-0! + 6) \times 3!!. \\
 2162 := (2 + 1) \times 6! + 2 = 2 + 6! \times (1 + 2). & 3607 := 3!! \times (6 - 0!) + 7 = 7 + (-0! + 6) \times 3!!. \\
 2163 := (2 + 1) \times 6! + 3 = 3 + 6! \times (1 + 2). & 3608 := 3!! \times (6 - 0!) + 8 = 8 + (-0! + 6) \times 3!!. \\
 2164 := (2 + 1) \times 6! + 4 = 4 + 6! \times (1 + 2). & 3609 := 3!! \times (6 - 0!) + 9 = 9 + (-0! + 6) \times 3!!.
 \end{array}$$











$$\begin{aligned} 38443 &:= (3! + 8)^4 + 4! + 3. \\ 38444 &:= (3! + 8)^4 + 4! + 4. \\ 38445 &:= (3! + 8)^4 + 4! + 5. \\ 38446 &:= (3! + 8)^4 + 4! + 6. \\ 38447 &:= (3! + 8)^4 + 4! + 7. \\ 38448 &:= (3! + 8)^4 + 4! + 8. \\ 38449 &:= (3! + 8)^4 + 4! + 9. \end{aligned}$$

$$\begin{aligned} 38760 &:= -3!! + 8! - 7!/6 + 0. \\ 38761 &:= -3!! + 8! - 7!/6 + 1. \\ 38762 &:= -3!! + 8! - 7!/6 + 2. \\ 38763 &:= -3!! + 8! - 7!/6 + 3. \\ 38764 &:= -3!! + 8! - 7!/6 + 4. \\ 38765 &:= -3!! + 8! - 7!/6 + 5. \\ 38766 &:= -3!! + 8! - 7!/6 + 6. \\ 38767 &:= -3!! + 8! - 7!/6 + 7. \\ 38768 &:= -3!! + 8! - 7!/6 + 8. \\ 38769 &:= -3!! + 8! - 7!/6 + 9. \end{aligned}$$

$$\begin{aligned} 46680 &:= 4! + 6\sqrt{\sqrt{6^8}} + 0. \\ 46681 &:= 4! + 6\sqrt{\sqrt{6^8}} + 1. \\ 46682 &:= 4! + 6\sqrt{\sqrt{6^8}} + 2. \\ 46683 &:= 4! + 6\sqrt{\sqrt{6^8}} + 3. \\ 46684 &:= 4! + 6\sqrt{\sqrt{6^8}} + 4. \\ 46685 &:= 4! + 6\sqrt{\sqrt{6^8}} + 5. \\ 46686 &:= 4! + 6\sqrt{\sqrt{6^8}} + 6. \\ 46687 &:= 4! + 6\sqrt{\sqrt{6^8}} + 7. \\ 46688 &:= 4! + 6\sqrt{\sqrt{6^8}} + 8. \\ 46689 &:= 4! + 6\sqrt{\sqrt{6^8}} + 9. \end{aligned}$$

$$\begin{aligned} 51840 &:= 5! \times 18 \times 4! + 0. \\ 51841 &:= 5! \times 18 \times 4! + 1. \\ 51842 &:= 5! \times 18 \times 4! + 2. \\ 51843 &:= 5! \times 18 \times 4! + 3. \\ 51844 &:= 5! \times 18 \times 4! + 4. \\ 51845 &:= 5! \times 18 \times 4! + 5. \\ 51846 &:= 5! \times 18 \times 4! + 6. \\ 51847 &:= 5! \times 18 \times 4! + 7. \\ 51848 &:= 5! \times 18 \times 4! + 8. \\ 51849 &:= 5! \times 18 \times 4! + 9. \end{aligned}$$

$$\begin{aligned} 64800 &:= 6!\sqrt[4]{8} + 0 + 0. \\ 64801 &:= 6!\sqrt[4]{8} + 0 + 1. \\ 64802 &:= 6!\sqrt[4]{8} + 0 + 2. \\ 64803 &:= 6!\sqrt[4]{8} + 0 + 3. \\ 64804 &:= 6!\sqrt[4]{8} + 0 + 4. \\ 64805 &:= 6!\sqrt[4]{8} + 0 + 5. \\ 64806 &:= 6!\sqrt[4]{8} + 0 + 6. \\ 64807 &:= 6!\sqrt[4]{8} + 0 + 7. \\ 64808 &:= 6!\sqrt[4]{8} + 0 + 8. \\ 64809 &:= 6!\sqrt[4]{8} + 0 + 9. \end{aligned}$$

$$\begin{aligned} 64810 &:= 6!\sqrt[4]{8} + 10. \\ 64811 &:= 6!\sqrt[4]{8} + 11. \\ 64812 &:= 6!\sqrt[4]{8} + 12. \end{aligned}$$

$$\begin{aligned} 64813 &:= 6!\sqrt[4]{8} + 13. \\ 64814 &:= 6!\sqrt[4]{8} + 14. \\ 64815 &:= 6!\sqrt[4]{8} + 15. \\ 64816 &:= 6!\sqrt[4]{8} + 16. \\ 64817 &:= 6!\sqrt[4]{8} + 17. \\ 64818 &:= 6!\sqrt[4]{8} + 18. \\ 64819 &:= 6!\sqrt[4]{8} + 19. \\ 64820 &:= 6!\sqrt[4]{8} + 20. \\ 64821 &:= 6!\sqrt[4]{8} + 21. \\ 64822 &:= 6!\sqrt[4]{8} + 22. \\ 64823 &:= 6!\sqrt[4]{8} + 23. \\ 64824 &:= 6!\sqrt[4]{8} + 24. \\ 64825 &:= 6!\sqrt[4]{8} + 25. \\ 64826 &:= 6!\sqrt[4]{8} + 26. \\ 64827 &:= 6!\sqrt[4]{8} + 27. \\ 64828 &:= 6!\sqrt[4]{8} + 28. \\ 64829 &:= 6!\sqrt[4]{8} + 29. \\ 64830 &:= 6!\sqrt[4]{8} + 30. \\ 64831 &:= 6!\sqrt[4]{8} + 31. \\ 64832 &:= 6!\sqrt[4]{8} + 32. \\ 64833 &:= 6!\sqrt[4]{8} + 33. \\ 64834 &:= 6!\sqrt[4]{8} + 34. \\ 64835 &:= 6!\sqrt[4]{8} + 35. \\ 64836 &:= 6!\sqrt[4]{8} + 36. \\ 64837 &:= 6!\sqrt[4]{8} + 37. \\ 64838 &:= 6!\sqrt[4]{8} + 38. \\ 64839 &:= 6!\sqrt[4]{8} + 39. \\ 64850 &:= 6!\sqrt[4]{8} + 50. \\ 64851 &:= 6!\sqrt[4]{8} + 51. \\ 64852 &:= 6!\sqrt[4]{8} + 52. \\ 64853 &:= 6!\sqrt[4]{8} + 53. \\ 64854 &:= 6!\sqrt[4]{8} + 54. \\ 64855 &:= 6!\sqrt[4]{8} + 55. \\ 64856 &:= 6!\sqrt[4]{8} + 56. \\ 64857 &:= 6!\sqrt[4]{8} + 57. \\ 64858 &:= 6!\sqrt[4]{8} + 58. \\ 64859 &:= 6!\sqrt[4]{8} + 59. \\ 64860 &:= 6!\sqrt[4]{8} + 60. \\ 64861 &:= 6!\sqrt[4]{8} + 61. \\ 64862 &:= 6!\sqrt[4]{8} + 62. \\ 64863 &:= 6!\sqrt[4]{8} + 63. \\ 64864 &:= 6!\sqrt[4]{8} + 64. \\ 64865 &:= 6!\sqrt[4]{8} + 65. \\ 64866 &:= 6!\sqrt[4]{8} + 66. \\ 64867 &:= 6!\sqrt[4]{8} + 67. \\ 64868 &:= 6!\sqrt[4]{8} + 68. \\ 64869 &:= 6!\sqrt[4]{8} + 69. \\ 64870 &:= 6!\sqrt[4]{8} + 70. \\ 64871 &:= 6!\sqrt[4]{8} + 71. \\ 64872 &:= 6!\sqrt[4]{8} + 72. \\ 64873 &:= 6!\sqrt[4]{8} + 73. \\ 64874 &:= 6!\sqrt[4]{8} + 74. \\ 64875 &:= 6!\sqrt[4]{8} + 75. \\ 64876 &:= 6!\sqrt[4]{8} + 76. \\ 64877 &:= 6!\sqrt[4]{8} + 77. \\ 64878 &:= 6!\sqrt[4]{8} + 78. \\ 64879 &:= 6!\sqrt[4]{8} + 79. \end{aligned}$$

$$\begin{aligned} 64880 &:= 6!\sqrt[4]{8} + 80. \\ 64881 &:= 6!\sqrt[4]{8} + 81. \\ 64882 &:= 6!\sqrt[4]{8} + 82. \\ 64883 &:= 6!\sqrt[4]{8} + 83. \\ 64884 &:= 6!\sqrt[4]{8} + 84. \\ 64885 &:= 6!\sqrt[4]{8} + 85. \\ 64886 &:= 6!\sqrt[4]{8} + 86. \\ 64887 &:= 6!\sqrt[4]{8} + 87. \\ 64888 &:= 6!\sqrt[4]{8} + 88. \\ 64889 &:= 6!\sqrt[4]{8} + 89. \\ 64890 &:= 6!\sqrt[4]{8} + 90. \\ 64891 &:= 6!\sqrt[4]{8} + 91. \\ 64892 &:= 6!\sqrt[4]{8} + 92. \\ 64893 &:= 6!\sqrt[4]{8} + 93. \\ 64894 &:= 6!\sqrt[4]{8} + 94. \\ 64895 &:= 6!\sqrt[4]{8} + 95. \\ 64896 &:= 6!\sqrt[4]{8} + 96. \\ 64897 &:= 6!\sqrt[4]{8} + 97. \\ 64898 &:= 6!\sqrt[4]{8} + 98. \\ 64899 &:= 6!\sqrt[4]{8} + 99. \end{aligned}$$

$$\begin{aligned} 64980 &:= (6! + \sqrt{4}) \times (\sqrt{9})!! / 8 + 0. \\ 64981 &:= (6! + \sqrt{4}) \times (\sqrt{9})!! / 8 + 1. \\ 64982 &:= (6! + \sqrt{4}) \times (\sqrt{9})!! / 8 + 2. \\ 64983 &:= (6! + \sqrt{4}) \times (\sqrt{9})!! / 8 + 3. \\ 64984 &:= (6! + \sqrt{4}) \times (\sqrt{9})!! / 8 + 4. \\ 64985 &:= (6! + \sqrt{4}) \times (\sqrt{9})!! / 8 + 5. \\ 64986 &:= (6! + \sqrt{4}) \times (\sqrt{9})!! / 8 + 6. \\ 64987 &:= (6! + \sqrt{4}) \times (\sqrt{9})!! / 8 + 7. \\ 64988 &:= (6! + \sqrt{4}) \times (\sqrt{9})!! / 8 + 8. \\ 64989 &:= (6! + \sqrt{4}) \times (\sqrt{9})!! / 8 + 9. \end{aligned}$$

$$\begin{aligned} 83520 &:= 8! + 3 \times 5!^2 + 0. \\ 83521 &:= 8! + 3 \times 5!^2 + 1. \\ 83522 &:= 8! + 3 \times 5!^2 + 2. \\ 83523 &:= 8! + 3 \times 5!^2 + 3. \\ 83524 &:= 8! + 3 \times 5!^2 + 4. \\ 83525 &:= 8! + 3 \times 5!^2 + 5. \\ 83526 &:= 8! + 3 \times 5!^2 + 6. \\ 83527 &:= 8! + 3 \times 5!^2 + 7. \\ 83528 &:= 8! + 3 \times 5!^2 + 8. \\ 83529 &:= 8! + 3 \times 5!^2 + 9. \end{aligned}$$

$$\begin{aligned} 87360 &:= 8! \times (7 + 3!) / 6 + 0. \\ 87361 &:= 8! \times (7 + 3!) / 6 + 1. \\ 87362 &:= 8! \times (7 + 3!) / 6 + 2. \\ 87363 &:= 8! \times (7 + 3!) / 6 + 3. \\ 87364 &:= 8! \times (7 + 3!) / 6 + 4. \\ 87365 &:= 8! \times (7 + 3!) / 6 + 5. \\ 87366 &:= 8! \times (7 + 3!) / 6 + 6. \\ 87367 &:= 8! \times (7 + 3!) / 6 + 7. \\ 87368 &:= 8! \times (7 + 3!) / 6 + 8. \\ 87369 &:= 8! \times (7 + 3!) / 6 + 9. \end{aligned}$$

$$\begin{aligned} 90540 &:= (9! - (0! + 5!)) / 4 + 0. \\ 90541 &:= (9! - (0! + 5!)) / 4 + 1. \\ 90542 &:= (9! - (0! + 5!)) / 4 + 2. \\ 90543 &:= (9! - (0! + 5!)) / 4 + 3. \end{aligned}$$

$$\begin{aligned} 90544 &:= (9! - (0! + 5)!)/4 + 4. \\ 90545 &:= (9! - (0! + 5)!)/4 + 5. \\ 90546 &:= (9! - (0! + 5)!)/4 + 6. \\ 90547 &:= (9! - (0! + 5)!)/4 + 7. \\ 90548 &:= (9! - (0! + 5)!)/4 + 8. \end{aligned}$$

$$\begin{aligned} 90549 &:= (9! - (0! + 5)!)/4 + 9. \\ 92160 &:= (\sqrt{9})!! \times 2^{1+6} + 0. \\ 92161 &:= (\sqrt{9})!! \times 2^{1+6} + 1. \\ 92162 &:= (\sqrt{9})!! \times 2^{1+6} + 2. \\ 92163 &:= (\sqrt{9})!! \times 2^{1+6} + 3. \end{aligned}$$

$$\begin{aligned} 92164 &:= (\sqrt{9})!! \times 2^{1+6} + 4. \\ 92165 &:= (\sqrt{9})!! \times 2^{1+6} + 5. \\ 92166 &:= (\sqrt{9})!! \times 2^{1+6} + 6. \\ 92167 &:= (\sqrt{9})!! \times 2^{1+6} + 7. \\ 92168 &:= (\sqrt{9})!! \times 2^{1+6} + 8. \\ 92169 &:= (\sqrt{9})!! \times 2^{1+6} + 9. \end{aligned}$$

### 4.3. Symmetrical consecutive representations in reverse order of digits

$$\begin{aligned} 7920 &:= 0 + (2 + 9)!/7!. \\ 7921 &:= 1 + (2 + 9)!/7!. \\ 7922 &:= 2 + (2 + 9)!/7!. \\ 7923 &:= 3 + (2 + 9)!/7!. \\ 7924 &:= 4 + (2 + 9)!/7!. \\ 7925 &:= 5 + (2 + 9)!/7!. \\ 7926 &:= 6 + (2 + 9)!/7!. \\ 7927 &:= 7 + (2 + 9)!/7!. \\ 7928 &:= 8 + (2 + 9)!/7!. \\ 7929 &:= 9 + (2 + 9)!/7!. \end{aligned}$$

$$\begin{aligned} 13440 &:= 0 + (4 + 4)!/3 \times 1. \\ 13441 &:= 1 + (4 + 4)!/3 \times 1. \\ 13442 &:= 2 + (4 + 4)!/3 \times 1. \\ 13443 &:= 3 + (4 + 4)!/3 \times 1. \\ 13444 &:= 4 + (4 + 4)!/3 \times 1. \\ 13445 &:= 5 + (4 + 4)!/3 \times 1. \\ 13446 &:= 6 + (4 + 4)!/3 \times 1. \\ 13447 &:= 7 + (4 + 4)!/3 \times 1. \\ 13448 &:= 8 + (4 + 4)!/3 \times 1. \\ 13449 &:= 9 + (4 + 4)!/3 \times 1. \\ 13680 &:= 0 + (8! + 6!)/3 \times 1. \\ 13681 &:= 1 + (8! + 6!)/3 \times 1. \\ 13682 &:= 2 + (8! + 6!)/3 \times 1. \\ 13683 &:= 3 + (8! + 6!)/3 \times 1. \\ 13684 &:= 4 + (8! + 6!)/3 \times 1. \\ 13685 &:= 5 + (8! + 6!)/3 \times 1. \\ 13686 &:= 6 + (8! + 6!)/3 \times 1. \\ 13687 &:= 7 + (8! + 6!)/3 \times 1. \\ 13688 &:= 8 + (8! + 6!)/3 \times 1. \\ 13689 &:= 9 + (8! + 6!)/3 \times 1. \end{aligned}$$

$$\begin{aligned} 15120 &:= 0 + 21 \times (5 + 1)!. \\ 15121 &:= 1 + 21 \times (5 + 1)!. \\ 15122 &:= 2 + 21 \times (5 + 1)!. \\ 15123 &:= 3 + 21 \times (5 + 1)!. \\ 15124 &:= 4 + 21 \times (5 + 1)!. \\ 15125 &:= 5 + 21 \times (5 + 1)!. \\ 15126 &:= 6 + 21 \times (5 + 1)!. \\ 15127 &:= 7 + 21 \times (5 + 1)!. \\ 15128 &:= 8 + 21 \times (5 + 1)!. \\ 15129 &:= 9 + 21 \times (5 + 1)!. \end{aligned}$$

$$\begin{aligned} 20160 &:= 0 + (6 + 1 + 0)!/2. \\ 20161 &:= 1 + (6 + 1 + 0)!/2. \\ 20162 &:= 2 + (6 + 1 + 0)!/2. \\ 20163 &:= 3 + (6 + 1 + 0)!/2. \\ 20164 &:= 4 + (6 + 1 + 0)!/2. \\ 20165 &:= 5 + (6 + 1 + 0)!/2. \\ 20166 &:= 6 + (6 + 1 + 0)!/2. \end{aligned}$$

$$\begin{aligned} 20167 &:= 7 + (6 + 1 + 0)!/2. \\ 20168 &:= 8 + (6 + 1 + 0)!/2. \\ 20169 &:= 9 + (6 + 1 + 0)!/2. \\ 23040 &:= 0 + (4 - 0)! \times 32. \\ 23041 &:= 1 + (4 - 0)! \times 32. \\ 23042 &:= 2 + (4 - 0)! \times 32. \\ 23043 &:= 3 + (4 - 0)! \times 32. \\ 23044 &:= 4 + (4 - 0)! \times 32. \\ 23045 &:= 5 + (4 - 0)! \times 32. \\ 23046 &:= 6 + (4 - 0)! \times 32. \\ 23047 &:= 7 + (4 - 0)! \times 32. \\ 23048 &:= 8 + (4 - 0)! \times 32. \\ 23049 &:= 9 + (4 - 0)! \times 32. \end{aligned}$$

$$\begin{aligned} 23340 &:= 0 + (4! + 3!^{3!})/2. \\ 23341 &:= 1 + (4! + 3!^{3!})/2. \\ 23342 &:= 2 + (4! + 3!^{3!})/2. \\ 23343 &:= 3 + (4! + 3!^{3!})/2. \\ 23344 &:= 4 + (4! + 3!^{3!})/2. \\ 23345 &:= 5 + (4! + 3!^{3!})/2. \\ 23346 &:= 6 + (4! + 3!^{3!})/2. \\ 23347 &:= 7 + (4! + 3!^{3!})/2. \\ 23348 &:= 8 + (4! + 3!^{3!})/2. \\ 23349 &:= 9 + (4! + 3!^{3!})/2. \end{aligned}$$

$$\begin{aligned} 26880 &:= 0 + 8 \times 8!/(6 \times 2). \\ 26881 &:= 1 + 8 \times 8!/(6 \times 2). \\ 26882 &:= 2 + 8 \times 8!/(6 \times 2). \\ 26883 &:= 3 + 8 \times 8!/(6 \times 2). \\ 26884 &:= 4 + 8 \times 8!/(6 \times 2). \\ 26885 &:= 5 + 8 \times 8!/(6 \times 2). \\ 26886 &:= 6 + 8 \times 8!/(6 \times 2). \\ 26887 &:= 7 + 8 \times 8!/(6 \times 2). \\ 26888 &:= 8 + 8 \times 8!/(6 \times 2). \\ 26889 &:= 9 + 8 \times 8!/(6 \times 2). \end{aligned}$$

$$\begin{aligned} 33840 &:= 0 + 48 \times 3!! - 3!!. \\ 33841 &:= 1 + 48 \times 3!! - 3!!. \\ 33842 &:= 2 + 48 \times 3!! - 3!!. \\ 33843 &:= 3 + 48 \times 3!! - 3!!. \\ 33844 &:= 4 + 48 \times 3!! - 3!!. \\ 33845 &:= 5 + 48 \times 3!! - 3!!. \\ 33846 &:= 6 + 48 \times 3!! - 3!!. \\ 33847 &:= 7 + 48 \times 3!! - 3!!. \\ 33848 &:= 8 + 48 \times 3!! - 3!!. \\ 33849 &:= 9 + 48 \times 3!! - 3!!. \end{aligned}$$

$$\begin{aligned} 38160 &:= 0 + (6! - 8) \times 3!!. \\ 38161 &:= 1 + (6! - 8) \times 3!!. \end{aligned}$$

$$\begin{aligned} 38162 &:= 2 + (6! - 8) \times 3!!. \\ 38163 &:= 3 + (6! - 8) \times 3!!. \\ 38164 &:= 4 + (6! - 8) \times 3!!. \\ 38165 &:= 5 + (6! - 8) \times 3!!. \\ 38166 &:= 6 + (6! - 8) \times 3!!. \\ 38167 &:= 7 + (6! - 8) \times 3!!. \\ 38168 &:= 8 + (6! - 8) \times 3!!. \\ 38169 &:= 9 + (6! - 8) \times 3!!. \end{aligned}$$

$$\begin{aligned} 39840 &:= 0 + 4! + 8! - 9!/3!!. \\ 39841 &:= 1 + 4! + 8! - 9!/3!!. \\ 39842 &:= 2 + 4! + 8! - 9!/3!!. \\ 39843 &:= 3 + 4! + 8! - 9!/3!!. \\ 39844 &:= 4 + 4! + 8! - 9!/3!!. \\ 39845 &:= 5 + 4! + 8! - 9!/3!!. \\ 39846 &:= 6 + 4! + 8! - 9!/3!!. \\ 39847 &:= 7 + 4! + 8! - 9!/3!!. \\ 39848 &:= 8 + 4! + 8! - 9!/3!!. \\ 39849 &:= 9 + 4! + 8! - 9!/3!!. \end{aligned}$$

$$\begin{aligned} 40680 &:= 0 + 8! + 6!/\sqrt{0+4}. \\ 40681 &:= 1 + 8! + 6!/\sqrt{0+4}. \\ 40682 &:= 2 + 8! + 6!/\sqrt{0+4}. \\ 40683 &:= 3 + 8! + 6!/\sqrt{0+4}. \\ 40684 &:= 4 + 8! + 6!/\sqrt{0+4}. \\ 40685 &:= 5 + 8! + 6!/\sqrt{0+4}. \\ 40686 &:= 6 + 8! + 6!/\sqrt{0+4}. \\ 40687 &:= 7 + 8! + 6!/\sqrt{0+4}. \\ 40688 &:= 8 + 8! + 6!/\sqrt{0+4}. \\ 40689 &:= 9 + 8! + 6!/\sqrt{0+4}. \end{aligned}$$

$$\begin{aligned} 43560 &:= 0 + (6! + 5! \times 3!!)/\sqrt{4}. \\ 43561 &:= 1 + (6! + 5! \times 3!!)/\sqrt{4}. \\ 43562 &:= 2 + (6! + 5! \times 3!!)/\sqrt{4}. \\ 43563 &:= 3 + (6! + 5! \times 3!!)/\sqrt{4}. \\ 43564 &:= 4 + (6! + 5! \times 3!!)/\sqrt{4}. \\ 43565 &:= 5 + (6! + 5! \times 3!!)/\sqrt{4}. \\ 43566 &:= 6 + (6! + 5! \times 3!!)/\sqrt{4}. \\ 43567 &:= 7 + (6! + 5! \times 3!!)/\sqrt{4}. \\ 43568 &:= 8 + (6! + 5! \times 3!!)/\sqrt{4}. \\ 43569 &:= 9 + (6! + 5! \times 3!!)/\sqrt{4}. \end{aligned}$$

$$\begin{aligned} 53240 &:= 0 + (4! - 2)^3 \times 5. \\ 53241 &:= 1 + (4! - 2)^3 \times 5. \\ 53242 &:= 2 + (4! - 2)^3 \times 5. \\ 53243 &:= 3 + (4! - 2)^3 \times 5. \\ 53244 &:= 4 + (4! - 2)^3 \times 5. \\ 53245 &:= 5 + (4! - 2)^3 \times 5. \\ 53246 &:= 6 + (4! - 2)^3 \times 5. \end{aligned}$$

$$\begin{aligned} 53247 &:= 7 + (4! - 2)^3 \times 5. \\ 53248 &:= 8 + (4! - 2)^3 \times 5. \\ 53249 &:= 9 + (4! - 2)^3 \times 5. \end{aligned}$$

$$\begin{aligned} 53880 &:= 0 + 8! + 8!/3 + 5!. \\ 53881 &:= 1 + 8! + 8!/3 + 5!. \\ 53882 &:= 2 + 8! + 8!/3 + 5!. \\ 53883 &:= 3 + 8! + 8!/3 + 5!. \\ 53884 &:= 4 + 8! + 8!/3 + 5!. \\ 53885 &:= 5 + 8! + 8!/3 + 5!. \\ 53886 &:= 6 + 8! + 8!/3 + 5!. \\ 53887 &:= 7 + 8! + 8!/3 + 5!. \\ 53888 &:= 8 + 8! + 8!/3 + 5!. \\ 53889 &:= 9 + 8! + 8!/3 + 5!. \end{aligned}$$

$$\begin{aligned} 57960 &:= 0 + 69 \times 7 \times 5!. \\ 57961 &:= 1 + 69 \times 7 \times 5!. \\ 57962 &:= 2 + 69 \times 7 \times 5!. \\ 57963 &:= 3 + 69 \times 7 \times 5!. \\ 57964 &:= 4 + 69 \times 7 \times 5!. \\ 57965 &:= 5 + 69 \times 7 \times 5!. \\ 57966 &:= 6 + 69 \times 7 \times 5!. \\ 57967 &:= 7 + 69 \times 7 \times 5!. \end{aligned}$$

$$\begin{aligned} 86400 &:= 0 + (0! + 4)! \times \left( \sqrt{\sqrt{\sqrt{6^8}}} \right)!. \\ 86401 &:= 1 + (0! + 4)! \times \left( \sqrt{\sqrt{\sqrt{6^8}}} \right)!. \\ 86402 &:= 2 + (0! + 4)! \times \left( \sqrt{\sqrt{\sqrt{6^8}}} \right)!. \\ 86403 &:= 3 + (0! + 4)! \times \left( \sqrt{\sqrt{\sqrt{6^8}}} \right)!. \\ 86404 &:= 4 + (0! + 4)! \times \left( \sqrt{\sqrt{\sqrt{6^8}}} \right)!. \end{aligned}$$

$$\begin{aligned} 57968 &:= 8 + 69 \times 7 \times 5!. \\ 57969 &:= 9 + 69 \times 7 \times 5!. \end{aligned}$$

$$\begin{aligned} 59050 &:= 0 + (5 \times 0)! + 9^5. \\ 59051 &:= 1 + (5 \times 0)! + 9^5. \\ 59052 &:= 2 + (5 \times 0)! + 9^5. \\ 59053 &:= 3 + (5 \times 0)! + 9^5. \\ 59054 &:= 4 + (5 \times 0)! + 9^5. \\ 59055 &:= 5 + (5 \times 0)! + 9^5. \\ 59056 &:= 6 + (5 \times 0)! + 9^5. \\ 59057 &:= 7 + (5 \times 0)! + 9^5. \\ 59058 &:= 8 + (5 \times 0)! + 9^5. \\ 59059 &:= 9 + (5 \times 0)! + 9^5. \end{aligned}$$

$$\begin{aligned} 69120 &:= 0 + (2 + 1)!! \times 96. \\ 69121 &:= 1 + (2 + 1)!! \times 96. \\ 69122 &:= 2 + (2 + 1)!! \times 96. \\ 69123 &:= 3 + (2 + 1)!! \times 96. \\ 69124 &:= 4 + (2 + 1)!! \times 96. \\ 69125 &:= 5 + (2 + 1)!! \times 96. \\ 69126 &:= 6 + (2 + 1)!! \times 96. \\ 69127 &:= 7 + (2 + 1)!! \times 96. \\ 69128 &:= 8 + (2 + 1)!! \times 96. \end{aligned}$$

$$69129 := 9 + (2 + 1)!! \times 96.$$

$$\begin{aligned} 72590 &:= 0 + 9!/5 + 2 \times 7. \\ 72591 &:= 1 + 9!/5 + 2 \times 7. \\ 72592 &:= 2 + 9!/5 + 2 \times 7. \\ 72593 &:= 3 + 9!/5 + 2 \times 7. \\ 72594 &:= 4 + 9!/5 + 2 \times 7. \\ 72595 &:= 5 + 9!/5 + 2 \times 7. \\ 72596 &:= 6 + 9!/5 + 2 \times 7. \\ 72597 &:= 7 + 9!/5 + 2 \times 7. \\ 72598 &:= 8 + 9!/5 + 2 \times 7. \\ 72599 &:= 9 + 9!/5 + 2 \times 7. \end{aligned}$$

$$\begin{aligned} 80540 &:= 0 + \sqrt{4} \times (-50 + 8!). \\ 80541 &:= 1 + \sqrt{4} \times (-50 + 8!). \\ 80542 &:= 2 + \sqrt{4} \times (-50 + 8!). \\ 80543 &:= 3 + \sqrt{4} \times (-50 + 8!). \\ 80544 &:= 4 + \sqrt{4} \times (-50 + 8!). \\ 80545 &:= 5 + \sqrt{4} \times (-50 + 8!). \\ 80546 &:= 6 + \sqrt{4} \times (-50 + 8!). \\ 80547 &:= 7 + \sqrt{4} \times (-50 + 8!). \\ 80548 &:= 8 + \sqrt{4} \times (-50 + 8!). \\ 80549 &:= 9 + \sqrt{4} \times (-50 + 8!). \end{aligned}$$

$$\begin{aligned} 86405 &:= 5 + (0! + 4)! \times \left( \sqrt{\sqrt{\sqrt{6^8}}} \right)!. \\ 86406 &:= 6 + (0! + 4)! \times \left( \sqrt{\sqrt{\sqrt{6^8}}} \right)!. \\ 86407 &:= 7 + (0! + 4)! \times \left( \sqrt{\sqrt{\sqrt{6^8}}} \right)!. \\ 86408 &:= 8 + (0! + 4)! \times \left( \sqrt{\sqrt{\sqrt{6^8}}} \right)!. \\ 86409 &:= 9 + (0! + 4)! \times \left( \sqrt{\sqrt{\sqrt{6^8}}} \right)!. \end{aligned}$$

## 5. SELFIE REPRESENTATIONS IN BOTH WAY, ORDER OF DIGITS AND REVERSE

This section deals with the selfie representations of numbers. This we have divided in three subsections. The first one is in both orders, second one is in order of digits and third is in reverse order.

### 5.1. Selfie representations in both orders

$$\begin{aligned}
 24 &:= (\sqrt{2^4})! &= \sqrt{4!^2}. \\
 36 &:= 3! \times 6 &= 6 \times 3!. \\
 71 &:= \sqrt{7! + 1} &= \sqrt{1 + 7!}. \\
 \\ 
 119 &:= -1 + (-1 + (\sqrt{9})!)! &= ((\sqrt{9})! - 1)! - 1. \\
 143 &:= -1 + 4! \times 3! &= 3! \times 4! - 1. \\
 144 &:= (1 + 4)! + 4! &= 4! + (4 + 1)!. \\
 145 &:= 1 + 4! + 5! &= 5! + 4! + 1. \\
 216 &:= \sqrt{(2 + 1)!^6} &= 6^{1+2}. \\
 354 &:= 3 \times (5! - \sqrt{4}) &= (-\sqrt{4} + 5!) \times 3. \\
 355 &:= 3 \times 5! - 5 &= -5 + 5! \times 3. \\
 456 &:= 4 \times (5! - 6) &= (-6 + 5!) \times 4. \\
 693 &:= 6! - 9 \times 3 &= -3 \times 9 + 6!. \\
 713 &:= -7 + 1 \times 3!! &= 3!! - 1 \times 7. \\
 715 &:= (7 - 1)! - 5 &= -5 + (-1 + 7)!. \\
 733 &:= 7 + 3!! + 3! &= 3! + 3!! + 7. \\
 744 &:= (7 + 4!) \times 4! &= 4! \times (4! + 7). \\
 936 &:= (\sqrt{9})^3 + 6! &= 6! + 3!^{\sqrt{9}}. \\
 \\ 
 1296 &:= \sqrt{(1 + 2)!^9/6} &= 6^{\sqrt{9}+2-1}. \\
 1392 &:= (-1 + 3)! + (\sqrt{9})!! \times 2 &= 2 \times ((\sqrt{9})!! - (3 + 1)!). \\
 1426 &:= -14 + 2 \times 6! &= 62 \times (4! - 1). \\
 1432 &:= 1 \times (-4 + 3!!) \times 2 &= 2 \times (3!! - 4) \times 1. \\
 1433 &:= -1 + \sqrt{4} \times (3!! - 3) &= (3!! - 3) \times \sqrt{4} - 1. \\
 1434 &:= (1 - 4 + 3!!) \times \sqrt{4} &= \sqrt{4} \times (3!! - 4 + 1). \\
 1435 &:= 1 \times \sqrt{4} \times 3!! - 5 &= -5 + 3!! \times \sqrt{4} \times 1. \\
 1439 &:= -1 + \sqrt{4} \times (-3 + 9)! &= (9 - 3)! \times \sqrt{4} - 1. \\
 1463 &:= -1 + 4! + 6! + 3!! &= 3!! + 6! + 4! - 1. \\
 1464 &:= 1 \times 4! + 6! \times \sqrt{4} &= 4! + 6! \times \sqrt{4} \times 1. \\
 1573 &:= (1 + 5!) \times (7 + 3!) &= (3! + 7) \times (5! + 1). \\
 1704 &:= (1 + 70) \times 4! &= 4! \times (0 + 71). \\
 2048 &:= 2^{(-0!+4+8)} &= 8^4/(0 + 2). \\
 2304 &:= \sqrt{(2 \times (3 + 0!)!)^4} &= 4 \times (0! + 3)!^2. \\
 2544 &:= (2 + 5)!/\sqrt{4} + 4! &= 4! + (\sqrt{4} + 5)!/2. \\
 2864 &:= \sqrt{2 \times 8} \times (6! - 4) &= 4 \times 6! - 8 \times 2. \\
 2896 &:= 2 \times (8 + (\sqrt{9})!! + 6!) &= (6! + (\sqrt{9})!! + 8) \times 2. \\
 2904 &:= ((2 + \sqrt{9})! + 0!) \times 4! &= 4! \times (0! + (\sqrt{9} + 2)!). \\
 2954 &:= 2 + (\sqrt{9} + 5!) \times 4! &= 4! \times (5! + \sqrt{9}) + 2. \\
 3125 &:= (3 + 1 \times 2)^5 &= 5^{2+1 \times 3}. \\
 3354 &:= -3! + (3!! + 5!) \times 4 &= 4 \times (5! + 3!!) - 3!. \\
 3376 &:= -3!! + (-3 + 7)^6 &= -6! + (7 - 3)^{3!}. \\
 3444 &:= 3! \times (4!^{\sqrt{4}} - \sqrt{4}) &= (4!^{\sqrt{4}} - \sqrt{4}) \times 3!. \\
 3448 &:= 3! \times 4!^{\sqrt{4}} - 8 &= -8 + 4!^{\sqrt{4}} \times 3!. \\
 3453 &:= 3!! \times 4!/5 - 3 &= 3!!/5 \times 4! - 3. \\
 \\ 
 3455 &:= (3!! \times 4! - 5)/5 &= 5 \times (-5 - 4! + 3!!). \\
 3456 &:= 3!! \times 4/5 \times 6 &= 6!/5 \times 4 \times 3!. \\
 3459 &:= 3!! \times 4!/5 + \sqrt{9} &= (\sqrt{9})!!/5 \times 4! + 3. \\
 3465 &:= (-3 - 4! + 6!) \times 5 &= 5 \times (6! - 4! - 3). \\
 3495 &:= (3 - 4! + (\sqrt{9})!!) \times 5 &= 5! + (-9 + 4!)^3. \\
 3579 &:= 3!! \times 5 - 7 \times \sqrt{9} &= -\sqrt{9} \times 7 + 5 \times 3!!). \\
 3584 &:= 3!! \times 5 + 8 - 4! &= -\sqrt{4} \times 8 + 5 \times 3!!). \\
 3585 &:= (3!! + 5 - 8) \times 5 &= 5 \times ((8 - 5)! - 3). \\
 3586 &:= 3!! \times 5 - 8 - 6 &= -6 - 8 + 5 \times 3!!). \\
 3589 &:= 3!! \times 5 - 8 - \sqrt{9} &= -\sqrt{9} - 8 + 5 \times 3!!). \\
 3591 &:= 3!! \times 5 - 9 \times 1 &= -1 \times 9 + 5 \times 3!!). \\
 3592 &:= 3!! \times 5 - (\sqrt{9})! - 2 &= -2^{\sqrt{9}} + 5 \times 3!!). \\
 3594 &:= 3!! \times 5 - \sqrt{9} \times 4 &= (\sqrt{4} \times 9)! \times 5 - 3!. \\
 3595 &:= (3!! + 5 - (\sqrt{9})!) \times 5 &= 5 \times (-(\sqrt{9})! + 5 + 3!!). \\
 3598 &:= 3! + 5 \times (\sqrt{9})! - 8 &= -8 + (\sqrt{9})! \times 5 + 3!. \\
 3599 &:= 3!! \times 5 - 9/9 &= -9/9 + 5 \times 3!!). \\
 3615 &:= (3 + 6!) \times 1 \times 5 &= 5 \times 1 \times (6! + 3). \\
 3625 &:= (3 + 6! + 2) \times 5 &= 5 \times (2 + 6! + 3). \\
 3636 &:= 3! \times (6 + 3!!) - 6! &= 6 \times (3! + 6!) - 3!!). \\
 3654 &:= (3! + 6!) \times 5 + 4! &= 4! + 5 \times (6 + 3!!). \\
 3655 &:= (3!! + 6 + 5) \times 5 &= 5 \times (5 + 6 + 3!!). \\
 \\ 
 3744 &:= -3!! + 7! - 4!^{\sqrt{4}} &= -4!^{\sqrt{4}} + 7! - 3!!). \\
 3755 &:= (3!! + 7) \times 5 + 5! &= 5! + 5 \times (7 + 3!!). \\
 3864 &:= 3 \times (-8 + 6^4) &= -4! + \sqrt{6^8} \times 3. \\
 3957 &:= -3 - 9 \times 5! + 7! &= 7! - 5! \times 9 - 3. \\
 3996 &:= (3!! - 9 \times (\sqrt{9})!) \times 6 &= (6! - 9 \times (\sqrt{9})!) \times 3!. \\
 4088 &:= 4^{(\sqrt{0!+8})!} - 8 &= -8 + 8^{0+4}. \\
 4093 &:= 4^{(\sqrt{0+9})!} - 3 &= -3 + (9 - 0!)^4. \\
 4094 &:= -\sqrt{4} + (-0! + 9)^4 &= -\sqrt{4} + (9 - 0!)^4. \\
 4096 &:= 4^{0 \times 9 + 6} &= (6!/90)^4. \\
 4098 &:= \sqrt{4} + \sqrt{(-0! + 9)^8} &= \sqrt{8(9 - 0!)} + \sqrt{4}. \\
 4099 &:= 4^{(\sqrt{0+9})!} + \sqrt{9} &= \sqrt{9} + (9 - 0!)^4. \\
 4176 &:= (-4! + (-1 + 7)!) \times 6 &= 6 \times ((7 - 1)! - 4!). \\
 4296 &:= (-4 + (2 \times \sqrt{9})!) \times 6 &= 6 \times ((\sqrt{9} \times 2)! - 4). \\
 4308 &:= (-\sqrt{4} + 3!!) \times (\sqrt{0! + 8})! &= (\sqrt{8 + 0!})! \times (3!! - \sqrt{4}). \\
 4314 &:= 4! \times (-1 + 3!!)/4 &= 4! \times (3!! - 1)/4. \\
 4316 &:= \sqrt{4} + (3!! - 1) \times 6 &= 6 \times 1 \times 3!! - 4. \\
 4317 &:= -4 - 3!! + 1 + 7! &= 7! + 1 - 3!! - 4. \\
 4318 &:= -\sqrt{4} + 3! \times (\sqrt{1 + 8})!! &= (8 - 1)! - 3!! - \sqrt{4}. \\
 4319 &:= (4 + 3)! - 1 - (\sqrt{9})!! &= -(\sqrt{9})!! - 1 + (3 + 4)!. \\
 4324 &:= 4 + 3! \times (2 + 4)! &= (4 + 2) \times 3!! + 4. \\
 4332 &:= (\sqrt{4} + 3!!) \times 3 \times 2 &= (2 + 3!!) \times 3 \times \sqrt{4}. \\
 4336 &:= -\sqrt{4} + 3! \times (3 + 6!) &= 6 \times (3 + 3!!) - \sqrt{4}. \\
 4337 &:= (4 + 3!!) \times 3! - 7 &= -7 + 3! \times (3!! + 4). \\
 4344 &:= 4! \times (3!! + 4)/4 &= 4! \times (4 + 3!!)/4. \\
 4346 &:= \sqrt{4} + 3! \times (4 + 6!) &= 6 \times (4 + 3!!) + \sqrt{4}.
 \end{aligned}$$

$4368 := \sqrt{4} \times 3 \times (6! + 8)$	$= (8 + 6!) \times 3 \times \sqrt{4}.$	$10073 := -1 + (0! + 0!) \times (7! - 3)$	$= (-3 + 7!) \times (0! + 0!) - 1.$
$4464 := 4! \times (4! + 6!)/4$	$= 4! \times (6! + 4!)/4.$	$10074 := (1 + 0!) \times (0! + 7! - 4)$	$= (-4 + 7! + 0!) \times (0! + 1).$
$4466 := 6 \times (6! + 4!) + \sqrt{4}$	$= \sqrt{4} + (4! + 6!) \times 6.$	$10075 := (1 + 0!) \times (0 + 7)! - 5$	$= -5 + 7! \times (0 + 0! + 1).$
$4816 := 4(\sqrt{\sqrt{81}})! + 6!$	$= 6! + 1 \times 8^4.$	$10076 := (1 + 0!) \times (0! + 7!) - 6$	$= -6 + (7! + 0!) \times (0! + 1).$
$4944 := (\sqrt{49})! - 4 \times 4!$	$= -4 \times 4! + (9 - \sqrt{4})!.$	$10077 := -\sqrt{10 - 0!} + 7! + 7!$	$= 7! + 7! - 0! - 0! - 1.$
$4977 := (-\sqrt{4} + (\sqrt{9})!! - 7) \times 7$	$= \sqrt{(7! - 7 \times 9)\sqrt{4}}.$	$10079 := (1 + 0!) \times (0! + 7!) - \sqrt{9}$	$= (\sqrt{9})!! \times 7 \times (0! + 0!) - 1.$
$4995 := (\sqrt{49})! - 9 \times 5$	$= -5 \times 9 + (9 - \sqrt{4})!.$	$10097 := -1 + (0! + 0!) \times (9 + 7!)$	$= (7! + 9) \times (0! + 0!) - 1.$
$5016 := -(5 - 0!)! + (1 + 6)!$	$= (6 + 1)! - (-0! + 5)!.$	$10368 := (1 + 0!)^3 \times \sqrt{6^8}$	$= 8 \times 6^{3+0+1}.$
$5017 := -(5 - 0!)! + 1 + 7!$	$= 7! + 1 - (-0! + 5)!.$	$10795 := -1 + (-0! + 7!) \times \sqrt{9} \times 5$	$= 5 \times (\sqrt{9} \times (7 - 0!)! - 1).$
$5027 := -\sqrt{5! + 0!} - 2 + 7!$	$= 7! - 2 - \sqrt{0! + 5!}.$	$10798 := -1 - 0! + 7! + (\sqrt{9})!! \times 8$	$= 8 \times (\sqrt{9})!! + 7! - 0! - 1.$
$5029 := -\sqrt{5! + 0!} + (-2 + 9)!$	$= (9 - 2)! - \sqrt{0! + 5!}.$	$10799 := -1 + (-0! + 7 + 9) \times (\sqrt{9})!!$	$= (\sqrt{9})!! \times (9 + 7 - 0!) - 1.$
$5034 := -5 - 0! + (3 + 4)!$	$= (4 + 3)! - 0! - 5.$	$11344 := (-11 + 3!) \times 4 \times 4$	$= 4 \times 4 \times (3!! - 11).$
$5035 := (5 - 0! + 3!) - 5$	$= (5 + 3 - 0!)! - 5.$	$11519 := (\sqrt{9})!! \times (15 + 1) - 1$	$= -1 + (15 + 1) \times (\sqrt{9})!!.$
$5037 := 5 \times 0 - 3 + 7!$	$= 7! - 3 + 0/5.$	$11528 := (1 + (1 + 5)! \times 2) \times 8$	$= 8 \times (2 \times (5 + 1)! + 1).$
$5039 := 5 + (0! + 3!) - (\sqrt{9})!$	$= -(\sqrt{9})! + (3! + 0!)! + 5.$	$11544 := 1 \times (1 + 5! \times 4) \times 4!$	$= 4! \times (4 \times 5! + 1) \times 1.$
$5064 := ((5 \times 0)! + 6!)! + 4!$	$= 4! + (6 + (0/5)!)!.$	$11664 := 1 \times 1 \times 6^6/4$	$= ((4! - 6) \times 6)^{1+1}.$
$5184 := \sqrt{(5 + 1)^8} \times 4$	$= 4! + (8 - 1)! + 5!.$	$11957 := 11 \times (9 \times 5! + 7)$	$= (7 + 5! \times 9) \times 11.$
$5275 := 5! \times 2 + 7! - 5$	$= -5 + 7! + 2 \times 5!.$	$12274 := ((1 + 2)!! + 2) \times (-7 + 4!)$	$= (4! - 7) \times (2 + (2 + 1)!!).$
$5395 := -(5! - 3!) \times 9 - 5$	$= -5 + 9 \times (3!! - 5!).$	$12288 := (1 + 2)! \times 2^{8 \times 8}$	$= 8^{8/2} \times (2 + 1).$
$5397 := 5! \times 3 - \sqrt{9} + 7!$	$= 7! - \sqrt{9} + 3 \times 5!.$	$12289 := 1 + (2 \times 2)! \times 8^{\sqrt{9}}$	$= \sqrt{9} \times 8^{(2^2)} + 1.$
$5568 := (-5!/5 + 6!) \times 8$	$= 8 \times (6! - 5!/5).$	$12294 := (1 + 2)! + 2^9 \times 4!$	$= (4^{(\sqrt{9})!} + 2) \times (2 + 1).$
$5637 := -5! + 6! - 3 + 7!$	$= 7! - 3 + 6! - 5!.$	$12544 := \sqrt{(-12 + 5! + 4)^4}$	$= (-4 - 4 + 5!)^2 \times 1.$
$5765 := 5 + 7! + 6 \times 5!$	$= 5! \times 6 + 7! + 5.$	$12599 := -1 + 25 \times 9! / (\sqrt{9})!!$	$= 9! / (\sqrt{9})!! \times 5^2 - 1.$
$5875 := 5! + 8!/7 - 5$	$= 5! \times \sqrt{\sqrt{7^8}} - 5.$	$12923 := -1 + 2 \times 9 \times (-2 + 3!!)$	$= (3!! - 2) \times 9 \times 2 - 1.$
$6399 := ((6 - 3)!! - 9) \times 9$	$= 9 \times (-9 + (\sqrt{36})!).$	$12933 := (1 + 2) \times (-9 + 3! \times 3!!)$	$= (3! \times 3!! - 9) \times (2 + 1).$
$6476 := 6! - 4 + 7! + 6!$	$= 6! + 7! - 4 + 6!.$	$12959 := -1 + 2 \times 9 \times 5! \times (\sqrt{9})!$	$= 9! / (5! - 92) - 1.$
$6494 := (6! + \sqrt{4}) \times 9 - 4$	$= -4 + 9 \times (\sqrt{4} + 6!).$	$12974 := ((1 + 2)!! \times 9 + 7) \times \sqrt{4}$	$= \sqrt{4} \times (7 + 9 \times (2 + 1)!!).$
$6696 := \sqrt{6^6} + 9 \times 6!$	$= 6! \times 9 + \sqrt{6^6}.$	$12975 := (1 + 2) \times (-\sqrt{9})!! + 7! + 5)$	$= (5 + 7! - (\sqrt{9})!!) \times (2 + 1).$
$6719 := -(6 - (7 + 1)!) / (\sqrt{9})!$	$= -(\sqrt{9})! + (1 + 7!)! / 6.$	$12993 := (-1 + (2 + (\sqrt{9})!!) \times (\sqrt{9})!) \times 3$	$= 3 \times ((\sqrt{9})! \times ((\sqrt{9})!! + 2) - 1).$
$6768 := (6 + 7!/6) \times 8$	$= 8 \times (6 + 7!/6).$	$12994 := (-1 + (2 + (\sqrt{9})!!) \times 9) \times \sqrt{4}$	$= \sqrt{4} \times (9 \times ((\sqrt{9})!! + 2) - 1).$
$6835 := (6! + 8!)/3! - 5$	$= -5 + (3!! + 8!)/6.$	$12996 := 1 \times (2 + (\sqrt{9})!!) \times \sqrt{9} \times 6$	$= 6 \times \sqrt{9} \times ((\sqrt{9})!! + 2) \times 1.$
$6839 := (6! + 8! - 3!) / (\sqrt{9})!$	$= ((\sqrt{9})!! - 3! + 8!) / 6.$	$13199 := -1 + (-3!! + (-1 + 9)! / \sqrt{9})$	$= -(\sqrt{9})!! + (9 - 1)! / 3 - 1.$
$6859 := (6 + 8 + 5)^{\sqrt{9}}$	$= \sqrt{((\sqrt{9})! + 5 + 8)^6}.$	$13392 := ((1 + 3)! + 3!!) \times 9 \times 2$	$= 2 \times (\sqrt{9})!^3 \times 31.$
$6864 := (6! + 8!)/6 + 4!$	$= 4! \times 6 + 8!/6.$	$13433 := -1 - 3! + (\sqrt{4^3})! / 3$	$= -3! + (3! + \sqrt{4})! / 3 - 1.$
$7056 := (7 - 0!)^5 - 6!$	$= 6^5 - (-0! + 7)!.$	$13435 := (1 + 3 + 4)! / 3 - 5$	$= -5 + (3! + \sqrt{4})! / 3 \times 1.$
$7193 := -7 + (1 + 9) \times 3!!$	$= 3!! \times (9 + 1) - 7.$	$13439 := ((1 + 3 + 4)! - 3) / \sqrt{9}$	$= 9! / (3^4/3) - 1.$
$7199 := 7! - 1 + \sqrt{9} \times (\sqrt{9})!!$	$= \sqrt{9} \times (\sqrt{9})!! - 1 + 7!.$	$13454 := 1 - 3 + (-4 + 5!)^{\sqrt{4}}$	$= (-4 + 5!)^{\sqrt{4}} - 3 + 1.$
$7235 := (7 + 2 \times 3!) \times 5$	$= 5 \times (3!! \times 2 + 7).$	$13537 := 1 + 3!^5 + 3!! + 7!$	$= 7! + 3!^5 + 3!! + 1.$
$7595 := 7 \times (5 + 9 \times 5!)$	$= (5 + 9 \times 5!) \times 7.$	$13555 := (-1 - 3! + 5!) \times 5! - 5$	$= -5 + 5! \times (5! - 3! - 1).$
$7944 := 7! + (\sqrt{9})!! \times 4 + 4!$	$= 4! + (\sqrt{4} + 9)! / 7!.$	$13557 := -1 \times 3 + 5! \times (5! - 7)$	$= (-7 + 5!) \times 5! - 3 \times 1.$
$8192 := 8^{1+\sqrt{9}} \times 2$	$= 2^{9+1} \times 8.$	$13566 := ((1 + 3)! - 5) \times (6! - 6)$	$= (-6 + 6!) \times (-5 + (3 + 1)!!).$
$8632 := -8 + 6! \times 3! \times 2$	$= 2 \times 3! \times 6! - 8.$	$13661 := (13 + 6) \times (6! - 1)$	$= (-1 + 6!) \times (6 \times 3 + 1).$
$8648 := 8 + 6! \times (4 + 8)$	$= (8 + 4) \times 6! + 8.$	$13679 := -1 + 3!! \times (6 + 7 + (\sqrt{9})!)$	$= (\sqrt{9})!! \times (7 + 6 + 3!) - 1.$
$9372 := -(\sqrt{9})!! + (3! + 7!) \times 2$	$= 2 \times (7! + 3!) - (\sqrt{9})!!.$	$13822 := \sqrt{(1 + 3)!^{8-2}} - 2$	$= -2 + (\sqrt{2 \times 8})!^3 \times 1.$
$9595 := (\sqrt{9})!! \times 5! / 9 - 5$	$= -5 + (\sqrt{9})!! \times 5! / 9.$	$13823 := -1 + \sqrt{(3 \times 8)^{2 \times 3}}$	$= (32 - 8)^3 - 1.$
$9599 := ((\sqrt{9})!! \times 5! - 9) / 9$	$= (-9 + (\sqrt{9})!! \times 5!) / 9.$	$13824 := 1 \times (3 \times 8)^2 \times 4!$	$= (-4 + 28)^3 \times 1.$
$9972 := (-9 \times (\sqrt{9})! + 7!) \times 2$	$= 2 \times (7! - 9 \times (\sqrt{9})!).$	$13825 := 1 + (3 \times 8)^{(-2+5)}$	$= ((5 - 2) \times 8)^3 + 1.$
$10067 := -1 + (0! + 0!) \times (-6 + 7!) = (7! - 6) \times (0! + 0!) - 1.$		$13829 := -1 + 3! + (8/2)!^{\sqrt{9}}$	$= (\sqrt{9})! + (\sqrt{2 \times 8})!^3 - 1.$

$$\begin{aligned}
13924 &:= \sqrt{((-1-3+9)!-2)^4} &= (\sqrt{4}-(2+\sqrt{9}))^{3-1}. \\
14335 &:= (-1+4 \times (-3+3!)) \times 5 &= 5 \times ((3!)-3) \times 4-1. \\
14352 &:= 1 \times 4! \times (3!-5!-2) &= (-2-5!+3!) \times 4! \times 1. \\
14359 &:= -1 + (-\sqrt{4}+3!)/(\sqrt{9})! &= (\sqrt{9})! \times 5!/3! - 41. \\
14365 &:= (-1+4 \times 3!-6) \times 5 &= 5 \times (-6+3! \times 4-1). \\
14376 &:= -1 \times 4! \times 3 \times 7! - 6! &= -6! + 7! \times 3 - 4! \times 1. \\
14395 &:= (-1+4 \times (-3+9)) \times 5 &= 5 \times ((9-3)! \times 4-1). \\
14397 &:= 1-4+(-3!+\sqrt{9} \times 7!) &= 7! \times \sqrt{9} - 3! - 4 + 1. \\
14399 &:= -1 + (4+3)! \times \sqrt{9} - (\sqrt{9})! &= ((\sqrt{9})!/(9-3))^{\sqrt{4}} - 1. \\
14515 &:= (1+4)! \times (5!+1) - 5 &= 5! \times (1+5!) - 4 - 1. \\
14543 &:= -1 + (\sqrt{4+5})! + 4!^3 &= 3! \times 4! + 5!^{\sqrt{4}} - 1. \\
14544 &:= (1+4)! + 5!^{\sqrt{4}} + 4! &= 4!^{\sqrt{4+5}} + (4-1)!. \\
14545 &:= 1+4!+5!^{\sqrt{4}}+5! &= 5!^{\sqrt{4}} + 5! + 4! + 1. \\
14567 &:= -1+4! \times (-5!+6!+7) &= (7+6!-5!) \times 4! - 1. \\
14637 &:= (1-4!+6!) \times 3 \times 7 &= 7 \times 3 \times (6!-4!+1). \\
14753 &:= -1 + (-\sqrt{4}+7!-5!) \times 3 &= 3 \times (-5!+7!-\sqrt{4}) - 1. \\
14754 &:= (-1+4) \times (7!-5!-\sqrt{4}) &= (-\sqrt{4}-5!+7!) \times (4-1). \\
14755 &:= (-1+4) \times (7!-5!) - 5 &= -5 + (-5!+7!) \times (4-1). \\
14759 &:= 1 - \sqrt{4} + (7!-5!) \times \sqrt{9} &= (\sqrt{9}+5!) \times (7-\sqrt{4}) - 1. \\
14905 &:= (1+4)^{(\sqrt{9})!} - (0!+5)! &= 5^{(\sqrt{9}+9)!} - (4-1)!. \\
14973 &:= -1 \times (49-7!) \times 3 &= 3 \times (7!-9) - (4+1)!. \\
14975 &:= -1-4!+\sqrt{9} \times 7! - 5! &= -5! + 7! \times \sqrt{9} - 4! - 1. \\
14993 &:= -1 + (4! - \sqrt{9}) \times ((\sqrt{9})! - 3!) &= (3! - (\sqrt{9})!) \times (\sqrt{9} - 4!) - 1. \\
14994 &:= -14 \times 9 + 9!/4! &= (4! - \sqrt{9}) \times ((\sqrt{9})! - (4-1)!). \\
14997 &:= -(1+4)! - \sqrt{9} + \sqrt{9} \times 7! &= 7! \times \sqrt{9} - \sqrt{9} \times 41. \\
15093 &:= ((\sqrt{-1+50})! - 9) \times 3 &= -3 \times (9 - (0! + 5 + 1)!). \\
15097 &:= 1 - (5-0!)! + \sqrt{9} \times 7! &= 7! \times \sqrt{9} + 0! - (5-1)!. \\
15117 &:= (1 - (5-1)) \times (1-7!) &= (7! - 1) \times (-1 + 5 - 1). \\
15119 &:= -1 + (5+1+1)! \times \sqrt{9} &= 9! / (\sqrt{1+15})! - 1. \\
15232 &:= (-1+5!) \times 2^{3!} \times 2 &= 2^{3!} \times 2 \times (5! - 1). \\
15237 &:= -1+5!-2+3 \times 7! &= 7! \times 3 - 2 + 5! - 1. \\
15273 &:= (-1+52+7!) \times 3 &= 3 \times ((\sqrt{7^2})! + 51). \\
15279 &:= (1+52+7!) \times \sqrt{9} &= \sqrt{9} \times (7! + 2 + 51). \\
15359 &:= -1+5! \times (3+5^{\sqrt{9}}) &= (\sqrt{9}+5^3) \times 5! - 1. \\
15367 &:= (1+5!) \times (3!/(6+7)) &= (7+6!/3!) \times (5!+1). \\
15473 &:= -1 + (5! - \sqrt{4} + 7!) \times 3 &= 3 \times (7! - \sqrt{4} + 5!) - 1. \\
15479 &:= (1+5!) \times \sqrt{4^7} - 9 &= (9 + (7 - \sqrt{4})!) \times 5! - 1. \\
15488 &:= (1+5!) \times \sqrt{4} \times 8 \times 8 &= 88^{\sqrt{4}} \times \sqrt{5-1}. \\
15505 &:= 1 \times 5^{5+0!} - 5! &= 5^{0!+5} - 5! \times 1. \\
15552 &:= (15/5)!^5 \times 2 &= (-2+5!)^5 \times \sqrt{5-1}. \\
15564 &:= ((1+5)^5 + 6) \times \sqrt{4} &= \sqrt{4} \times (6^5 + 5 + 1). \\
15585 &:= 1 \times (5^5 - 8) \times 5 &= 5 \times (-8 + 5^5) \times 1. \\
15589 &:= (-1+5!) \times (5!+8+\sqrt{9}) &= (\sqrt{9}+8+5!) \times (5!-1). \\
15595 &:= 1 \times (5^5 - (\sqrt{9})!) \times 5 &= 5^{(\sqrt{9})!} - 5 \times (5+1). \\
15609 &:= (1+5!) \times ((6-0!)! + 9) &= (9 + (-0! + 6!)) \times (5! + 1). \\
15619 &:= 1 + 5^6 - 1 - (\sqrt{9})! &= ((\sqrt{9})! - 1)^6 - 5 - 1. \\
15623 &:= 1 + 5^{\sqrt{6^2}} - 3 &= (3+2)^6 - \sqrt{5-1}. \\
15624 &:= 1 + 5^6 + 2 - 4 &= (\sqrt{4^2})! \times 651. \\
15625 &:= 1 \times 5^{(6+2-5)!} &= 5^{(2 \times 6 - 5 - 1)}. \\
15627 &:= -1 + 5^6 + \sqrt{2+7} &= (7-2)^6 + \sqrt{5-1}. \\
15649 &:= 1 \times 5^6 + 4 \times (\sqrt{9})! &= (9-4)^6 + (5-1)!. \\
15654 &:= 1 \times 5^6 + 5 + 4! &= 4! + 5^6 + 5 \times 1. \\
15655 &:= 1 \times 5 \times (6+5^5) &= (5^5 + 6) \times 5 \times 1. \\
15745 &:= 1 \times 5^{(7-4)!} + 5! &= 5! + (\sqrt{4}-7)^{5+1}. \\
15763 &:= \sqrt{1+5!} \times (-7+6!+3!) &= (3! + 6! - 7) \times \sqrt{5!+1}. \\
15864 &:= (-1-58+6!) \times 4! &= 4! \times (6! - 8 - 51). \\
15928 &:= \sqrt{1+5!} \times ((\sqrt{9})! \times 2 + 8) &= (8 + 2 \times (\sqrt{9})!) \times \sqrt{5!+1}. \\
15939 &:= \sqrt{1+5!} \times (9^3 + (\sqrt{9})!) &= (9^3 + (\sqrt{9})!) \times \sqrt{5!+1}. \\
15967 &:= (1+5!+\sqrt{9} \times 6!) \times 7 &= 7 \times (6! \times \sqrt{9} + 5! + 1). \\
16345 &:= (-1+6)^{3!} + (\sqrt{4+5})! &= \sqrt{5^{4 \times 3}} + 6! \times 1. \\
16346 &:= 1+6!+(3+\sqrt{4})^6 &= 6! + (\sqrt{4}+3)^6 + 1. \\
16377 &:= (1+6-3)^7 - 7 &= -7 + (7-3)^{6+1}. \\
16384 &:= 16^3 \times (8-4) &= \sqrt{48/3}^{6+1}. \\
16464 &:= -1 \times 6! + (-4+6!) \times 4! &= 4! \times (6! - 4) - 6! \times 1. \\
16537 &:= (-1+6!) \times (5 \times 3! - 7) &= (-7 + 3! \times 5) \times (6! - 1). \\
16559 &:= -1 - 6! + (5!/5) \times (\sqrt{9})! &= (\sqrt{9})! / 5 \times 5! - 6! - 1. \\
16564 &:= -1 - 6! + 5 + 6! \times 4! &= 4! \times 6! + 5 - 6! - 1. \\
16807 &:= \sqrt{(1+6)^8} \times (0+7) &= 7^{(0/8+6-1)}. \\
16944 &:= (-1+6! - 9 - 4) \times 4! &= 4! \times (-4 - 9 + 6! - 1). \\
16945 &:= 1 + (6! - 9) \times 4! - 5! &= -5! + 4! \times (-9 + 6!) + 1. \\
16992 &:= (\sqrt{16})! \times ((\sqrt{9})! - (\sqrt{9})! \times 2) &= 2 \times ((\sqrt{9})! + (\sqrt{9})!^{(6-1)}). \\
17039 &:= -1 + \sqrt{7!+0!} \times 3! / \sqrt{9} &= (\sqrt{9})! / 3 \times \sqrt{0!+7!} - 1. \\
17064 &:= (-1-7-0!+6!) \times 4! &= 4! \times (6! - 0! - 7 - 1). \\
17136 &:= (\sqrt{17-1})! \times (3! - 6) &= (6! - 3!) \times (\sqrt{17-1})!. \\
17232 &:= ((1+7)/2)! \times (3! - 2) &= (-2 + 3!) \times (-2 + (7-1)!). \\
17248 &:= (-1 + (\sqrt{7+2})!) \times 4! - 8 &= -8 + (4! \times ((\sqrt{2+7})! - 1)). \\
17253 &:= \sqrt{1+7!} \times (2 \times 5! + 3) &= 3\sqrt{5^2} \times 71. \\
17264 &:= -(1+7) \times 2 + 6! \times 4! &= 4! \times 6! - 2 \times (7+1). \\
17274 &:= 1 - 7 + (\sqrt{2+7})! \times 4! &= 4! \times (\sqrt{7+2})! - 7 + 1. \\
17279 &:= -1 + (7+2)! / (7 \times \sqrt{9}) &= 9! / (7 + 2 \times 7) - 1. \\
17294 &:= 1 \times 7 \times 2 + (\sqrt{9})! \times 4! &= 4! \times (\sqrt{9})! + 2 \times 7 \times 1. \\
17296 &:= (1+7) \times (2 + \sqrt{9} \times 6!) &= (6! \times \sqrt{9} + 2) \times (7+1). \\
17303 &:= -1 + (7-3)! \times (0! + 3!) &= (3! + 0!) \times (-3 + 7!) - 1. \\
17304 &:= (1^7 + 3! + 0) \times 4! &= 4 \times (0! + 3!) \times (7-1). \\
17329 &:= 1 + (7-3)! \times (2 + (\sqrt{9})!) &= ((\sqrt{9})! + 2) \times (-3 + 7!) + 1. \\
17346 &:= ((-1+7)! + 3) \times 4! - 6 &= -6 + (4! \times (3 + (7-1)!)). \\
17349 &:= ((-1+7)! + 3) \times 4! - \sqrt{9} &= -\sqrt{9} + 4! \times (3 + (7-1)!). \\
17351 &:= \sqrt{1+7!} + 3! \times (5-1)! &= (-1+5!) \times 3! + 71. \\
17395 &:= (5 + (\sqrt{9})! / 3) \times 71 &= \sqrt{1+7!} \times (3! / \sqrt{9} + 5). \\
17424 &:= \sqrt{((-1+7) \times (4! - 2))!} &= 4! \times (2 + 4 + (7-1)!). \\
17449 &:= 1 + 7 \times 4! + 4! \times (\sqrt{9})! &= (\sqrt{9})! \times 4! + 4! \times 7 + 1. \\
17496 &:= (-1+7) \times 4 \times \sqrt{9^6} &= (6 \times \sqrt{9})^4 / (7-1). \\
17527 &:= 1 \times 7^5 + (\sqrt{2+7})! &= 7^{\sqrt{2^5}} + (7-1)!. \\
17925 &:= ((-1+7)! - \sqrt{9}) \times 25 &= 5 \times (2^9 \times 7 + 1). \\
17994 &:= 1 - 7 + (\sqrt{9})! + (\sqrt{9})! \times 4! &= 4! \times (\sqrt{9})! + (\sqrt{9})! - 7 + 1.
\end{aligned}$$

$$\begin{aligned}
 17995 &:= (1 + (\sqrt{7+9})!) \times (\sqrt{9})! - 5 &= -5 + (\sqrt{9})! \times ((\sqrt{9+7})! + 1). & 23324 &:= (2 \times 3)^{3!}/2 - 4 &= -4 + (2 \times 3)^{3!}/2. \\
 17997 &:= (-1 + 7! - (\sqrt{9})!) \times \sqrt{9} + 7! &= 7! - \sqrt{9} \times ((\sqrt{9})! - 7! + 1). & 23325 &:= 2 + 3!^{3!}/2 - 5 &= -5 + 2 + 3!^{3!}/2. \\
 18025 &:= ((\sqrt{1+8})!! + 0!) \times 25 &= 5^2 \times (0! + (\sqrt{\sqrt{81}})!). & 23326 &:= -2 + 3!^{3!}/\sqrt{-2+6} &= 6^{2+3} \times 3 - 2. \\
 18642 &:= (-\sqrt{1+8+6}) \times (4! + 2) &= (2 + 4!) \times (6! - \sqrt{\sqrt{81}}). & 23328 &:= (2 \times 3^3)^2 \times 8 &= (8 - 2)^{3+3}/2. \\
 18963 &:= \sqrt{(18+9)^6} - 3!! &= -3!! + (-6+9)^{\sqrt{81}}. & 23329 &:= -2 + 3!^{3!}/2 + \sqrt{9} &= \sqrt{9} - 2 + 3!^{3!}/2. \\
 18969 &:= \sqrt{(1+8)^9} - 6! + (\sqrt{9})! &= (\sqrt{9})! - 6! + \sqrt{9^{\sqrt{81}}}. & 23334 &:= 2 \times (3 + 3!^{3!}/4) &= (4 \times 3 + 3!^{3!})/2. \\
 19344 &:= ((1 + \sqrt{9})! + 3!!) \times (4! + \sqrt{4}) &= (4! + \sqrt{4}) \times (3!! + (\sqrt{9} + 1)!). & 23392 &:= (2 + 9^3) \times 32 &= 2^{3!} + 3!^{(\sqrt{9})!}/2. \\
 19368 &:= 1 \times 9 \times (3 \times 6! - 8) &= (-8 + 6! \times 3) \times 9 \times 1. & 23424 &:= (2 \times 3!! + 4!) \times 2^4 &= 4^2 \times (4! + 3!! \times 2). \\
 19395 &:= 1 \times 9 \times 3 \times (\sqrt{9})! - 5 &= (-5 + \sqrt{9} \times 3!!) \times 9 \times 1. & 23664 &:= (-2 + 36) \times (6! - 4!) &= (-4! + 6!) \times (6 \times 3! - 2). \\
 19413 &:= (-1 + (\sqrt{9})!) \times (4 - 1)^3 &= (3! - 4) \times ((\sqrt{9})! - 1). & 23694 &:= (-2 + (\sqrt{36})!) \times (9 + 4!) &= (4! + 9) \times ((6 - 3)! - 2). \\
 19433 &:= -1 + (\sqrt{9} + 4!) \times 3!! - 3! &= 3!! \times (3 + 4!) - (\sqrt{9})! - 1. & 23755 &:= -2 \times 3!! + 7! \times 5 - 5 &= -5 + 5 \times 7! - 3!! \times 2. \\
 19435 &:= (-1 + (\sqrt{9})!^4) \times 3 \times 5 &= 5 \times (3!^4 \times \sqrt{9} - 1). & 23758 &:= -2 + 3!! \times (-7 + 5 \times 8) &= (8 \times 5 - 7) \times 3!! - 2. \\
 19436 &:= -1 - \sqrt{9} + (4! + 3) \times 6! &= 6! \times (3 + 4!) - \sqrt{9} - 1. & 23856 &:= (\sqrt{2^{3 \times 8}} - 5!) \times 6 &= 6 \times (-5! + 8^{3! - 2}). \\
 19439 &:= -1 + (\sqrt{9 \times 4})! \times 3 \times 9 &= 9 \times 3 \times (\sqrt{4 \times 9})! - 1. & 24276 &:= (2 + 4!)^2 \times 7 \times 6 &= 6 \times 7 \times (2 + 4!)^2. \\
 19441 &:= 1 + (\sqrt{9} + 4!) \times (4 - 1)!! &= (-1 + 4 + 4!) \times (\sqrt{9})! + 1. & 24336 &:= (2 + 4!) \times (3!^3 + 6!) &= ((6 + 33) \times 4)^2. \\
 19443 &:= (1 + 9 \times (4 + \sqrt{4})!) \times 3 &= 3 \times ((4 + \sqrt{4})! \times 9 + 1). & 24384 &:= (2^{4+3!} - 8) \times 4! &= 4! \times (8^3 - 4) \times 2. \\
 19447 &:= -1 - (\sqrt{9})!! + 4 \times (\sqrt{4} + 7!) &= (7! + \sqrt{4}) \times 4 - (\sqrt{9})!! - 1. & 24476 &:= 2 \times (-\sqrt{4} + (4! - 7) \times 6!) &= (6! \times (-7 + 4!) - \sqrt{4}) \times 2. \\
 19449 &:= (1 + \sqrt{9} \times (4 + \sqrt{4})!) \times 9 &= 9 \times ((4 + \sqrt{4})! \times \sqrt{9} + 1). & 24576 &:= (-2 + 4)^{5+7} \times 6 &= 6 \times (7 - 5)^{4! / 2}. \\
 19464 &:= 1 \times (\sqrt{9} + 4!) \times 6! + 4! &= 4! \times 6! + 4! \times 91. & 24594 &:= 2 \times (-4! + (5! - 9)^{\sqrt{4}}) &= (-4! + (9 - 5!)^{\sqrt{4}}) \times 2. \\
 19467 &:= (1 + (\sqrt{9})!) \times \sqrt{\sqrt{4} + 6!} + 7 &= \sqrt{7 + 6! + \sqrt{4} \times ((\sqrt{9})! + 1)}. & 24624 &:= (2^{4+6} + 2) \times 4! &= 4! \times (2^{6+4} + 2). \\
 19493 &:= -1 + ((\sqrt{9})!! + \sqrt{4}) \times 9 \times 3 &= 3 \times 9 \times (\sqrt{4} + (\sqrt{9})!) - 1. & 24975 &:= (-2 \times 4! + \sqrt{9} + 7!) \times 5 &= 5 \times (7! - \sqrt{9} - 42). \\
 19494 &:= 1 \times (\sqrt{9} + 4!) \times ((\sqrt{9})!! + \sqrt{4}) &= (4! + \sqrt{9}) \times (\sqrt{4} + (\sqrt{9})!) \times 1. & 25075 &:= (-25 + (0 + 7)!) \times 5 &= 5 \times (7! + 0 - 5^2). \\
 19683 &:= 1 \times (9 - 6)^8 \times 3 &= 3^8 \times 6/(\sqrt{9} - 1). & 25165 &:= ((2 + 5)! - 1 - 6) \times 5 &= 5 \times (6! - 1) \times (5 + 2). \\
 19684 &:= 1 + \sqrt{\sqrt{9^{6+8+4}}} &= (-4!/8 + 6)^9 + 1. & 25167 &:= 2 + 5 \times ((1 + 6)! - 7) &= (7! - 6 - 1) \times 5 + 2. \\
 19693 &:= 1 + 9 + \sqrt{(6! + 9)^3} &= 3^9 + 6 + \sqrt{9} + 1. & 25173 &:= -2 + 5 \times (1 + 7! - 3!) &= (-3! + 7! + 1) \times 5 - 2. \\
 19699 &:= 1 + 9 + 6 + \sqrt{9^9} &= \sqrt{9^9} + 6 + 9 + 1. & 25174 &:= -4! + 7! \times 1 \times 5 - 2 &= -2 + 5 \times 1 \times 7! - 4!. \\
 20144 &:= (((2 + 0!)! + 1)! - 4) \times 4 &= 4 \times (-4 + (1 + (0! + 2)!)). & 25175 &:= 25 \times (-1 + 7!/5) &= 5 \times 7! - 1 \times 5^2. \\
 20157 &:= -2 - 0! + (-1 + 5) \times 7! &= 7! \times (5 - 1) - 0! - 2. & 25183 &:= -2 + 5 \times ((-1 + 8)! - 3) &= (-3 + (8 - 1)!) \times 5 - 2. \\
 20184 &:= (2^{0!+1})! + 8!/\sqrt{4} &= 4! + 8!/(1 \times 0 + 2). & 25185 &:= (2 - 5 + (-1 + 8)!) \times 5 &= 5 \times ((8 - 1)! - 5 + 2). \\
 20455 &:= (\sqrt{2^{0+4!}} - 5) \times 5 &= 5 \times (-5 + 4^{(0!+2)!}). & 25187 &:= 2 + 5 \times (-\sqrt{1+8} + 7!) &= (7! - \sqrt{\sqrt{81}}) \times 5 + 2. \\
 20495 &:= (\sqrt{2^{0+4!}} + \sqrt{9}) \times 5 &= 5 \times (\sqrt{9} + 4^{(0!+2)!}). & 25189 &:= -2 + 5 \times (-1 + 8)! - 9 &= -9 + (8 - 1)! \times 5 - 2. \\
 20734 &:= -2 + (-0! + 7 + 3!)^4 &= \sqrt{(4 \times 3)^{7+0!}} - 2. & 25192 &:= 2 + 5 \times ((1 + (\sqrt{9})!) - 2) &= (-2 + ((\sqrt{9})! + 1)!) \times 5 + 2. \\
 21456 &:= (2 + 1)! \times (-4! + 5 \times 6!) &= (6! \times 5 - 4!) \times (1 + 2)!. & 25194 &:= -2 + 5 \times (1 + (\sqrt{9})!) - 4 &= -4 + ((\sqrt{9})! + 1)! \times 5 - 2. \\
 21575 &:= (-2 + 1)!! - 5 + 7!) \times 5 &= 5 \times (7! - 5 - (1 + 2)!). & 25195 &:= ((2 + 5)! - 1^9) \times 5 &= -5 + ((\sqrt{9})! - 1) \times (5 + 2)!. \\
 21595 &:= 2 \times 15 \times (\sqrt{9})! - 5 &= -5 + (\sqrt{9})! \times 5 \times (1 + 2)!. & 25196 &:= 2 + 5 \times (1 + (\sqrt{9})!) - 6 &= -6 + ((\sqrt{9})! + 1)! \times 5 + 2. \\
 21596 &:= 2 + (-1 + 5 \times (\sqrt{9})!) \times 6 &= 6 \times ((\sqrt{9})! \times 5 - 1) + 2. & 25197 &:= 2 - 5 \times (1^9 - 7!) &= 7! \times ((\sqrt{9})! - 1) - 5 + 2. \\
 21597 &:= -2 - 1 + 5 \times (-\sqrt{9})!! + 7!) &= (7! - (\sqrt{9})!) \times 5 - 1 - 2. & 25198 &:= -2 + 5 \times (-1^9 + 8)! &= 8!/(9 - 1) \times 5 - 2. \\
 21599 &:= -2 + 1 + 5 \times (\sqrt{9})! \times (\sqrt{9})!! &= (\sqrt{9})! \times (\sqrt{9})! \times 5 + 1 - 2. & 25199 &:= 2 + 5 \times (1 + (\sqrt{9})!) - \sqrt{9} &= -\sqrt{9} + ((\sqrt{9})! + 1)! \times 5 + 2. \\
 21605 &:= ((2 + 1)! \times 6! + 0!) \times 5 &= 5 \times (0! + 6 \times (1 + 2)!). & 25205 &:= ((\sqrt{25} + 2)! + 0!) \times 5 &= 5 \times (0! + (\sqrt{25} + 2)!). \\
 22968 &:= (2 \times 2)! \times (-\sqrt{9} - 6!) + 8! &= 8! - (6! + \sqrt{9}) \times (2 \times 2)!. & 25207 &:= 2 + 5 \times ((2 \times 0)! + 7!) &= (7! + 0!) \times \sqrt{25} + 2. \\
 22984 &:= (2 + (-2 + (\sqrt{9})!) \times 8) \times 4 &= 4 \times (8 \times ((\sqrt{9})! - 2) + 2). & 25208 &:= -2 + 5 \times ((2 \times 0)! + 8!) &= ((8 - 0)!) \times 2 \times 5 - 2. \\
 23035 &:= (2 + 30) \times 3!! - 5 &= -5 + 3!! \times (0 + 32). & 25215 &:= ((2 + 5)! + 2 + 1) \times 5 &= 5 \times (1 + 2 + (5 + 2)!). \\
 23038 &:= -2 + (3 + 0!) \times 3!! \times 8 &= 8 \times (3 + 0!) \times 3!! - 2. & 25217 &:= 2 + 5 \times (2 + 1 + 7!) &= (7! + 1 + 2) \times 5 + 2. \\
 23064 &:= (2 + 30) \times 6! + 4! &= 4! + 6! \times (0 + 32). & 25335 &:= ((2 + 5)! + 3^3) \times 5 &= 5 \times (3^3 + (5 + 2)!). \\
 23136 &:= 2^{3! - 1} \times (3 + 6!) &= (6! + 3) \times 1 \times 32. & 25337 &:= 2 + 5 \times (3^3 + 7!) &= (7! + 3^3) \times 5 + 2. \\
 23323 &:= -2 + 3!^{3!}/2 - 3 &= -3 - 2 + 3!^{3!}/2. & 25375 &:= (2^5 + 3 + 7!) \times 5 &= 5 \times (7! + \sqrt{35^2}). \\
 & & & 25758 &:= -2 + 5 \times (7! + 5! - 8) &= (-8 + 5! + 7!) \times 5 - 2. \\
 & & & 25775 &:= (2 + 5! - 7 + 7!) \times 5 &= 5 \times (7! - 7 + 5! + 2). \\
 & & & 25795 &:= (2 + 5! + 7! - \sqrt{9}) \times 5 &= 5 \times (-\sqrt{9} + 7! + 5! + 2).
 \end{aligned}$$

$$\begin{aligned}
25798 &:= -2 + (5! + 7!) \times (-\sqrt{9} + 8) &= (8 - \sqrt{9}) \times (7! + 5!) - 2. & 30279 &:= 3 \times (0! + 2 \times (7! + (\sqrt{9}!))) &= (((\sqrt{9}!) + 7!) \times 2) + 0! \times 3. \\
25918 &:= -2 - 5!^{\sqrt{9}-1} + 8! &= (\sqrt{81})!/(9 + 5) - 2. & 30288 &:= 3! \times ((0! - 2 + 8!) + 8) &= (8 + (8 - (2 \times 0!)!) \times 3!. \\
25932 &:= (-2 + 5)! \times ((\sqrt{9}!) \times 3!! + 2) &= (2 + 3! \times (\sqrt{9}!)) \times (5 - 2)!. & 30297 &:= 3 \times (0! + 2 \times (9 + 7!)) &= ((7! + 9) \times 2 + 0!) \times 3. \\
25944 &:= (2 + 5! \times 9) \times 4! - 4! &= 4! + 4 \times 9 \times (5 - 2)!. & 30354 &:= 3! \times ((0! + 3!)! - 5 + 4!) &= (4! - 5 + (3! + 0!)!) \times 3!. \\
25945 &:= 25 + 9 \times 4! \times 5! &= 5! \times 4! \times 9 + 5^2. & 30355 &:= 3! \times (0! + 3!)! + 5! - 5 &= 5! - 5 + 3! \times (0! + 3!)!. \\
25968 &:= (-2 + 5)! \times ((\sqrt{9}!) \times 6! + 8) &= (8 + 6 \times (\sqrt{9}!)) \times (5 - 2)!. & 30366 &:= (3! + 0!) \times (3 + 6!) \times 6 &= 6 \times (6! + 3) \times (0! + 3!)!. \\
25992 &:= 2 \times (5! - 9 + \sqrt{9})^2 &= 2 \times (\sqrt{9} - 9 + 5!)^2. & 30372 &:= 3! \times ((0! + 3!)! + 7! - 2) &= (-2 + 7! + (3 + 0!)!) \times 3!. \\
25994 &:= 2 + (5! \times 9 + \sqrt{9}) \times 4! &= 4! \times (\sqrt{9} + 9 \times 5!) + 2. & 30377 &:= 3! \times ((0! + 3!)! + 7!) - 7 &= -7 + (7! + (3 + 0!)!) \times 3!. \\
26244 &:= (2 \times (6/2)^4)^{\sqrt{4}} &= (4 \times 42 - 6)^2. & 30384 &:= (-30 + \sqrt{3!^8}) \times 4! &= (4! + (8 - (3 \times 0!)!)) \times 3!. \\
26354 &:= 2 + 6^3 \times (5! + \sqrt{4}) &= (\sqrt{4} + 5!) \times \sqrt{3!^6} + 2. & 30597 &:= 3 \times (-0! + 5!) + (\sqrt{9}!) \times 7! &= 7! \times (\sqrt{9}!) + (5! - 0!) \times 3. \\
26494 &:= (2 + 6)! - 4!^{\sqrt{9}} - \sqrt{4} &= (\sqrt{4^{\sqrt{9}}})! - \sqrt{4!^6} - 2. & 30947 &:= 3!! - 0! + (\sqrt{9}!) \times (-\sqrt{4} + 7!) &= (7! - \sqrt{4}) \times (\sqrt{9}!) - 0! + 3!!!. \\
26496 &:= (2 + 6)! - 4!^{9-6} &= 69 \times (4! + 6!)/2. & 30955 &:= 3!! + (0! + 9!)/5! - 5 &= -5 + 5! + ((\sqrt{9}!) + 0!)! \times 3!!. \\
26864 &:= (2 - 6 + 8!/6) \times 4 &= 4 \times (-6 + 8!/6 + 2). & 30957 &:= -3 - 0 + (\sqrt{9}!) \times (5! + 7!) &= (7! + 5!) \times (\sqrt{9}!) - 0 - 3. \\
26868 &:= 2 \times (-6 - 8!/6) + 8! &= 8! - (6 + 8!/6) \times 2. & 30972 &:= 3!! - 0 + (\sqrt{9}!) \times (7! + 2) &= (2 + 7!) \times (\sqrt{9}!) - 0 + 3!!!. \\
26892 &:= 2 \times (\sqrt{9} + 8!/6) \times 2 &= 2 \times 6 + 8!/6 \times 2. & 30979 &:= 3!! + 0! + (\sqrt{9} + 7!) \times (\sqrt{9}!) &= ((\sqrt{9} + 7!) \times (\sqrt{9}!) + 0!) + 3!!!. \\
26894 &:= 2 + 6 \times (8!/9 + \sqrt{4}) &= 4 \times (\sqrt{9} + 8!/6) + 2. & 30996 &:= 3!! + ((0! + (\sqrt{9}!)!) + (\sqrt{9}!) \times 6) &= 6! + (\sqrt{9}!) \times ((\sqrt{9}!) + (0! + 3!)!). \\
27646 &:= 2 \times (-7 + 6 + \sqrt{4!^6}) &= (6 + \sqrt{4!^6} - 7) \times 2. & 30997 &:= 3!! + 0! + (\sqrt{9}!) \times ((\sqrt{9}!) + 7!) &= (7! + (\sqrt{9}!) \times (\sqrt{9}!) + 0!) + 3!!!. \\
27648 &:= 2^7 \times 6^{4!^8} &= \sqrt{8^4} \times 6 \times 72. & 31668 &:= -(3!! + 1) \times (6 + 6) + 8! &= 8! - (6 + 6) \times (1 + 3!!). \\
27744 &:= 4! + (4 + 7) \times 7!/2 &= \sqrt{(27 + 7)^4} \times 4!. & 31679 &:= (\sqrt{9}!) \times 7! + 6! - 1 + 3!! &= 3!! - 1 + 6! + 7! \times (\sqrt{9}!). \\
28224 &:= (2 + 82)^2 \times 4 &= 42^2 \times 8 \times 2. & 31944 &:= (3! + 1 \times (\sqrt{9}!)) \times 44 &= 4! \times (\sqrt{4} + 9 \times 1)^3. \\
28559 &:= -2 + (8 + 5)^{(-5+9)} &= \sqrt{(\sqrt{9} + 5 + 5)^8} - 2. & 31995 &:= (3!! - 1 \times 9) \times 9 \times 5 &= -5 \times 9 \times (9 - 1 \times 3!!). \\
28795 &:= (2 + 8!/7 - \sqrt{9}) \times 5 &= -5 - 9!/7 + 8! \times 2. & 32048 &:= -3!! + \sqrt{20+4!} \times 8 &= 8^{4+0!} - (2 \times 3!)!. \\
28798 &:= -2 - 8!/7 \times (\sqrt{9} - 8) &= 8! - 9!/7 + 8! - 2. & 32256 &:= (3! - 2!)^2 \times 56 &= (6 + 5!) \times 2^{2^3}. \\
28805 &:= ((-2 + 8!) \times 8 + 0!) \times 5 &= 5 \times (0! + 8 \times (8 - 2)!). & 32394 &:= -3 \times (2 + 3!! \times (9 - 4!)) &= ((4! - 9) \times 3!! - 2) \times 3. \\
28896 &:= \left( \sqrt{2^{(\sqrt{8+8}!)}} + (\sqrt{9}!) \right) \times 6 &= 6 \times ((\sqrt{9}!)! + 8^{8/2}). & 32395 &:= 5 \times 9 \times 3!! - 2 - 3 &= 3!! \times (2 + 3) \times 9 - 5. \\
29374 &:= -2 - (\sqrt{9}!)! + 3! \times (7! - 4!) &= (-4! + 7!) \times 3! - (\sqrt{9}!)! - 2. & 32448 &:= 3! \times (2 + 4!)^{\sqrt{4}} \times 8 &= (8 + 4 \times 4!)^2 \times 3. \\
29376 &:= (-(-2 + (\sqrt{9}!)!) \times 3! + 7!) \times 6 &= 6 \times (7! - (3 + 9)^2). & 32538 &:= 8! - 3!^5 - 2 \times 3 &= -(3 \times 2)^5 - 3! + 8!. \\
29476 &:= -2 + (\sqrt{9}!) \times \sqrt{(4! - 7)^6} &= 6 \times (-7 + 4!)^{\sqrt{9}} - 2. & 32544 &:= -(3 \times 2)^5 + (4 + 4!) &= 4! \times 452 \times 3. \\
29496 &:= ((-2 + 9!) - 4) \times (\sqrt{9}!) - 6! &= -6! + (\sqrt{9}!) \times (-4 + (9 - 2)!). & 32744 &:= 32^{7-4} - 4! &= 4 \times (4^7/2 - 3!). \\
29518 &:= -2 + (\sqrt{9}!) \times (-5! + (-1 + 8)!) &= 8! - 15 \times (\sqrt{9}!)! - 2. & 32748 &:= -3! \times (2 + 7!/4) + 8! &= 8! - (4 + 7!/2) \times 3. \\
29576 &:= 2 + (9 - 5! + 7!) \times 6 &= 6 \times (7! - 5! + 9) + 2. & 32762 &:= (2 + 6)^{7-2} - 3! &= -3! + 2^{(7+6+2)}. \\
29584 &:= \sqrt{(-2 + \sqrt{9} \times 58)^4} &= (4 \times (8 \times 5 + \sqrt{9}))^2. & 32768 &:= (3 - 2 + 7)^6/8 &= (8 - 6)^{(7-2) \times 3}. \\
29791 &:= ((-2 + (\sqrt{9}!)!) + 7)^{\sqrt{9}} \times 1 &= \sqrt{((1 + \sqrt{9}!) + 7)^{\sqrt{9} \times 2}}. & 32771 &:= (1 + 7)^{7-2} + 3 &= 3 + 2^{(7+7+1)}. \\
29976 &:= (-2 + (-\sqrt{9}!) + (\sqrt{9}!)!) \times 7 \times 6 &= 6 \times (7 \times ((\sqrt{9}!)! - (\sqrt{9}!)! - 2)). & 32774 &:= (3 + 2^{7+7}) \times \sqrt{4} &= 4^{\sqrt{7 \times 7}} \times 2 + 3!. \\
30096 &:= ((3! + 0!)! - (0! + \sqrt{9}!) \times 6) &= 6 \times (((\sqrt{9}!) + 0!)! - (0! + 3)!). & 32784 &:= ((3! - 2)^7 + 8) \times \sqrt{4} &= 4! + 8! - 7!/2 \times 3. \\
30186 &:= ((3! + 0!)! - 1 - 8) \times 6 &= -6 \times (\sqrt{81} - (0! + 3)!). & 32805 &:= \sqrt{3^{2 \times 8}} \times (0 + 5) &= 5 \times \sqrt{(0! + 8)^{(2^3)}}. \\
30198 &:= 3! \times (0! + (1 + (\sqrt{9}!)!) - 8) &= (-8 + ((\sqrt{9}!) + 1)! + 0!) \times 3!. & 32835 &:= (\sqrt{3^{2 \times 8}} + 3!) \times 5 &= 5 \times (3^8 + 2 \times 3). \\
30228 &:= ((3! + 0!)! - 2) \times (-2 + 8) &= (8 - 2) \times (-2 + (0! + 3)!). & 33144 &:= (3!! + 3!!) \times (-1 + 4!) + 4! &= 4! + (4! - 1) \times (3!! + 3!!). \\
30234 &:= 3! \times (0! - 2 + (3 + 4)!) &= ((4 + 3)! - (2 \times 0!)!) \times 3!. & 33408 &:= 3! \times (3!! - 4!) \times (0 + 8) &= 8 \times (0 - 4! + 3!!) \times 3!. \\
30235 &:= 3! \times (0! + 2 \times 3)! - 5 &= -5 + 3 \times 2 \times (0! + 3)!!. & 33488 &:= 3!! + (3! + \sqrt{4}) \times \sqrt{8^8} &= 8 \times 8^4 + (3 + 3)!!. \\
30237 &:= 7! \times 3 \times 2 - 0 - 3 &= -3 + 0 + 2 \times 3 \times 7!. & 33489 &:= (3 + 3!!/4)^{(8 - (\sqrt{9}!)!)} &= (9 - 8 \times 4!)^{3!^3}. \\
30252 &:= (2 + (5 + 2)!) \times (0 + 3)! &= 3! \times (0 + 2 + (5 + 2)!). & 33494 &:= 3! + 3!! + \sqrt{4^{-9+4!}} &= \sqrt{4^{-9+4!}} \times 3!! + 3!. \\
30264 &:= 3! \times (((0/2)! + 6!) + 4) &= (4 + (6 + (2 \times 0!)!)) \times 3!. & 33495 &:= (3 + (3!! + 4!) \times 9) \times 5 &= 5 \times (9 \times (4! + 3!!) + 3). \\
30267 &:= 3^{0!+2} + 6 \times 7! &= 7! \times 6 + (2 + 0!)^3. & 33558 &:= (3!! - 3!) \times (55 - 8) &= (-8 + 55) \times (-3! + 3!!). \\
30273 &:= 3! \times ((0! + 2!) + 7!) - 3 &= ((3! + 7!) \times 2 - 0!) \times 3. & 33595 &:= (-3! + (3 + 5)!)/(\sqrt{9}!) \times 5 &= 5 \times ((\sqrt{9} + 5)! - 3!)/3!. \\
30274 &:= 3! \times ((0! + 2!) + 7!) - \sqrt{4} &= -\sqrt{4} + (7! + (2 + 0!)!) \times 3!. & 33648 &:= -3!! + 3! \times (6! - 4) \times 8 &= 8 \times (-4 + 6!) \times 3! - 3!!!. \\
30276 &:= (6 + 7!) \times 2 \times (0 + 3) &= 3 \times (0 + 2) \times (7! + 6). & 33696 &:= (3!^3 + 6!) \times (\sqrt{9}!) \times 6 &= (6^{\sqrt{9}} + 6!) \times 3! \times 3!. \\
& & & 33768 &:= 3!^3 \times \sqrt{7^6} - 8! &= -8! + (6 \times 7)^{\sqrt{3 \times 3}}.
\end{aligned}$$



$$\begin{aligned}
 33798 &:= -3!! + 3! \times (-7 + (\sqrt{9})!! \times 8) = (8 \times (\sqrt{9})!! - 7) \times 3! - 3!! & 34773 &:= (-3 \times 4! + 7!) \times 7 - 3 & &= -3 + 7 \times (7! - 4! \times 3). \\
 33835 &:= 3!! \times 3! \times 8 - 3!! - 5 & &= -5 + 3!! \times 8 \times 3! - 3!! & 34774 &:= (-3 \times 4! + 7!) \times 7 - \sqrt{4} & &= -\sqrt{4} + 7 \times (7! - 4! \times 3). \\
 33837 &:= (7! - 3!!) \times 8 - 3!! - 3 & &= -3 - 3!! + 8! \times 3!/7 & 34777 &:= -3!! + (4! + 7 + 7!) \times 7 & &= 7 \times (7! + 7 + 4!) - 3!! \\
 33839 &:= -3/3 + 8! - 3!! \times 9 & &= -9 \times 3!! + 8! - 3/3 & 34779 &:= (-3 \times 4! + 7!) \times 7 + \sqrt{9} & &= \sqrt{9} + 7 \times (7! - 4! \times 3). \\
 33852 &:= (2 - 5! + 8 \times 3!!) \times 3! & &= 3! \times (3!! \times 8 - 5! + 2) & 34797 &:= (-3 \times 4! + 7! + \sqrt{9}) \times 7 & &= 7 \times (\sqrt{9} + 7! - 4! \times 3). \\
 33864 &:= -3!! + 3! \times (8 \times 6! + 4) & &= (4 + 6! \times 8) \times 3! - 3!! & 34836 &:= 3! \times (-\sqrt{4} + 8 \times (3! + 6!)) & &= ((6 + 3!!) \times 8 - \sqrt{4}) \times 3!. \\
 33981 &:= (3 + 3!!) \times ((\sqrt{9})! \times 8 - 1) & &= (-1 + 8 \times (\sqrt{9})!) \times (3 + 3!!) & 34944 &:= (3!! + \sqrt{4\sqrt{9}}) \times \sqrt{4} \times 4! & &= \sqrt{4} \times 4! \times ((\sqrt{9})!! + \sqrt{4^3}). \\
 33984 &:= 3! \times ((3!! - 9) \times 8 - 4!) & &= -48 \times (9 + 3 - 3!!) & 34968 &:= -3! \times (4 - \sqrt{9^6} \times 8) & &= (8 \times (6! + 9) - 4) \times 3!. \\
 34224 &:= (3!! + 4!) \times (22 + 4!) & &= (4! + 22) \times (4! + 3!!) & 34986 &:= 3!^{\sqrt{49}}/8 - 6 & &= (\sqrt{6^8} \times 9 - \sqrt{4}) \times 3. \\
 34266 &:= -3! + 4! \times 2 \times (6! - 6) & &= (6! - 6) \times 2 \times 4! - 3! & 34989 &:= 3!^{\sqrt{49}}/8 - \sqrt{9} & &= \sqrt{(\sqrt{9})^{18}} \times (\sqrt{9} + 4!) - 3. \\
 34269 &:= -3 + 4! \times 2 \times (6! - (\sqrt{9})!) & &= ((\sqrt{9})!! - 6) \times 2 \times 4! - 3 & 34991 &:= 3!^4 \times 9 \times \sqrt{9} - 1 & &= -1 + (9 + 9!)^4/3. \\
 34295 &:= (3 + 4^2)^{\sqrt{9}} \times 5 & &= 5 \times (\sqrt{9} + 2^4)^3 & 34992 &:= 3 \times (4 \times 9 \times \sqrt{9})^2 & &= 2 \times (9 + 9!)^4/3!. \\
 34368 &:= (3!! - 4) \times \sqrt{36} \times 8 & &= 8 \times ((6 - 3)!! - 4) \times 3! & 34994 &:= 3!^4 \times 9 \times \sqrt{9} + \sqrt{4} & &= \sqrt{4} + (9 + 9!)^4/3. \\
 34377 &:= (-3 \times 43 + 7!) \times 7 & &= 7 \times (7! - 3 \times 43) & 34998 &:= 3 \times \left( \sqrt{4} + 9 \times \sqrt{(\sqrt{9})^{18}} \right) & &= (8 + (\sqrt{9})!(\sqrt{9})!)/4 \times 3. \\
 34386 &:= (3 - (4 - 3!!) \times 8) \times 6 & &= 6 \times (8 \times (3!! - 4) + 3) & 35077 &:= (-3! \times 5 + 0! + 7!) \times 7 & &= 7 \times (7! + 0! - 5 \times 3!). \\
 34398 &:= 3! \times (-4! - 3 + (\sqrt{9})!! \times 8) & &= (8 \times (\sqrt{9})!! - 3 - 4!) \times 3! & 35268 &:= 3! \times (5! - 2 + 6! \times 8) & &= (8 \times 6! - 2 + 5!) \times 3!. \\
 34432 &:= (3!! \times 4! - 4^3) \times 2 & &= 2 \times (3!! \times 4! - 4^3) & 35272 &:= 3! + (5 + 2) \times (7! - 2) & &= (-2 + 7!) \times (2 + 5) + 3!. \\
 34454 &:= ((3!! - \sqrt{4}) \times 4! - 5) \times \sqrt{4} & &= \sqrt{4} \times (-5 + 4! \times (-\sqrt{4} + 3!!)) & 35274 &:= (3 + 5)! - 2 - 7! - 4 & &= -4 - 7! - 2 + (5 + 3)!. \\
 34464 &:= 3 \times 4 \times 4 \times (6! - \sqrt{4}) & &= 4 \times (6! - \sqrt{4}) \times 4 \times 3 & 35275 &:= (-3 + 5 \times 2) \times 7! - 5 & &= -5 + 7 \times (2 \times 5 - 3)!. \\
 34488 &:= -3^{4+\sqrt{4}} \times 8 + 8! & &= 8! - (-8 + 4! + \sqrt{4})^3 & 35276 &:= (3 + 5)! + 2 - 7! - 6 & &= -6 - 7! + 2 + (5 + 3)!. \\
 34494 &:= (3!! \times 4! - 4! - 9) \times \sqrt{4} & &= \sqrt{4} \times (-9 - 4! + 4! \times 3!!) & 35277 &:= 3! + 5 + (-2 + 7!) \times 7 & &= 7 \times (7! - 2) + 5 + 3!. \\
 34497 &:= 3!! \times 4! \times \sqrt{4} - 9 \times 7 & &= -7 \times 9 + 4! \times \sqrt{4} \times 3!! & 35278 &:= 3! + (5 + 2) \times 7! - 8 & &= 8! - 7! - \sqrt{25} + 3. \\
 34512 &:= (3!! \times 4! - (5 - 1)!) \times 2 & &= 2 \times (-(-1 + 5)!) + 4! \times 3!! & 35279 &:= (3 + 5)! + 2 - 7! - \sqrt{9} & &= (\sqrt{9})!! \times 7^2 + 5 - 3!. \\
 34528 &:= (-3!! - 4 + (5 + 2)!) \times 8 & &= 8 \times ((2 + 5)! - 4 - 3!!) & 35304 &:= (3 + 5)! - (3! + 0!)! + 4! & &= 4! - (0! + 3!)! + (5 + 3)!. \\
 34536 &:= 3! \times (-4 + (5 + 3) \times 6!) & &= (6! \times (3 + 5) - 4) \times 3! & 35424 &:= (3 + 5)! \times 4!/2 \times 4! & &= 4!/2 \times 4! \times (5! + 3). \\
 34542 &:= (3!! \times 4! - 5 - 4) \times 2 & &= 2 \times (-4 - 5 + 4! \times 3!!) & 35477 &:= -3! + (5 + 4! + 7!) \times 7 & &= 7 \times (7! + 4! + 5) - 3!. \\
 34544 &:= (3 \times 4! \times 5! - 4) \times 4 & &= 4 \times (-4 + 5! \times 4! \times 3) & 35488 &:= (-3!! + 5! - 4) \times 8 + 8! & &= 8! + 8 \times (-4 + 5! - 3!!). \\
 34545 &:= 3 \times (4 \times 5! \times 4! - 5) & &= (-5 + 4 \times 5! \times 4!) \times 3 & 35707 &:= (\sqrt{3!!} \times 5 + 7! + 0!) \times 7 & &= 7 \times (0! + 7! + \sqrt{5 \times 3!!}). \\
 34548 &:= 3! \times (-\sqrt{4} + 5! \times 48) & &= (8!)/(\sqrt{4} + 5) - \sqrt{4} \times 3! & 35777 &:= (\sqrt{3!} - 5 + 7! + 7!) \times 7 & &= 7 \times (7! + \sqrt{7! - 5 + 3!}). \\
 34554 &:= (-3 + (4! + 5!) \times 5!) \times \sqrt{4} & &= \sqrt{4} \times (5! \times (5! + 4!) - 3) & 35875 &:= 3!! - 5! + 8! - 7! - 5 & &= -5 - 7! + 8! - 5! + 3!! \\
 34555 &:= \sqrt{3! \times 4!^5} \times 5 - 5 & &= -5 + 5! \times (5! - 4!) \times 3 & 35994 &:= -3! + 5 \times (\sqrt{9})!! \times ((\sqrt{9})! + 4) & &= (4 + (\sqrt{9})!) \times (\sqrt{9})!! \times 5 - 3!. \\
 34557 &:= -3 + 4! \times 5! \times (5 + 7) & &= (7 + 5) \times 5! \times 4! - 3 & 35995 &:= 3!! \times (59 - 9) - 5 & &= -5 + (\sqrt{9})!! \times (-\sqrt{9} + 53). \\
 34572 &:= 3! \times ((\sqrt{4+5})!! + 7! + 2) & &= (2 + 7! + (\sqrt{5+4})!!) \times 3! & 35997 &:= -3 + 5 \times (\sqrt{9})!! \times (\sqrt{9} + 7) & &= (7 + \sqrt{9}) \times (\sqrt{9})!! \times 5 - 3. \\
 34574 &:= (3! \times 4! \times 5! + 7) \times \sqrt{4} & &= \sqrt{4} \times (7 + 5! \times 4! \times 3!) & 35998 &:= 3 - 5 - (\sqrt{9})! \times (\sqrt{9})!! + 8! & &= 8! - (\sqrt{9})! \times (\sqrt{9})!! - 5 + 3. \\
 34584 &:= 3!^{\sqrt{4}} \times 5! \times 8 + 4! & &= (48 \times 5! + 4) \times 3! & 36025 &:= (3!! + 6! + 0!) \times 25 & &= 5^2 \times (0! + 6! + 3!!). \\
 34596 &:= (3 + 4! \times 5!) \times ((\sqrt{9})! + 6) & &= (6 + (\sqrt{9})!) \times (5! \times 4! + 3) & 36224 &:= (\sqrt{36} + 2)! - \sqrt{2^4!} & &= (4 \times 2!) - (-2 + 6)^{3!}. \\
 34602 &:= (-3 + 4! \times (6! + 0!)) \times 2 & &= 2 \times ((0! + 6!) \times 4! - 3) & 36288 &:= (3 + 6)!/(2 + \sqrt{8 \times 8}) & &= 8! - 8^2 \times 63. \\
 34608 &:= 3 \times \sqrt{4} \times (6! + 0!) \times 8 & &= 8 \times (0! + 6!) \times \sqrt{4} \times 3 & 36477 &:= (3 + (6! + 4!) \times 7) \times 7 & &= 7 \times (7 \times (4! + 6!) + 3). \\
 34614 &:= (3 + 4! \times (6! + 1)) \times \sqrt{4} & &= \sqrt{4} \times ((1 + 6!) \times 4! + 3) & 36585 &:= -(3 + 6!) \times 5 + 8! - 5! & &= -5! + 8! - 5 \times (6! + 3). \\
 34629 &:= -3 + 4! \times (6! \times 2 + \sqrt{9}) & &= (\sqrt{9} + 2 \times 6!) \times 4! - 3 & 36678 &:= 3!! - 6 \times (6! + 7) + 8! & &= 8! - (7 + 6!) \times 6 + 3!! \\
 34644 &:= (-3! + 4! \times (6! + \sqrt{4})) \times \sqrt{4} & &= \sqrt{4} \times (4! \times (6! + \sqrt{4}) - 3!) & 36744 &:= 3 \times 6! \times (-7 + 4!) + 4! & &= 4! + (4! - 7) \times 6! \times 3. \\
 34648 &:= (3!! + 4 + 6!) \times 4! - 8 & &= -8 + 4! \times (6! + 4 + 3!!) & 36748 &:= -3!! - (6! - 7) \times 4 + 8! & &= 8! - 4 \times (-7 + 6!) - 3!! \\
 34668 &:= (8 \times 6! - 6 + 4!) \times 3! & &= 3! \times (4! - 6 + 6! \times 8) & 36757 &:= (\sqrt{3!^6} + 7! - 5) \times 7 & &= -7 \times (5 - 7! - 6^3). \\
 34686 &:= (-3 + 4! + 6! \times 8) \times 6 & &= 6 \times (8 \times 6! + 4! - 3) & 36758 &:= 3 - (6! - 7) \times 5 + 8! & &= 8! - 5 \times (-7 + 6!) + 3. \\
 34688 &:= (3! \times (4 + 6!) - 8) \times 8 & &= 8 \times (-8 + 6 \times (4 + 3!!)) & 36792 &:= (\sqrt{3!^6} + 7!) \times (9 - 2) & &= (-2 + 9) \times (7! + 6^3). \\
 34692 &:= (-3! + 4! \times (6! + \sqrt{9})) \times 2 & &= 2 \times ((\sqrt{9} + 6!) \times 4! - 3!) & 36798 &:= -3 + 6 \times 7! + \sqrt{9^8} & &= 8! - 9! \times 7/6! + 3!. \\
 34702 &:= (3!! \times 4! + \sqrt{7! + 0!}) \times 2 & &= 2 \times (\sqrt{0! + 7!} + 4! \times 3!!) & 36864 &:= 36 \times \sqrt{8^{6 \times 4}} & &= (4 \times 6 \times 8)^{6/3}. \\
 34704 &:= ((4 - 0!)! + 7! + 4!) \times 3! & &= (3! + \sqrt{4} \times (7 - 0!)!) \times 4! & 36882 &:= (3 + 6) \times (\sqrt{8^8} + 2) & &= (2 + \sqrt{8^8}) \times (6 + 3). \\
 34728 &:= (3!! \times \sqrt{4} + 7) \times (\sqrt{2 \times 8})! & &= (8/2)! \times (7 + \sqrt{4} \times 3!!) & & & & \\
 34734 &:= 3! + 4! \times (7 + 3!! \times \sqrt{4}) & &= (\sqrt{4} \times 3!! + 7) \times 4! + 3! & & & &
 \end{aligned}$$

$$\begin{aligned}
37044 &:= (3 \times 7)^{0!+\sqrt{4}} \times 4 &= 4 \times ((4-0!) \times 7)^3. \\
37296 &:= 37 \times 2 \times 9!/6! &= 6^{(\sqrt{9})!} - 2 \times 7! + 3!!. \\
37344 &:= (3!! \times (7+3!) - 4!) \times 4 &= 4 \times (-4! + 3!! \times (7+3!)). \\
37424 &:= (-3!! + (7! - \sqrt{4}) \times 2) \times 4 &= 4 \times (2 \times (-\sqrt{4} + 7!) - 3!!). \\
37434 &:= -3! + 7! \times 4 + 3!! \times 4! &= 4! \times 3!! + 4 \times 7! - 3!. \\
37435 &:= (3 + \sqrt{7^4}) \times 3!! - 5 &= -5 + 3!! \times 4 \times (7+3!). \\
37438 &:= -\sqrt{-3+7} - 4 \times 3!! + 8! &= 8! - 3!! \times 4 - \sqrt{7-3}. \\
37464 &:= ((3+7!) \times \sqrt{4} - 6!) \times 4 &= 4! + 6! \times 4 \times (7+3!). \\
37468 &:= (3!! - 7) \times (\sqrt{4} - 6) + 8! &= 8! + (6 - \sqrt{4}) \times (7 - 3!!). \\
37748 &:= (-3!! + 77) \times 4 + 8! &= 8! + 4 \times (77 - 3!!). \\
37789 &:= (3!! - 7) \times (7 \times 8 - \sqrt{9}) &= (\sqrt{9} - 8 \times 7) \times (7 - 3!!). \\
37805 &:= -3 + 7! + 8^{0+5} &= 5 \times (0! + (8! + 7!)/3!). \\
37895 &:= (-3 + 7 \times 8) \times ((\sqrt{9})!! - 5) &= (-5 + (\sqrt{9})!!) \times (8 \times 7 - 3). \\
38148 &:= -3 \times ((\sqrt{\sqrt{81}})!! + 4) + 8! &= 8! + (-4 - (\sqrt{1+8})!!) \times 3. \\
38184 &:= -3 \times (\sqrt{\sqrt{81}})!! + 8! + 4! &= 4! + 8! - \sqrt{1+8} \times 3!!. \\
38368 &:= -3!! - 8^3 - 6! + 8! &= 8! - 6! - 3!! - 8^3. \\
38397 &:= (7! - (\sqrt{9})!!/3) \times 8 - 3 &= -3 - 8!/3 + 9!/7. \\
38398 &:= -(3! + 8 \times 3!!)/\sqrt{9} + 8! &= 8! - ((\sqrt{9})! + 3!! \times 8)/3. \\
38525 &:= 3!! - 8! + 5^{2+5} &= 5^{2+5} - 8! + 3!!!. \\
38598 &:= 3! \times (-8 - 5! + \sqrt{9^8}) &= 8! - (\sqrt{9} + 5!) \times (8 + 3!). \\
38637 &:= -3 + 8! - 6!/3 \times 7 &= -7!/3 - 6 + 8! + 3. \\
38664 &:= (3! + 8 \times 6) \times (6! - 4) &= (-4 + 6!) \times (6 \times 8 + 3!). \\
38688 &:= -3 \times 8 \times 68 + 8! &= 8! - 8 \times 68 \times 3. \\
38736 &:= -(3+8)!/7! + 3!^6 &= 6! + 3!^7 - 8! \times 3!. \\
38753 &:= -3!! + 8! - 7 - 5! - 3!! &= -3!! - 5! - 7 + 8! - 3!!!. \\
38755 &:= -3!! + 8! - 7 \times 5! - 5 &= -5 - 5! \times 7 + 8! - 3!!!. \\
38799 &:= -3^8 + 7! + 9!/9 &= -9 + 9 \times (7! - 8 - 3!!). \\
38832 &:= -2 \times 3!! + 8! - 8 \times 3! &= -3! \times 8 + 8! - 3!! \times 2. \\
38848 &:= -(3!! + 8 + 8) \times \sqrt{4} + 8! &= 8! - \sqrt{4} \times (8 + 8 + 3!!). \\
38864 &:= -3!! + 8! + 8 - 6! - 4! &= -4! - 6! + 8 + 8! - 3!!!. \\
38866 &:= -3!! + 8! - 8 - 6! - 6 &= -6! - 6! - 8 + 8! - 3!. \\
38869 &:= -3!! + 8! - 8 - 6! - \sqrt{9} &= -(\sqrt{9})!! - 6! - 8 + 8! - 3. \\
38872 &:= -3!! - 8 + 8! - (\sqrt{7+2})!! &= -(\sqrt{2+7})!! - 8 + 8! - 3!!!. \\
38873 &:= -3!! + (\sqrt{8 \times 8})! - 7 - 3!! &= -3!! - 7 + (\sqrt{8 \times 8})! - 3!!!. \\
38879 &:= -3!! - 8 + 8! + 7 - (\sqrt{9})!! &= -(\sqrt{9})!! + 7 - 8 + 8! - 3!!!. \\
38894 &:= 3! + 8 + 8! - (\sqrt{9})!! \times \sqrt{4} &= -\sqrt{4} \times (\sqrt{9})!! + 8 + 8! + 3!. \\
38904 &:= -3!! + 8! - (\sqrt{9})!! - 0 + 4! &= 4! + 0 - (\sqrt{9})!! + 8! - 3!!!. \\
38928 &:= 3! \times (8 + 9 \times (-2 + 8)!) &= 8! - 29 \times 8 \times 3!. \\
38944 &:= -3!! + 8! - (\sqrt{9})!! + \sqrt{\sqrt{\sqrt{4^4}}} &= \sqrt{\sqrt{\sqrt{4^4}}} - (\sqrt{9})!! + 8! - 3!!!. \\
38948 &:= -(3! + 8)^{\sqrt{9}}/\sqrt{4} + 8! &= 8! - \sqrt{\sqrt{4} \times 98^3}. \\
38955 &:= -3!! + 8! - (9 + 5!) \times 5 &= -5 \times (5! + 9) + 8! - 3!!!. \\
38979 &:= (3 + 8 - (\sqrt{9})!! + 7!) \times 9 &= 9 \times (7! - ((\sqrt{9})!! - 8 - 3)). \\
38998 &:= -(3+8)^{\sqrt{9}} + 9 + 8! &= 8! + 9 - (\sqrt{9} + 8)^3. \\
39024 &:= 3! \times (9 \times (0! + 2)!! + 4!) &= (4! + (2+0)!! \times 9) \times 3!. \\
39048 &:= (-3! \times 9 + 0!) \times 4! + 8! &= 8! + 4! \times (0! - 9 \times 3!). \\
39096 &:= (3!! + \sqrt{9} + 0!) \times 9 \times 6 &= (6! + \sqrt{9} + 0!) \times 9 \times 3!. \\
39258 &:= 3 \times \sqrt{9} \times (2 - 5!) + 8! &= 8! - (5! - 2) \times \sqrt{9} \times 3. \\
39339 &:= (3! \times 9^3 - 3) \times 9 &= -9 \times (3 - 3! \times 9^3). \\
39347 &:= (3^9 - 3!) \times \sqrt{4} - 7 &= -7 + \sqrt{4} \times (3^9 - 3!). \\
39348 &:= -(3+9) \times 3^4 + 8! &= 8! - 4 \times \sqrt{3^9} \times 3. \\
39363 &:= 3^9/3 \times 6 - 3 &= 3^6 \times 3! \times 9 - 3. \\
39364 &:= 3^9/3 \times 6 - \sqrt{4} &= -\sqrt{4} + 6 \times 3^9/3. \\
39366 &:= 3^9 \times (3 - 6/6) &= 6 \times (6 - 3)^9/3. \\
39369 &:= 3 + 9^3 \times 6 \times 9 &= (9 + 6 \times 3^9)/3. \\
39374 &:= (3^9 - 3 + 7) \times \sqrt{4} &= \sqrt{4} \times (7 + 3^9 - 3). \\
39382 &:= ((3 \times 9)^3 + 8) \times 2 &= 2 \times (8 + (3 \times 9)^3). \\
39384 &:= 3 \times (\sqrt{9} + 3^8) \times \sqrt{4} &= 4! + 8! - 3!! - (\sqrt{9})!!/3. \\
39438 &:= 3! \times (\sqrt{9} \times 4 + 3^8) &= 8! - 3! \times 49 \times 3. \\
39448 &:= (-3!^{\sqrt{9}} + \sqrt{4}) \times 4 + 8! &= 8! - 4 \times (\sqrt{4} + (\sqrt{9})!^3). \\
39456 &:= (3!! \times 9 - 4! + 5!) \times 6 &= 6 \times (5! - 4! + 9 \times 3!!). \\
39468 &:= -\sqrt{(3! + (\sqrt{9})!!)} \times 4! - 6! + 8! &= 8! - \sqrt{6 \times (4! + 9!/3)}. \\
39478 &:= 3! - (\sqrt{9})!! - \sqrt{4^7} + 8! &= 8! - (7! + 4 \times \sqrt{9})/3!. \\
39528 &:= -3!! + (-9 + (5+2)!) \times 8 &= 8 \times ((2+5)! - 9) - 3!!!. \\
39538 &:= -3^{(\sqrt{9})!} - 53 + 8! &= 8! - 3!! - 59 - 3. \\
39546 &:= -3! \times (9 + 5!) + (\sqrt{4} + 6)! &= (\sqrt{64})! - (5! + 9) \times 3!. \\
39548 &:= -3! \times (9 + 5!) + \sqrt{4} + 8! &= 8! + \sqrt{4} - (5! + 9) \times 3!. \\
39555 &:= (3!! - \sqrt{9}) \times 55 + 5! &= 5! + 55 \times ((\sqrt{9})!! - 3). \\
39564 &:= -3!! + (\sqrt{9} + 5)! - \sqrt{6^4} &= (\sqrt{4} + 6)! - (5! + (\sqrt{9})!) \times 3!. \\
39568 &:= -3 \times 9 - 5 - 6! + 8! &= 8! - 6! - 5 - 9 \times 3. \\
39578 &:= -3!! - \sqrt{9} \times 5 - 7 + 8! &= 8! - 7 - 5 \times \sqrt{9} - 3!!!. \\
39579 &:= -3!! + (\sqrt{9} + 5)! - 7 \times \sqrt{9} &= -\sqrt{9} \times 7 + (5 + \sqrt{9})! - 3!!!. \\
39581 &:= -1 + 8! - (5! + \sqrt{9}) \times 3! &= -3! \times (\sqrt{9} + 5!) + 8! - 1. \\
39582 &:= -3! \times (\sqrt{9} + 5!) + (\sqrt{8^2})! &= 2 + 8! - 5!/( \sqrt{9})! - 3!!!. \\
39583 &:= -3^{(\sqrt{9})!} - 5 + 8! - 3 &= -3 + 8! - 5 - 9^3. \\
39584 &:= 3 - (\sqrt{9})!! + (5 + 8!) - 4! &= -\sqrt{4} + 8! - 5 - 9^3. \\
39586 &:= -3 \times \sqrt{9} - 5 + 8! - 6! &= -6! + 8! - 5 - \sqrt{9} \times 3. \\
39587 &:= -3! - (\sqrt{9})! \times 5! + 8! - 7 &= -7 + 8! - 5! \times (\sqrt{9})! - 3!. \\
39588 &:= -3 - 9^{(-5+8)} + 8! &= 8! - 8 + 5 - 9^3. \\
39589 &:= 3 - (\sqrt{9})!! - 5 + 8! - 9 &= \sqrt{9} + 8! - 5 - 9^3. \\
39591 &:= -3 \times \sqrt{9^5} + (9 - 1)! &= 1 \times (\sqrt{9} + 5)! - 9^3. \\
39592 &:= -3! + (\sqrt{9} + 5)! - (\sqrt{9})!! - 2 &= (2^{\sqrt{9}})! - 5 - (\sqrt{9})!! - 3. \\
39594 &:= (3^9 + 5! - (\sqrt{9})!) \times \sqrt{4} &= (4 + 9 - 5)! - (\sqrt{9})!! - 3!. \\
39595 &:= -(-3 + 9)! + (5 + \sqrt{9})! - 5 &= (5 + \sqrt{9})! - 5 - (9 - 3)!. \\
39597 &:= -3 - (\sqrt{9})!! + (5 + \sqrt{9}) \times 7! &= 7! \times (\sqrt{9} + 5) - (\sqrt{9})!! - 3. \\
39598 &:= -(-3 + 9)! - 5 + \sqrt{9} + 8! &= 8! + \sqrt{9} - 5 - (9 - 3)!. \\
39599 &:= -3!! + (\sqrt{9} + 5)! - 9/9 &= 9!/9 + 5 - (\sqrt{9})!! - 3!. \\
39618 &:= 3 \times (\sqrt{9})! - 6! + 1 \times 8! &= 8! - 1 \times 6! + \sqrt{9} \times 3!. \\
39624 &:= -(-3 + 9)! + (6 + 2)! + 4! &= 4! + (2 + 6)! - (9 - 3)!. \\
39636 &:= 3!! + (9 \times 6! + 3!) \times 6 &= 6 \times (3! + 6! \times 9) + 3!!!. \\
39648 &:= -3!! + 96/\sqrt{4} + 8! &= 8! - 4! - (6^{\sqrt{9}}) \times 3. \\
39655 &:= (3/\sqrt{9} + 6!) \times 55 &= 55 \times (6! + \sqrt{9}/3). \\
39678 &:= -3!! + (\sqrt{9})! \times (6 + 7) + 8! &= 8! + (7 + 6) \times (\sqrt{9})! - 3!!!. \\
39744 &:= (3! + 9 \times 7) \times 4! \times 4! &= 4! \times 4! \times (7 \times 9 + 3)!. \\
39754 &:= -3! + (9! - 7!)/(5 + 4) &= ((4 + 5)! - 7!)/9 - 3!. \\
39763 &:= ((3 + 6)! - 7!)/9 + 3 &= 3 + (9! - 7!)/(6 + 3).
\end{aligned}$$

$$\begin{aligned}
 39768 &:= ((3!! - 9) \times 7 - 6) \times 8 &= 8 \times (-6 + 7 \times (-9 + 3!!)). & 40316 &:= -4 + 0 + (3 - 1 + 6)! &= (\sqrt{61+3})! + 0 - 4. \\
 39784 &:= -3!!/9 \times 7 + 8! + 4! &= 4! + 8! - 7!/( \sqrt{9} \times 3). & 40317 &:= 4 \times 0 - 3 + (1 + 7)! &= (7 + 1)! - 3 + 0/4. \\
 39789 &:= 3 \times 9 \times 7 + 8! - (\sqrt{9})!! &= -(\sqrt{9})!! + 8! + 7 \times 9 \times 3. & 40318 &:= 4 \times 0 - 3 + 1 + 8! &= 8! - 1 + 3 + 0 - 4. \\
 39798 &:= 3! \times (9!/7! + \sqrt{9^8}) &= 8! - \sqrt{((\sqrt{9})! + 7!) \times 9 \times 3!}. & 40319 &:= (\sqrt{40+3})! - 1^9 &= (9 - 1)! + 3 + 0 - 4. \\
 39808 &:= -(3!/ \sqrt{9})^{8+0!} + 8! &= 8! + 0 - 8^{9/3}. & 40332 &:= 4 \times (0 + 3) + (3! + 2)! &= (2^3)! + 3 \times (0 + 4). \\
 39816 &:= (3!! - 9) \times 8 \times (1 + 6) &= (6 + 1) \times 8 \times (-9 + 3!!). & 40334 &:= \sqrt{4} \times (0! + 3!) + (3! + \sqrt{4})! &= (\sqrt{4^3})! + (3! + 0!) \times \sqrt{4}. \\
 39828 &:= (3 - 9) \times 82 + 8! &= (-82 + 8!/( \sqrt{9})!) \times 3!. & 40335 &:= (4 + 0!) \times 3 + (3 + 5)! &= (5 + 3)! + 30/\sqrt{4}. \\
 39834 &:= (-3^9 + 8! - 3!!) \times \sqrt{4} &= 4! - 3! + 8! - 9!/3!! & 40337 &:= 4! + (-0! + 3 \times 3)! - 7 &= -7 + (3 \times 3 - 0!)! + 4!. \\
 39835 &:= 3!!/\sqrt{9} + 8! - 3!! - 5 &= -5 - 3!! + 8! + (\sqrt{9})!!/3. & 40338 &:= (4 + 0!) \times 3 + (3 + 8!) &= 8! + 3 + 30/\sqrt{4}. \\
 39837 &:= ((3!! - 9) \times 8 + 3) \times 7 &= 7 \times (3 + 8 \times (-9 + 3!!)). & 40342 &:= (\sqrt{40+3})! + 4! - 2 &= (2 \times 4)! - 3 + 0! + 4!. \\
 39858 &:= -3! \times (9 \times 8 + 5) + 8! &= 8! - (5 + 8 \times 9) \times 3!. & 40343 &:= 4! - (0/3)! + (\sqrt{4^3})! &= (3 + \sqrt{4} + 3)! - 0! + 4!. \\
 39864 &:= 3!!/\sqrt{9} + 8! - 6! + 4! &= 4! - 6! + 8! + (\sqrt{9})!!/3. & 40344 &:= 4! - 0/3 + (4 + 4)! &= (4 + 4)! + 3! \times (0 + 4). \\
 39878 &:= 3! + ((\sqrt{9})!! - 8) \times 7 \times 8 &= 8 \times 7 \times (-8 + (\sqrt{9})!!) + 3!. & 40345 &:= 4! + 0! + (\sqrt{\sqrt{3^4} + 5})! &= \sqrt{5^4} + (3 + 0! + 4)!. \\
 39884 &:= -3! \times 9 \times 8 + 8! - 4 &= -4 + 8! - 8 \times 9 \times 3!. & 40346 &:= 4! - 0! + 3 + (\sqrt{4} + 6)! &= (\sqrt{64})! + 30 - 4. \\
 39888 &:= -3 \times 9 \times (8 + 8) + 8! &= 8! - (8 + 8) \times 9 \times 3. & 40358 &:= 40 + 3 - 5 + 8! &= 8! + 5!/3 + 0 - \sqrt{4}. \\
 39896 &:= 3!!/9 + 8! - 9!/6! &= 6!/9 + 8! - 9!/3!! & 40368 &:= ((4 - 0 + 3)! + 6) \times 8 &= 8 \times (6 + (3 + 0 + 4)!). \\
 39948 &:= (3! - 99) \times 4 + 8! &= 8! - 4 \times (99 - 3!). & 40372 &:= 4 \times (0! + (3! + 7!) \times 2) &= (2 \times (7! + 3!) + 0!) \times 4. \\
 39957 &:= -3 + 9 \times (-\sqrt{9})!! + 5! + 7! &= (7! + 5! - (\sqrt{9})!!) \times 9 - 3. & 40392 &:= 4 \times ((0! + 3!)! + 9) \times 2 &= 2 \times (9 + (3! + 0!)!) \times 4. \\
 39958 &:= -3!/ \sqrt{9} - \sqrt{9} \times 5! + 8! &= 8! - (5! \times 9 + (\sqrt{9})!)/3. & 40395 &:= (4! + 0!) \times 3 + (\sqrt{9} + 5)! &= (5 + \sqrt{9})! + 3 \times (0! + 4!). \\
 39978 &:= 3! \times ((\sqrt{9})! - 9 \times 7) + 8! &= 8! - 7^{\sqrt{9}} + \sqrt{9}/3. & 40398 &:= \sqrt{4} \times (0 + 39) + 8! &= 8! + \sqrt{9} \times (30 - 4). \\
 39983 &:= (-3!! + (-\sqrt{9})! + (\sqrt{9})!! \times 8!)/3!! &= (-3!! + 8! \times (-\sqrt{9})! + (\sqrt{9})!!)/3!! & 40408 &:= 4 \times (-0! + 4! - 0!) + 8! &= 8! + (-0! + 4! - 0!) \times 4. \\
 39984 &:= (3!! - (\sqrt{9})!) \times ((\sqrt{9})! + 8) \times 4 &= 4 \times (8 + (\sqrt{9})!) \times ((\sqrt{9})! - 3!). & 40428 &:= (4 \times (0! + 4! + 2)) + 8! &= 8! + (2 + 4! + 0!) \times 4. \\
 39987 &:= 3 + ((\sqrt{9})!! - (\sqrt{9})!) \times 8 \times 7 &= 7 \times 8 \times ((\sqrt{9})!! - (\sqrt{9})!) + 3. & 40435 &:= (4 + 0!)! + (\sqrt{4^3})! - 5 &= 5! + (3! + \sqrt{4})! - 0! - 4. \\
 39988 &:= -3! \times 9 \times (\sqrt{9})! + 8! - 8 &= 8! - 8 - (\sqrt{9})! \times 9 \times 3!. & 40438 &:= (4 + 0!)! + 4 - 3! + 8! &= 8! + 3 \times 40 - \sqrt{4}. \\
 40128 &:= (-4! + (0! + (1 + 2)!))! \times 8 &= 8! + (2 - 10) \times 4!. & 40458 &:= (4! - 0!) \times (\sqrt{4 + 5})! + 8! &= 8! + 5! - (4 - 0!)! + 4!. \\
 40175 &:= -4! - 0! + (1 + 7)! - 5! &= -5! + (7 + 1)! - 0! - 4!. & 40464 &:= (4 - 0 + 4)! + 6 \times 4! &= 4! \times 6 + (4 - 0 + 4)!!. \\
 40178 &:= -\sqrt{4 \times (0 + 1 + 7)!} + 8! &= 8! + 7! \times (0 - \sqrt{4}). & 40465 &:= 4! + 0! + (\sqrt{4} + 6)! + 5! &= 5! + (\sqrt{64})! + 0! + 4!. \\
 40195 &:= -(4 + 0!)! + (-1 + 9)! - 5 &= -5^{\sqrt{9}} + (10 - \sqrt{4})!. & 40468 &:= 4 - 0 + 4! \times 6 + 8! &= 8! + 6 \times 4! + 0 + 4. \\
 40198 &:= -(4 + 0!)! + 1 - \sqrt{9} + 8! &= 8! - \sqrt{9} + 1 - (0! + 4)! & 40528 &:= 4 \times (0 + 52) + 8! &= 8! + (2 + 50) \times 4. \\
 40199 &:= -(4 + 0!)! - 1 + 9!/9 &= 9!/9 - 1 - (0! + 4)! & 40536 &:= (40/5)! + \sqrt{3!^6} &= 6^3 + (5 - 0! + 4)! &= 6^3 + (5 - 0! + 4)!. \\
 40228 &:= -4 \times (0! + 22) + 8! &= 8! - (22 + 0!) \times 4. & 40538 &:= \sqrt{4} + (0! + 5)^3 + 8! &= 8! + 3^5 - 0! - 4!. \\
 40248 &:= -(4 - 0!) \times 24 + 8! &= 8! + (\sqrt{4} - 20) \times 4. & 40548 &:= (-(-4 - 0!)! + 5!) \times \sqrt{4} + 8! &= 8! + \sqrt{4} \times (5! - (0! + \sqrt{4})!). \\
 40258 &:= \sqrt{4} \times (0! - 2^5) + 8! &= 8! - 5!/2 + 0 - \sqrt{4}. & 40558 &:= (4 - 0!)^5 - 5 + 8! &= 8! + 5! + 5! + 0 - \sqrt{4}. \\
 40268 &:= -40 - 2 \times 6 + 8! &= 8! - (6 + 20) \times \sqrt{4}. & 40562 &:= \sqrt{4} \times (0! + 5!) + (6 + 2)! &= (2 + 6)! + (5! + 0!) \times \sqrt{4}. \\
 40272 &:= 4 \times (-0! + 2)! + 7! \times 2 &= 2 \times (7! - (2 + 0!)!) \times 4. & 40568 &:= \sqrt{4} \times (0! + 5!) + 6 + 8! &= 8! + 6 + (5! + 0!) \times \sqrt{4}. \\
 40276 &:= 4 \times (0! + 2 \times (7! - 6)) &= ((-6 + 7!) \times 2 + 0!) \times 4. & 40582 &:= 4! \times \sqrt{0! + 5!} + 8! - 2 &= -2 + 8! + \sqrt{5! + 0!} \times 4!. \\
 40278 &:= -40 - 2 + 7! \times 8 &= 8! - 7 \times (2 + 0 + 4). & 40584 &:= \sqrt{4} \times (0 + 5)! + 8! + 4! &= 4! + 8! + 5! \times (0 + \sqrt{4}). \\
 40293 &:= (4 \times (0 + 2))! - 9 \times 3 &= -3 \times 9 + (2 \times (0 + 4))!. & 40585 &:= 4! + 0! + 5! + 8! + 5! &= 5! + 8! + 5! + 0! + 4!. \\
 40294 &:= -\sqrt{4} - 0 + (2^{\sqrt{9}})! - 4! &= (\sqrt{4^{\sqrt{9}}})! - 2 + 0 - 4!. & 40668 &:= \sqrt{4!} \times ((0! + 6)! + 6) + 8! &= 8! + 6 \times (60 - \sqrt{4}). \\
 40295 &:= -4! - 0! + (2 \times (9 - 5))! &= (5 + \sqrt{9})! - 2 + 0! - 4!. & 40698 &:= ((4 + 0!)! + 6) \times \sqrt{9} + 8! &= 8! + \sqrt{9} \times (6 + (0! + 4)!). \\
 40296 &:= -4! - 0 + (2^{9-6})! &= ((-6 + 9)^2 - 0!)! - 4!. & 40832 &:= \sqrt{40!+8} + (3! + 2)! &= (2^3)! + 8^{0!+\sqrt{4}}. \\
 40297 &:= -4! + 0! + (2 \times \sqrt{9 + 7})! &= ((7 + 9)/2)! + 0! - 4!. & 40838 &:= (4 - 0!)! + 8^3 + 8! &= 8! + 3! + 8^{0!+\sqrt{4}}. \\
 40298 &:= -40 + 2 \times 9 + 8! &= 8! - 9 \times 2 + 0 - 4. & 40848 &:= (4 - 0!)!! + 8! - 4! \times 8 &= 8! - 4! \times 8 + (0! + \sqrt{4})!!. \\
 40299 &:= -4! + 0! + 2 + 9!/9 &= 9!/9 + 2 + 0! - 4!. & 40895 &:= -4! - 0! + 8! + (\sqrt{9})!! - 5! &= -5! + (\sqrt{9})!! + 8! - 0! - 4!. \\
 40308 &:= 4 \times (0 - 3) - 0 + 8! &= 8! + 0 + 3 \times (0 - 4). & 40896 &:= -(4 - 0!)!! \times 8 + (\sqrt{9})!^6 &= 6^{(\sqrt{9})!} - 8 \times (0! + \sqrt{4})!!. \\
 40309 &:= -\sqrt{4} + (0! + 3! + 0!)! - 9 &= (9 - 0!)! - 3! - 0! - 4. & 40968 &:= 4! \times (0 - \sqrt{9}) + 6! + 8! &= 8! + \sqrt{6^{(9-0!)/4}}. \\
 40312 &:= 4 \times ((0! + 3!)! - 1) \times 2 &= 2 \times ((1 + 3!)! - 0!) \times 4. & 40986 &:= -(4 - 0!)! \times 9 + 8! + 6! &= 6! + 8! - 9 \times (0! + \sqrt{4})!. \\
 40313 &:= (\sqrt{40+3})! - 1 - 3! &= -3 + (1 + 3! + 0!)! - 4. & 41035 &:= (-\sqrt{4} + 10)! + 3!! - 5 &= -5 + 3!! + ((0! + 1) \times 4)!. \\
 40314 &:= -(4 - 0!)! + (3 + 1 + 4)! &= -(4 - 1)! + (3 + 0! + 4)! & & & \\
 40315 &:= (40/(3! - 1))! - 5 &= -5 + (13 - 0! - 4)!. & & & 
 \end{aligned}$$

$$\begin{aligned}
41036 &:= -4 + ((1 + 0!)^3)! + 6! &= 6! + (3! + 0! + 1)! - 4. \\
41038 &:= (4 - 1)!! + 0! - 3 + 8! &= 8! + 3!! + 0! + 1 - 4. \\
41064 &:= (-\sqrt{4} + 10)! + 6! + 4! &= 4! + 6! + ((0! + 1) \times 4)!. \\
41348 &:= 4^{(-1+3!)} + 4 + 8! &= 8! + 4^{3!-1} + 4. \\
41398 &:= -\sqrt{4} + (-1 + 3!)! \times 9 + 8! &= 8! + 9 \times (3! - 1)! - \sqrt{4}. \\
41448 &:= -4! + 1 \times 4!^4/8 &= 8! + 4! \times (4! - 1 + 4!). \\
41472 &:= 4! \times 1 \times 4! \times 72 &= 2 \times (7 + 4 + 1)^4. \\
41499 &:= (4 - 1) \times (4!^{\sqrt{9}} + 9) &= \sqrt{9} \times (9 + 4!^{(-1+4)}). \\
41616 &:= (4 - 1)!^6 - (1 + 6)! &= -(6 + 1)! + 6^{(-1+4)!}. \\
41617 &:= (4 - 1)!^6 + 1 - 7! &= -7! + 1 + 6^{(-1+4)!}. \\
41736 &:= (4 + 1)! - 7! + 3!^6 &= 6^{3!} - 7! + (1 + 4)!. \\
41762 &:= \sqrt{4} + (1 + 7)! + 6! \times 2 &= 2 \times 6! + (7 + 1)! + \sqrt{4}. \\
41764 &:= 4 + (1 + 7)! + 6! \times \sqrt{4} &= \sqrt{4} \times 6! + (7 + 1)! + 4. \\
41784 &:= \sqrt{4} \times (-1 + 7)! + 8! + 4! &= 4! + 8! + (7 - 1)! \times \sqrt{4}. \\
42048 &:= 4!^2 \times (-0! + 4) + 8! &= 8! + 4! \times (0! + 2) \times 4!. \\
42336 &:= (4 + 2)^{3!} - 3! \times 6! &= 6^3 \times (3!! - 2 \times 4!). \\
42368 &:= 4 \times 2^{3+6} + 8! &= 8! + \sqrt{(6/3)^{(-2+4)}}. \\
42456 &:= -4! + (\sqrt{\sqrt{2^{4!}} - 5}) \times 6! &= 6! \times (5! - \sqrt{4})/2 - 4!. \\
42648 &:= (4!^2 + 6) \times 4 + 8! &= 8! + (9 + 4!)^2 \times \sqrt{4}. \\
42768 &:= (4! + 2 + 7) \times \sqrt{6^8} &= 8! + 6! + 72 \times 4!. \\
43188 &:= (4 \times (3!! - 1) + 8!) - 8 &= 8! - 8 + (-1 + 3!!) \times 4. \\
43195 &:= 4 \times 3!! + (-1 + 9!) - 5 &= -5 + (9 - 1)! + 3!! \times 4. \\
43196 &:= -4 + 3!! \times (1 + 9) \times 6 &= 6 \times (9 + 1) \times 3!! - 4. \\
43198 &:= 4 \times 3!! + 1 - \sqrt{9} + 8! &= 8! - \sqrt{9} + 1 + 3!! \times 4. \\
43199 &:= 4 \times 3!! - 1 + 9!/9 &= 9!/9 - 1 + 3!! \times 4. \\
43203 &:= ((\sqrt{4} + 3)!^2 + 0!) \times 3 &= 3 \times (0! + (2 + 3)!^{\sqrt{4}}). \\
43204 &:= (4 + 0!)!^2 \times 3 + 4 &= 4 + 3!!/2 \times (0! + 4)!. \\
43208 &:= 4 \times (3!! + 2) - 0 + 8! &= 8! + (0 + 2 + 3!!) \times 4. \\
43248 &:= 4 \times 3!! + 2 \times 4! + 8! &= 8! + 4! \times 2 + 3!! \times 4. \\
43264 &:= 4^3 \times \sqrt{26^4} &= (4! \times 6 + 2^{3!})^{\sqrt{4}}. \\
43356 &:= -4! + (3 + 3!!) \times \sqrt{5 \times 6!} &= \sqrt{(6! \times 5) \times (3 + 3!!)} - 4!. \\
43536 &:= -4! + \sqrt{3!! \times 5} \times (3! + 6!) &= (6 + 3!!) \times \sqrt{5 \times 3!!} - 4!. \\
43584 &:= ((4! + 3) \times 5! + 8!) + 4! &= 4! + 8! + 5! \times (3 + 4!). \\
43676 &:= (-4 + 3!!) \times (67 - 6) &= (67 - 6) \times (3!! - 4). \\
43688 &:= 4^{3!} - 6! + 8! - 8 &= (8 + 8^6)/3! - 4. \\
43769 &:= -4 \times 3!! - 7 + 6^{(\sqrt{9})!} &= (\sqrt{9})!^6 - 7 - 3!! \times 4. \\
43896 &:= -4! - 3!! + 8! + (\sqrt{9})! \times 6! &= (69 - 8) \times 3!! - 4!. \\
43915 &:= (\sqrt{4^3})! + ((\sqrt{9})!! - 1) \times 5 &= 5 \times (-1 + (\sqrt{9})!!) + (3! + \sqrt{4})!. \\
43918 &:= -\sqrt{4} + 3!! \times ((\sqrt{9})! - 1) + 8! &= 8! + (-1 + (\sqrt{9})!) \times 3!! - \sqrt{4}. \\
43935 &:= (\sqrt{4^3})! + (\sqrt{9} + 3!!) \times 5 &= 5 \times (3 + (\sqrt{9})!!) + (3! + \sqrt{4})!. \\
43944 &:= 4! - 3!! \times \left( \sqrt{9} - \sqrt{\sqrt{\sqrt{4^4}}} \right) &= \left( \sqrt{\sqrt{\sqrt{\sqrt{4^4}}} - \sqrt{9}} \right) \times 3!! + 4!. \\
43965 &:= (\sqrt{4^3})! + \sqrt{9^6} \times 5 &= 5 \times (6! + 9) + (3! + \sqrt{4})!. \\
44416 &:= (4 + 4)! + 4^{1 \times 6} &= (-6 + 14)! + \sqrt{\sqrt{4^{4!}}}. \\
44496 &:= (4 + 4)! + (-4! + (\sqrt{9})!!) \times 6 &= 6 \times ((\sqrt{9})!! - 4!) + (4 + 4)!. \\
44628 &:= (4 + \sqrt{4}) \times (6! - 2) + 8! &= 8! + (-2 + 6!) \times (4 + \sqrt{4}). \\
44635 &:= (4 + 4)! + 6 \times 3!! - 5 &= -5 + 3!! \times (64 - \sqrt{4}). \\
44636 &:= -4 + (\sqrt{4} + 6)! + 3! \times 6! &= 6 \times 3!! + (\sqrt{64})! - 4. \\
44637 &:= (4 + 4)! - 6! - 3 + 7! &= 7! - 3 - 6! + (4 + 4)!. \\
44638 &:= \sqrt{4} - 4 + 6 \times 3!! + 8! &= 8! + 3! \times 6! + \sqrt{4} - 4. \\
44664 &:= (4 + 4)! + 6 \times (6! + 4) &= (4 + 6!) \times 6 + (4 + 4)!. \\
44668 &:= 4 + (4 + 6!) \times 6 + 8! &= 8! + 6 \times (6! + 4) + 4. \\
44688 &:= (4 + \sqrt{4}) \times (6! + 8) + 8! &= 8! + (8 + 6!) \times (4 + \sqrt{4}). \\
44764 &:= \sqrt{4} \times (4! + 7) \times (6! + \sqrt{4}) &= (\sqrt{4} + 6!) \times (7 + 4!) \times \sqrt{4}. \\
44782 &:= -4!^{\sqrt{4}} + 7! + 8! - 2 &= -2 + 8! + 7! - 4!^{\sqrt{4}}. \\
44784 &:= -4! \times (4! - (7! + 8!)/4!) &= 4! \times ((8! + 7!)/4! - 4!). \\
44896 &:= 4^4 + 8! + (\sqrt{9})! \times 6! &= -6! + 9!/8 + 4^4. \\
44928 &:= 4^4 \times 9 \times 2 + 8! &= 8! + 2 \times 9 \times 4^4. \\
44942 &:= (4 - 4! \times 9)^{\sqrt{4}} - 2 &= -2 + (-4 + 9 \times 4!)^{\sqrt{4}}. \\
45056 &:= 4^{5+0!} \times (5 + 6) &= (6 + 5) \times \sqrt{\sqrt{(-0! + 5)!}}. \\
45099 &:= (-4! - 5 + (0! + (\sqrt{9})!))! \times 9 &= 9 \times (((\sqrt{9})! + 0!)! - 5 - 4!). \\
45189 &:= (-4! + 5 + (-1 + 8!))! \times 9 &= 9 \times ((8 - 1)! + 5 - 4!). \\
45279 &:= -(4 + 5)^2 + 7! \times 9 &= 9 \times 7! - (-2 + 5)^4. \\
45297 &:= (4 + 5) \times (2 - 9 + 7!) &= (7! - 9 + 2) \times (5 + 4). \\
45306 &:= ((6 + 0!)! - 3!) \times (5 + 4) &= (4 + 5) \times ((3! + 0!)! - 6). \\
45315 &:= (4 + 5) \times ((3! + 1)! - 5) &= (-5 + (1 + 3!))! \times (5 + 4). \\
45319 &:= 4 + (-5 + (3! + 1!)) \times 9 &= 9 \times ((1 + 3!)! - 5) + 4. \\
45333 &:= ((\sqrt{4} + 5)! - 3) \times 3 \times 3 &= 3 \times 3 \times (-3 + (5 + \sqrt{4})!). \\
45336 &:= -4! + (\sqrt{5 \times 3!!} + 3) \times 6! &= 6^3 \times 3! \times 5! - 4!. \\
45339 &:= (\sqrt{4} + 5) \times (-3 + 3!! \times 9) &= (9 \times 3!! - 3) \times (5 + \sqrt{4}). \\
45342 &:= (4 + 5) \times ((3 + 4)! - 2) &= (-2 + (4 + 3!))! \times (5 + 4). \\
45348 &:= (\sqrt{4} + 5)! - 3 \times 4 + 8! &= 8! - 4 \times 3 + (5 + \sqrt{4})!. \\
45355 &:= (4 + 5)!/(3 + 5) - 5 &= -5 + (5! + 3!!) \times 54. \\
45356 &:= -4 + 5! \times 3 \times (5! + 6) &= (6 + 5!) \times 3 \times 5! - 4. \\
45357 &:= -\sqrt{4^{5 \times 3}} + 5^7 &= 7! - 5 + (3 + 5)! + \sqrt{4}. \\
45358 &:= (\sqrt{4} + 5)! + 3 - 5 + 8! &= 8! - 5 + 3 + (5 + \sqrt{4})!. \\
45373 &:= -\sqrt{4} + (5 + 3 \times 7!) \times 3 &= 3 \times (7! \times 3 + 5) - \sqrt{4}. \\
45375 &:= \sqrt{4 + 5} \times (3 \times 7! + 5) &= (5 + 7! \times 3) \times \sqrt{5 + 4}. \\
45377 &:= 4! + (5 + 3)! + 7! - 7 &= 7! - 7 + (3 + 5)! + 4!. \\
45378 &:= (4 + 5) \times (-3! + 7! + 8) &= (8 + 7! - 3!) \times (5 + 4). \\
45379 &:= 4 + 5 \times 3 + 7! \times 9 &= 9 \times 7! + 3 \times 5 + 4. \\
45384 &:= (4! - 5 \times 3!)/8 + 4! &= 4! + 8! + (3! + 5 - 4)!. \\
45387 &:= (4 + 5) \times 3 + 8! + 7! &= 7! + 8! + 3 \times (5 + 4). \\
45393 &:= ((\sqrt{4} + 5)! + 3) \times 9 + 3! &= 3! + 9 \times (3 + (5 + \sqrt{4})!). \\
45395 &:= (\sqrt{4} + 5) \times (3!! \times 9 + 5) &= (5 + 9 \times 3!!) \times (5 + \sqrt{4}). \\
45397 &:= \sqrt{4} + (5 + 3!! \times 9) \times 7 &= 7! \times 9 + 35 + \sqrt{4}. \\
45632 &:= -4^5 + 6^{3 \times 2} &= 2^{3!} \times (6! - 5 - \sqrt{4}). \\
45679 &:= 4 + (5 + 6!) \times 7 \times 9 &= 9 \times 7 \times (6! + 5) + 4. \\
45837 &:= 4 \times 5! + 8! - 3 + 7! &= 7! - 3 + 8! + 5! \times 4. \\
45888 &:= 4! \times (5! \times (8 + 8) - 8) &= (-8 + (8 + 8) \times 5!) \times 4!. \\
45927 &:= ((4 + 5) \times 9)^2 \times 7 &= 7 \times ((2 - (\sqrt{9})! - 5)^4). \\
45933 &:= \sqrt{4} - 5 - (\sqrt{9})!! + 3!^{3!} &= 3!^{3!} - (\sqrt{9})!! - 5 + \sqrt{4}. \\
45934 &:= (\sqrt{4 + 5})!^{(\sqrt{9})!} - 3!! - \sqrt{4} &= -\sqrt{4} - 3!! + (\sqrt{9})!^{(\sqrt{5+4})!}. \\
45936 &:= (45 - 9)^3 - 6! &= 6^{3!} - (9 - \sqrt{5 + 4})!. \\
45939 &:= (\sqrt{4 + 5})!^{(\sqrt{9})!} - 3!! + \sqrt{9} &= (\sqrt{9})!^{3!} - (\sqrt{9})!! + 5 - \sqrt{4}. \\
45958 &:= -\sqrt{4} - 5! + (\sqrt{9})!! \times 5! - 8! &= -8! - 5! + (\sqrt{9})!! \times 5! - \sqrt{4}.
\end{aligned}$$

$$\begin{aligned}
 45964 &:= 4 - 5! + (\sqrt{9})!! \times 64 &= \sqrt{4^6} \times (\sqrt{9})!! - 5! + 4. \\
 45984 &:= (4! \times 5! - (\sqrt{9})!) \times 8 \times \sqrt{4} = \sqrt{4} \times 8 \times (-(\sqrt{9})! + 5! \times 4!). \\
 45985 &:= ((\sqrt{4} + 5)! + 9!)/8 - 5 &= \sqrt{5^8} + 9 \times (5 + \sqrt{4})!. \\
 46016 &:= -(4 + 60) \times (1 - 6!) &= (6! - 1) \times (0 + 64). \\
 46048 &:= (\sqrt{4} \times 6! - 0!) \times 4 \times 8 &= 8 \times 4 \times (-0! + 6! \times \sqrt{4}). \\
 46056 &:= -4! + 6! \times \sqrt{(-0! + 5)^6} &= (65 - 0!) \times 6! - 4!. \\
 46072 &:= 4 \times (6! - 0! + 7!) \times 2 &= 2 \times (7! - 0! + 6!) \times 4. \\
 46075 &:= \sqrt{4^6} \times (-0! + 7)! - 5 &= -5 + (7 - 0!)! \times 64. \\
 46078 &:= -\sqrt{4} + (6! + 0 + 7!) \times 8 &= 8 \times (7! + 0 + 6!) - \sqrt{4}. \\
 46079 &:= -\sqrt{4} + 6! + 0! + 7! \times 9 &= 9 \times 7! + 0! + 6! - \sqrt{4}. \\
 46137 &:= \sqrt{4^6} \times (1 + 3!)! - 7 &= -7 + (3!! + 1) \times 64. \\
 46144 &:= 4 \times (6! + 1) \times 4 \times 4 &= 4 \times 4 \times (1 + 6!) \times 4. \\
 46146 &:= \sqrt{4} + (6! + 1) \times \sqrt{4^6} &= 64 \times (1 + 6!) + \sqrt{4}. \\
 46208 &:= (\sqrt{4} + 6!) \times 2^{(\sqrt{0!+8})!} &= 8^{0+2} \times (6! + \sqrt{4}). \\
 46288 &:= (4! + 6! + 2) \times 8 + 8! &= 8! + 8 \times (2 + 6! + 4!). \\
 46336 &:= (4 + 6!) \times (3!/3)^6 &= (6/3)^{3!} \times (6! + 4). \\
 46368 &:= 4 \times (6! + 3^6) \times 8 &= 8 \times (6! + 3^6) \times 4. \\
 46466 &:= \sqrt{4} + 64 \times (6 + 6!) &= (6 + 6!) \times \sqrt{4^6} + \sqrt{4}. \\
 46536 &:= -4 \times 6 \times 5 + 3!^6 &= 6^{3!} - 5 \times 6 \times 4. \\
 46558 &:= \sqrt{4} \times (-6 + 5^5 + 8!) &= 8! + (5^5 - 6) \times \sqrt{4}. \\
 46566 &:= (-4! + 6) \times 5 + 6^6 &= 6^6 + 5 \times (6 - 4!). \\
 46584 &:= (4 + 6!) \times 5! - 8! + 4! &= 4! - 8! + 5! \times (6! + 4). \\
 46593 &:= \sqrt{4} - 65 + (\sqrt{9})!^{3!} &= 3!^{(\sqrt{9})!} - (5! + 6)/\sqrt{4}. \\
 46596 &:= (-4 + 6^5 - (\sqrt{9})!) \times 6 &= 6^{(\sqrt{9})!} - 56 - 4. \\
 46624 &:= -4! + 6^6 - 2 \times 4 &= -4 \times 2 + 6^6 - 4!. \\
 46625 &:= -4! + 6^6 - 2 - 5 &= -5 - 2 + 6^6 - 4!. \\
 46626 &:= -4 + 6^6 - 26 &= \sqrt{6^{2 \times 6}} - 6 - 4!. \\
 46627 &:= -\sqrt{4} + 6^6 - 27 &= -7 + 2 + 6^6 - 4!. \\
 46628 &:= -4! + 6^6 - \sqrt{2 \times 8} &= -(8/2)! + 6^6 - 4. \\
 46629 &:= \sqrt{4} + 6^6 - 29 &= -\sqrt{\sqrt{9^2}} + 6^6 - 4!. \\
 46631 &:= -4! + (6 \times 6)^3 - 1 &= -1 + \sqrt{36^6} - 4!. \\
 46632 &:= -4 \times 6 + 6^{3 \times 2} &= (2 \times 3)^6 - 6 \times 4. \\
 46633 &:= 4 + 6^6 - 3^3 &= 3/3 + 6^6 - 4!. \\
 46634 &:= \sqrt{4} + 6^6 - 3! \times 4 &= \sqrt{4} + \sqrt{36^6} - 4!. \\
 46636 &:= -\sqrt{4} + 6^6 - 3 \times 6 &= -6 \times 3 + 6^6 - \sqrt{4}. \\
 46637 &:= \sqrt{4} + 6^6 - 3 \times 7 &= -7 \times 3 + 6^6 + \sqrt{4}. \\
 46638 &:= -4 - 6 + 6^{3!} - 8 &= -8 - 3! + 6^6 - 4. \\
 46639 &:= -\sqrt{4} - 6 + 6^{3!} - 9 &= -9 + 3!^6 - \sqrt{64}. \\
 46642 &:= -2^4 + 6^6 + \sqrt{4} &= \sqrt{4} + 6^6 - 4^2. \\
 46644 &:= -4 \times 4 + 6^6 + 4 &= 4 + 6^6 - 4 \times 4. \\
 46645 &:= -4 + 6^6 - \sqrt{4} - 5 &= -5 - \sqrt{4} + 6^6 - 4. \\
 46646 &:= \sqrt{4} + 6^6 - \sqrt{4} \times 6 &= \sqrt{\sqrt{6^{4 \times 6}}} - 6 - 4. \\
 46647 &:= \sqrt{4} + 6^6 - 4 - 7 &= -7 + \sqrt{4} + 6^6 - 4. \\
 46648 &:= 4 \times 6^6/4 - 8 &= -8 + 4 + 6^6 - 4. \\
 46649 &:= 4 + 6^6 - \sqrt{4} - 9 &= -9 - \sqrt{4} + 6^6 + 4. \\
 46651 &:= -4 + 6 \times 6^5 - 1 &= -1^5 + 6^6 - 4. \\
 46652 &:= -4 + (6 \times 6)^{5-2} &= (2 - 5 + 6)!^6 - 4. \\
 46653 &:= -4 + 6^6 - 5 + 3! &= 3! - 5 + 6^6 - 4. \\
 46654 &:= \sqrt{4} + 6 \times 6^5 - 4 &= ((-4 + 5) \times 6)^6 - \sqrt{4}. \\
 46655 &:= 4 + 6 \times 6^5 - 5 &= 5/5 + 6^6 - \sqrt{4}. \\
 46656 &:= ((4 \times 6 + 6)/5)^6 &= 6^{(5 \times 6 - 6 \times 4)}. \\
 46658 &:= \sqrt{4} + 6^{(6+5-8)!} &= (8 - 5)! + 6^6 - 4. \\
 46659 &:= 4 + 6^6 + 5 - (\sqrt{9})! &= (\sqrt{9})!^5 \times 6 + 6/\sqrt{4}. \\
 46672 &:= \sqrt{4} + 6^6 + 7 \times 2 &= 2 \times 7 + 6^6 + \sqrt{4}. \\
 46673 &:= 4 + 6^6 + 7 + 3! &= 3 \times 7 + 6^6 - 4. \\
 46674 &:= 4 + 6^6 + 7 \times \sqrt{4} &= \sqrt{4} \times 7 + 6^6 + 4. \\
 46679 &:= \sqrt{4} + 6^6 + 7 \times \sqrt{9} &= \sqrt{9} \times 7 + 6^6 + \sqrt{4}. \\
 46692 &:= 4! + 6^6 + (\sqrt{9})! \times 2 &= (2 \times \sqrt{9})^6 + \sqrt{64}. \\
 46694 &:= \sqrt{4} + 6^6 + 9 \times 4 &= 4 \times 9 + 6^6 + \sqrt{4}. \\
 46695 &:= 4! + 6^6 + \sqrt{9} \times 5 &= 5 \times \sqrt{9} + 6^6 + 4!. \\
 46696 &:= 46 + 6^{(\sqrt{9})!} - 6 &= 6^{(\sqrt{9})!} + 6 \times 6 + 4. \\
 46704 &:= 4! + 6^{(7-0)!} + 4! &= 4! + (-0! + 7)^6 + 4!. \\
 46793 &:= 4! \times 6 - 7 + (\sqrt{9})!^{3!} &= 3!! \times 9 - 7 + (\sqrt{64})!. \\
 46795 &:= \sqrt{4} \times 6! + 7! \times 9 - 5 &= -5 + 9 \times 7! + 6! \times \sqrt{4}. \\
 46796 &:= -4 + 6! + 7! \times 9 + 6! &= 6! + 9 \times 7! + 6! - 4. \\
 46798 &:= -\sqrt{4} + 6! \times (-7 + 9 \times 8) &= (8 \times 9 - 7) \times 6! - \sqrt{4}. \\
 46818 &:= (\sqrt{4} + 6!) \times \sqrt{81} + 8! &= 8! + (1 + 8) \times (6! + \sqrt{4}). \\
 46836 &:= \sqrt{4} \times 6!/8 + 3!^6 &= 6^{(\sqrt{\sqrt{3^6}})!} + 6!/4. \\
 46848 &:= 4! \times 68 \times 4 + 8! &= \sqrt{8^4} \times (8 + 6! + 4). \\
 46896 &:= (4! + 6) \times 8 + (\sqrt{9})!^6 &= 6^{(\sqrt{9})!} + 8 \times (6 + 4!). \\
 47038 &:= -\sqrt{4} + (7 + 0!)/3! + 8! &= 8!/3! \times (0 + 7) - \sqrt{4}. \\
 47368 &:= (-4 + 7)!! + 3!^6 - 8 &= -8 + 6! + 3!^{(7-4)!}. \\
 47376 &:= (-4 + 7)!! + 3!^7/6 &= 6^7/3! + (7 - 4)!!!. \\
 47393 &:= 4! - 7 + 3!! + (\sqrt{9})!^{3!} &= 3!^{(\sqrt{9})!} + 3!! - 7 + 4!. \\
 47476 &:= (4 + 7) \times (-4 + 7! - 6!) &= (-6! + 7! - 4) \times (7 + 4). \\
 47488 &:= 4 \times 7 \times \sqrt{4^8} + 8! &= 8! + 8^4 \times 7/4. \\
 47496 &:= 4 \times 7!/4! + (\sqrt{9})!^6 &= 6 \times ((\sqrt{9})!! \times (4 + 7) - 4). \\
 47664 &:= (4! + 7!) \times 6 + 6! \times 4! &= 4! \times (6! + 6 + 7!/4). \\
 48096 &:= \sqrt{4} \times (\sqrt{8 + 0!})!! + (\sqrt{9})!^6 &= \sqrt{6^{9+0!}} + (\sqrt{\sqrt{8^4}})!. \\
 48386 &:= \sqrt{4} + 8!/(-3 + 8) \times 6 &= 6 \times 8!/(-3 + 8) + \sqrt{4}. \\
 48388 &:= 4 + 8!/(-3 + 8) + 8! &= 8!/(8 - 3) + 8! + 4. \\
 48408 &:= 4! + 8!/(4 + 0!) + 8! &= 8!/(0! + 4) + 8! + 4!. \\
 48864 &:= (-4! + \sqrt{8^8}) \times 6 \times \sqrt{4} &= \sqrt{4} \times 6 \times (\sqrt{8^8} - 4!). \\
 48936 &:= 4 \times ((8 + 9) \times 3!! - 6) &= 6! \times (3 + 9) + 8! - 4!. \\
 48955 &:= 4! \times (8 + 9) \times 5! - 5 &= -5 + 5! \times (9 + 8) \times 4!. \\
 48956 &:= -4 + (8 + \sqrt{(\sqrt{9})!! \times 5}) \times 6! &= 6! \times 5 + 9!/8 - 4. \\
 48958 &:= -\sqrt{4} + 8! + 9 \times 5! \times 8 &= 8 \times 5! \times 9 + 8! - \sqrt{4}. \\
 49152 &:= 4! \times (\sqrt{9} + 1)^5 \times 2 &= \sqrt{2^{(5-1)!}} \times 9 \times 4. \\
 49164 &:= (4^{(\sqrt{9})!} + 1) \times 6 \times \sqrt{4} &= (4^6 + 1) \times \sqrt{9} \times 4. \\
 49224 &:= 4! \times (\sqrt{9} + \sqrt{2^{(-2+4!)}}) &= (\sqrt{\sqrt{4^{22}}} + \sqrt{9}) \times 4!. \\
 49248 &:= 4 \times \sqrt{9} \times (\sqrt{2^{4!}} + 8) &= 8! + 4!/2 \times ((\sqrt{9})!! + 4!). \\
 49284 &:= (4! \times 9 - 2 + 8)^{\sqrt{4}} &= (4! - 82 \times \sqrt{9})^{\sqrt{4}}. \\
 49335 &:= (-4! + 93) \times (3!! - 5) &= (-5 + 3!!) \times (-3 + \sqrt{9} \times 4!).
 \end{aligned}$$

$$\begin{aligned}
49536 &:= 4 \times (\sqrt{9})! \times 5! + 3!^6 &= 6^{3!} + 5! \times (\sqrt{9})! \times 4. \\
49656 &:= -4! + (9 + \sqrt{6! \times 5}) \times 6! &= 6 \times 5! \times 69 - 4. \\
49669 &:= -\sqrt{4} - 9 + 6! \times 69 &= -9 + 6! \times 69 - \sqrt{4}. \\
49678 &:= -\sqrt{4} + (\sqrt{9})!! \times (6 + 7) + 8! &= 8! + (7 + 6) \times (\sqrt{9})!! - \sqrt{4}. \\
49697 &:= 4! + (\sqrt{9})!! \times 69 - 7 &= -7 + (\sqrt{9})!! \times 69 + 4!. \\
49704 &:= 4! + (\sqrt{9})!! \times (\sqrt{7! + 0!} - \sqrt{4}) &= (-\sqrt{4} + \sqrt{0! + 7!}) \times (\sqrt{9})!! + 4!. \\
49729 &:= (4! \times 9 + 7)^{\sqrt{-2+(\sqrt{9})!}} &= ((\sqrt{9} + 2)! - 7^{\sqrt{9}})^{\sqrt{4}}. \\
49923 &:= ((-4 + 9)! + 9)^2 \times 3 &= 3 \times ((2 + \sqrt{9})! + 9)^{\sqrt{4}}. \\
49928 &:= (-\sqrt{4} + 9 \times 9)^2 \times 8 &= 8 \times (-2 + 9 \times 9)^{\sqrt{4}}. \\
49956 &:= (4 + (\sqrt{9})!!) \times (9 + \sqrt{5 \times 6!}) &= (\sqrt{6! \times 5} + 9) \times ((\sqrt{9})!! + 4). \\
50275 &:= -5! + (-0! + 2 \times 7!) \times 5 &= 5 \times (7! \times 2 - 0!) - 5!. \\
50375 &:= (-5 + (-0! + 3) \times 7!) \times 5 &= 5 \times (7! \times (3 - 0!) - 5). \\
50384 &:= \sqrt{4} \times (-8 + (3! + 0!) \times 5) &= (5 \times (0! + 3!) - 8) \times \sqrt{4}. \\
50394 &:= (5 \times (0! + 3!)! - \sqrt{9}) \times \sqrt{4} &= \sqrt{4} \times (-\sqrt{9} + (3! + 0!)! \times 5). \\
50395 &:= ((5 + 9) \times 3!! - 0!) \times 5 &= 5 \times (-0! + 3!! \times (9 + 5)). \\
50688 &:= ((5 + 0!)^6 - 8!) \times 8 &= 8 \times (-8! + 6^{0!+5}). \\
50765 &:= \sqrt{(5 \times 0!) + 7!} \times (6! - 5) &= (-5 + 6!) \times \sqrt{7! + (0/5)!}. \\
50769 &:= (-5! + 0! + 7! + 6!) \times 9 &= 9 \times (6! + 7! + 0! - 5!). \\
50907 &:= ((5 + 0!)! - \sqrt{9}) \times \sqrt{0! + 7!} &= \sqrt{7! + 0!} \times (-\sqrt{9} + (0! + 5)!). \\
50976 &:= (5 + 0!)^{(\sqrt{9})!} + 7! - 6! &= -6! + 7! + (\sqrt{9})^{0!+5}. \\
51373 &:= (5 + 1)! + 37^3 &= 37^3 + (1 + 5)!.. \\
51696 &:= (5 - 1)! \times (6! \times \sqrt{9} - 6) &= 6^{(\sqrt{9})!} + (6 + 1^5)!.. \\
51737 &:= 5! + \sqrt{1 + 7!} \times (3!! + 7) &= (7 + 3!!) \times 7! + 5!. \\
51968 &:= 5! + (1 + 9 \times 6!) \times 8 &= 8 \times (6! \times 9 + 1) + 5!. \\
53424 &:= 53 \times 42 \times 4! &= 424 \times (3! + 5!). \\
53495 &:= -5^{3!} + 4!^{\sqrt{9}} \times 5 &= -5^{(\sqrt{9})!} + 4!^3 \times 5. \\
53557 &:= (-5 + 3!^5 - 5!) \times 7 &= -7 \times (5! + 5 - 3!^5). \\
53592 &:= (-5! + 3!^5) \times (9 - 2) &= (-2 + 9) \times (-5! + 3!^5). \\
53658 &:= (5! - 3) \times (-6 + 5!) + 8! &= 8! + (5! - 6) \times (-3 + 5!). \\
53985 &:= -5 \times (3 - (\sqrt{9})!!/8 \times 5!) &= (5!/8 \times (\sqrt{9})!! - 3) \times 5. \\
53995 &:= 5 \times 3!! \times (9 + (\sqrt{9})!) - 5 &= 5 \times (\sqrt{9})!! \times (9 + 3!) - 5. \\
54549 &:= (-5 + 4!) \times (5! \times 4! - 9) &= (-9 + 4! \times 5!) \times (4! - 5). \\
54644 &:= (-5 + 4!) \times (6! \times 4 - 4) &= (-4 + 4 \times 6!) \times (4! - 5). \\
54744 &:= (-5 \times 4! + 7^4) \times 4! &= (\sqrt{4 \times 4})! \times (7^4 - 5!). \\
54864 &:= 5!^{\sqrt{4}} + 8! + 6 \times 4! &= \sqrt{4!^6} + 8! + (\sqrt{4 + 5})!!.. \\
55296 &:= (5!/5)^2 \times 96 &= 6 \times 9 \times 2^{5+5}. \\
55375 &:= -5! + (5 + 3!) \times (7! + 5) &= (5 + 7!) \times (3! + 5) - 5!. \\
55379 &:= 5 + (5 + 3!) \times (7! - (\sqrt{9})!) &= (-\sqrt{9})! + 7! \times (3! + 5) + 5. \\
55435 &:= -5 + (5 + \sqrt{4})! \times (3! + 5) &= (5 + 3!) \times (\sqrt{4} + 5)! - 5. \\
55438 &:= 5! \times 5! - \sqrt{4} + 3!! + 8! &= 8! + 3!! - \sqrt{4} + 5! \times 5!. \\
55473 &:= \sqrt{5! + 5 - 4} \times (7! + 3) &= (3 + 7!) \times ((\sqrt{4 + 5})! + 5). \\
55495 &:= (5 + (5 + \sqrt{4})!) \times ((\sqrt{9})! + 5) &= (5 + (\sqrt{9})!) \times ((\sqrt{4} + 5)! + 5). \\
55715 &:= (5 \times 5 + 7!) \times \sqrt{1 + 5!} &= \sqrt{5! + 1} \times (7! + 5 \times 5). \\
56448 &:= (5! + 6) \times 448 &= 8! \times (4/4 + 6)/5. \\
56544 &:= (5! - 6) \times (5! + 4) \times 4 &= 4 \times (4 + 5!) \times (-6 + 5!). \\
56568 &:= 5! + (6^5 - 6!) \times 8 &= 8 \times (6^5 - 6!) + 5!. \\
56755 &:= (5 + 6) \times (7! + 5!) - 5 &= -5 + (5! + 7!) \times (6 + 5). \\
57464 &:= 5! + 7 \times 4^6 \times \sqrt{4} &= 4^6 \times \sqrt{4} \times 7 + 5!. \\
57595 &:= (5 + 75) \times (\sqrt{9})!! - 5 &= -5 + (\sqrt{9})!! \times (5 + 75). \\
57602 &:= (5 \times (7! + 6!) + 0!) \times 2 &= 2 \times (0! + (6! + 7!) \times 5). \\
57624 &:= 5 \times (7! + 6!) \times 2 + 4! &= 4! + 2 \times (6! + 7!) \times 5. \\
57625 &:= (5 + (7! + 6!) \times 2) \times 5 &= (5 + 2 \times (6! + 7!)) \times 5. \\
57648 &:= (-5 + 7 + 6!) \times 4! + 8! &= 8! + 4! \times (6! + 7 - 5). \\
58325 &:= 5 + 8! + 3!! \times 25 &= 5^2 \times 3!! + 8! + 5. \\
58929 &:= -\left(\sqrt{\sqrt{\sqrt{5^8}}}\right)! + 9^{2+\sqrt{9}} &= \sqrt{9^{\sqrt{2+98}}} - 5!. \\
59037 &:= -5 + 9^{(-0!+3!)} - 7 &= -7 + 3^{0!+9} - 5. \\
59042 &:= -5 + 9^{0!+4} - 2 &= -2 - 4 - 0! + 9^5. \\
59044 &:= -5 + 9^{(0/4)!+4} &= -4 - (4 \times 0)! + 9^5. \\
59047 &:= 5 + 9^{0!+4} - 7 &= -7 + 4 + 0! + 9^5. \\
59049 &:= (5 + \sqrt{9} + 0!)^4 \times 9 &= (94 \times 0 + 9)^5. \\
59052 &:= 5 + (9 + 0)^5 - 2 &= 2 + (5 \times 0)! + 9^5. \\
59163 &:= -3! + (6 - 1)! + 9^5 &= 5! + 9^{(-1+6)} - 3!. \\
59169 &:= 5! + 9^{\sqrt{16+9}} &= 9^{\sqrt{6+19}} + 5!. \\
59319 &:= (5 + \sqrt{9} + 3!)^{\sqrt{9}} &= 9 \times ((-1 + 3!!) \times 9 + 5!). \\
59399 &:= -5! \times 9 + (-3! + 9!)/(\sqrt{9})! &= (9! - (\sqrt{9})!)/3! - 9 \times 5!. \\
59439 &:= 5! + (9 \times 4 + 3)^{\sqrt{9}} &= (9 + 3! + 4!)^{\sqrt{9}} + 5!. \\
59535 &:= (5^{\sqrt{9}} + 5!) \times 3^5 &= (5^3 + 5!) \times \sqrt{9^5}. \\
59639 &:= -5! + (9! - 6)/3! - (\sqrt{9})!! &= (9! - 3!)/6 - (\sqrt{9})!! - 5!. \\
59649 &:= -5! + \sqrt{9^{6+4}} + (\sqrt{9})!! &= -(9 - 4)! + 6! + 9^5. \\
59755 &:= -5 + 9 \times 7! + 5! \times 5! &= 5! \times 5! + 7! \times 9 - 5. \\
59897 &:= (5! - \sqrt{9}) \times 8^{\sqrt{9}} - 7 &= 7!/(\sqrt{9})! + 8 + 9^5. \\
59984 &:= 5 + \sqrt{9^9} + 8! - 4! &= -4! + 8! + \sqrt{9^9} + 5. \\
59989 &:= -9 + 8! + \sqrt{9^9} - 5 &= -5 + \sqrt{9^9} + 8! - 9. \\
59998 &:= -5 + (9/\sqrt{9})^9 + 8! &= 8! + (9/\sqrt{9})^9 - 5. \\
60384 &:= 6 \times ((0! + 3!)! - 8) \times \sqrt{4} &= \sqrt{4} \times (-8 + (3! + 0!)!) \times 6. \\
60432 &:= ((6 + 0!)! - 4) \times 3! \times 2 &= 2 \times 3! \times (-4 + (0! + 6)!). \\
60472 &:= 6 \times (-0! + \sqrt{4} \times 7!) - 2 &= -2 + (7! \times \sqrt{4} - 0!) \times 6. \\
60473 &:= -6 - 0! + 4 \times 7! \times 3 &= 3 \times 7! \times 4 - 0! - 6. \\
60474 &:= -6 + (-0! + 4) \times 7! \times 4 &= 4 \times 7! \times (4 - 0!) - 6. \\
60475 &:= 6 \times \sqrt{0 + 4} \times 7! - 5 &= -5 + 7! \times \sqrt{4} \times (0 + 6). \\
60478 &:= 6 \times (0! + \sqrt{4} \times 7!) - 8 &= -8 + (7! \times \sqrt{4} + 0!) \times 6. \\
60479 &:= -(6 \times 0!) + 4 \times 7! \times \sqrt{9} &= (9! - (7 - 4)!)/(0 + 6). \\
60492 &:= 6 \times (0! + (\sqrt{49})!) \times 2 &= 2 \times ((9 - \sqrt{4})! + 0!) \times 6. \\
60499 &:= (-6 + (0! + 4) + 9!)/(\sqrt{9})! &= 9!/(9!) + 4! + 0! - 6. \\
60564 &:= (6! + 0!) \times (5! - \sqrt{6^4}) &= (4! + \sqrt{6! \times 5}) \times (0! + 6!). \\
60596 &:= (6! - (-0! + 5)! + 9!)/6 &= (6! + 9! - (5 - 0!)!)/6. \\
60599 &:= (6! - 0! - 5 + 9!)/(\sqrt{9})! &= (9! - (\sqrt{9})! + (5 + 0!)!)/6. \\
60624 &:= 6 \times ((0! + 6!) \times 2 + 4!) &= (4! + 2 \times (6 + 0!)!) \times 6. \\
61199 &:= 6! - 1 + 1 \times 9!/(9!) &= 9!/(9!) - 1 + 1 \times 6!. \\
62496 &:= 62 \times \sqrt{4} \times 9!/6! &= 6^{(\sqrt{9})!} + (4! - 2) \times 6!. \\
62784 &:= 6 \times 2 \times (7! + 8 \times 4!) &= (4! \times 8 + 7!) \times 2 \times 6. \\
63884 &:= (6 + 3!!) \times 88 - 4 &= -4 + 88 \times (3! + 6!). \\
64776 &:= (6! - 4 + 7! + 7!) \times 6 &= (6! + 7! + 7! - 4) \times 6. \\
64795 &:= 6 \times (\sqrt{4} \times 7! + (\sqrt{9})!!) - 5 &= -5 + (\sqrt{9})! \times (7! \times \sqrt{4} + 6!). \\
65544 &:= 6! \times (5! - 5 - 4!) + 4! &= 4! + (-4! - 5 + 5!) \times 6!. \\
65664 &:= 6! \times 5! - (6 + 6)^4 &= (-4! \times 6 + 6!) \times (5! - 6).
\end{aligned}$$

$$\begin{aligned}
 66144 &:= (-6! + (6! - 1) \times 4!) \times 4 &= 4 \times (4! \times (-1 + 6!) - 6!). & 74164 &:= 7! + 4 \times (1 + 6! \times 4!) &= (4! \times 6! + 1) \times 4 + 7!. \\
 66248 &:= 6! - 6 - 2 + 4^8 &= -8 + 4^{2+6} + 6!. & 74304 &:= 7! \times 4! - 3!^{(0!+\sqrt{4})!} &= -(4 - 0!)^{3!} + 4! \times 7!. \\
 66339 &:= (6 \times 6)^3 + 3^9 &= (9 \times 3)^3 + 6^6. & 74431 &:= 7^{\sqrt{4 \times 4}} \times 31 &= (1 + 3!)^4 \times (4! + 7). \\
 66784 &:= 6^6 + (7! - 8) \times 4 &= 4 \times (-8 + 7!) + 6^6. & 74448 &:= -7! + \sqrt{4} \times (-4!^{\sqrt{4}} + 8!) &= (8! - 4!^{\sqrt{4}}) \times \sqrt{4} - 7!. \\
 66954 &:= -6 + 6! \times (95 - \sqrt{4}) &= (-4! + 5! - \sqrt{9}) \times 6! - 6. & 74469 &:= (7 + 4 \times 4!) \times (6! + \sqrt{9}) &= (\sqrt{9} + 6!) \times (4 \times 4! + 7). \\
 66955 &:= 6! \times (-\sqrt{6! + 9} + 5!) + 5 &= -5 + (5! - \sqrt{9^6}) \times 6!. & 74688 &:= (7! - 4! - 6!) \times 8 + 8! &= 8! - 8 \times (6! + 4! - 7!). \\
 67199 &:= (-6 + (7 + 1)!) + 9! / (\sqrt{9})! &= (9! - (\sqrt{9})! + (1 + 7!)!) / 6. & 74873 &:= -7 + \sqrt{4} \times 8! + 7! - 3!! &= -3!! - 7! + 8! \times \sqrt{4} - 7. \\
 68544 &:= (6! - (8 - 5)!) \times 4! \times 4 &= 4 \times 4! \times ((-5 + 8)!! - 6). & 75344 &:= 7! \times 5 \times 3 - 4^4 &= -4^4 + 3 \times 5 \times 7!. \\
 68644 &:= (6 + \sqrt{8^6/4})^{\sqrt{4}} &= (4^4 + 6!) (8 - 6). & 75468 &:= -7! - 5! + \sqrt{4} \times (-6 + 8!) &= (8! - 6) \times \sqrt{4} - 5! - 7!. \\
 69024 &:= 6 \times ((\sqrt{9})!! - 0!) \times 2^4 &= ((4 + 2)! - 0!) \times 96. & 75473 &:= -7 + 5 \times (-4! + 7! \times 3) &= (3 \times 7! - 4!) \times 5 - 7. \\
 69144 &:= 6! \times (\sqrt{9} + 1) \times 4! + 4! &= 4! + (4 - 1)!! \times 96. & 75495 &:= (7! - 5 - \sqrt{4}) \times \sqrt{9} \times 5 &= 5 \times \sqrt{9} \times ((\sqrt{4} + 5)! - 7). \\
 69168 &:= 6 \times ((\sqrt{9})!! \times 16 + 8) &= 8 \times (6! + 1 + (\sqrt{9})!!) \times 6. & 75498 &:= -7! - 5! + \sqrt{4} \times (9 + 8!) &= (8! + 9) \times \sqrt{4} - 5! - 7!. \\
 69255 &:= (6! + 9) \times (-25 + 5!) &= (5! - 5^2) \times \sqrt{9^6}. & 75525 &:= (7! - 5) \times (5 - 2) \times 5 &= 5 \times (-2 + 5) \times (-5 + 7!). \\
 69264 &:= (6 + (\sqrt{9})!! \times (-2 + 6)) \times 4! &= 4! \times ((6 - 2) \times (\sqrt{9})!! + 6). & 75543 &:= (7! \times 5 + 5 - 4!) \times 3 &= 3 \times (-4! + 5 + 5 \times 7!). \\
 69404 &:= ((6! + \sqrt{9}) \times 4! - 0!) \times 4 &= 4 \times (-0! + 4! \times (\sqrt{9} + 6!)). & 75565 &:= (-7 + 5! \times (5! + 6)) \times 5 &= 5 \times ((6 + 5!) \times 5! - 7). \\
 69595 &:= 6! + ((\sqrt{9})!! + 5) \times 95 &= -5 + ((\sqrt{9})!! + 5) \times 96. & 75579 &:= (7! \times \sqrt{5 \times 5} - 7) \times \sqrt{9} &= \sqrt{9} \times (7! \times \sqrt{5 \times 5} - 7). \\
 69777 &:= -6! + (-9 + 7! + 7!) \times 7 &= 7 \times (7! + 7! - 9) - 6!. & 75585 &:= (7! \times 5 - 5) \times (8 - 5) &= (5 - 8) \times (5 - 5 \times 7!). \\
 69786 &:= -6 \times (9 - 7!) + 8! - 6! &= -6! + 8! + (7! - 9) \times 6. & 75593 &:= -7 + (5! - 5 \times \sqrt{9}) \times 3!! &= 3!! \times (-\sqrt{9} \times 5 + 5!) - 7. \\
 69798 &:= -6! + (-\sqrt{9} + 7!) \times ((\sqrt{9})! + 8) &= (8 + (\sqrt{9})!) \times (7! - \sqrt{9}) - 6!. & 75595 &:= 7! \times \sqrt{5 \times 5 \times 9} - 5 &= -5 + (-9 + 5! / 5) \times 7!. \\
 69837 &:= 6! \times (\sqrt{9})!! / 8 - 3 + 7! &= 7! \times (3! + 8) - \sqrt{9} - 6!. & 75603 &:= (7! \times 5 + (6 \times 0)!) \times 3 &= 3 \times (0! + 6! \times 5 \times 7). \\
 69848 &:= 6 \times (\sqrt{9})!! - 8 + 4^8 &= -8 + 4^8 + (\sqrt{9})! \times 6!. & 75618 &:= (7! \times 5 + 6) \times \sqrt{1 + 8} &= \sqrt{\sqrt{81}} \times (6 + 5 \times 7!). \\
 69864 &:= 6! \times 98 - 6! + 4! &= -4! + (6! + 8) \times 96. & 75635 &:= 7 \times (5 + 6! \times 3 \times 5) &= (5 \times 3 \times 6! + 5) \times 7. \\
 69888 &:= 6 \times ((\sqrt{9})!! + 8) \times (8 + 8) &= (8 + 8) \times (8 + (\sqrt{9})!!) \times 6. & 75637 &:= 7 + 5 \times (6 + 3 \times 7!) &= (7! \times 3 + 6) \times 5 + 7. \\
 69966 &:= -6! + 99 \times (6! - 6) &= (6! - 6) \times 99 - 6!. & 75834 &:= -7! + (5! + 8! - 3) \times \sqrt{4} &= \sqrt{4} \times (-3 + 8! + 5!) - 7!. \\
 69984 &:= 6^9 / (9 \times 8 \times \sqrt{4}) &= (4 + 8) \times \sqrt{(9 + 9)^6}. & 76356 &:= -7! + (6! - 3!) \times (5! - 6) &= (-6 + 5!) \times (-3! + 6!) - 7!. \\
 69993 &:= (6 + (\sqrt{9})!^{(\sqrt{9})!}) \times 9 / 3! &= (3! + (\sqrt{9})!^{(\sqrt{9})!}) \times 9 / 6. & 76896 &:= (7! + 6^{8-\sqrt{9}}) \times 6 &= 6 \times (\sqrt{(\sqrt{9})!^8} \times 6 + 7!). \\
 70476 &:= 7 \times \sqrt{0 + 4} \times (7! - 6) &= (-6 + 7!) \times \sqrt{4} \times (0 + 7). & 77634 &:= (-7 + 7! - 6!) \times (-3! + 4!) &= (4! - 3!) \times (-6! - 7 + 7!). \\
 70497 &:= (7! \times \sqrt{0 + 4} - 9) \times 7 &= 7 \times (-9 + \sqrt{4} \times (0 + 7)!). & 78352 &:= (-7 \times 8 + 3!!) \times (5! - 2) &= (-2 + 5!) \times (3!! - 8 \times 7). \\
 70546 &:= (7! - 0!) \times (5 \times 4 - 6) &= (-6 + 4 \times 5) \times (-0! + 7!). & 79184 &:= (7! - 91) \times 8 \times \sqrt{4} &= \sqrt{4} \times (8! - 1 - (\sqrt{9})!! - 7). \\
 70574 &:= 7 \times ((0/5)! + 7!) \times \sqrt{4} &= \sqrt{4} \times (7! + (5 \times 0)!) \times 7. & 79195 &:= (7! \times \sqrt{9} - 1 + (\sqrt{9})!!) \times 5 &= 5 \times ((\sqrt{9})!! - 1 + \sqrt{9} \times 7!). \\
 70582 &:= (-7! + \sqrt{0! + 5!} + 8!) \times 2 &= 2 \times (8! + \sqrt{5! + 0!} - 7!). & 79198 &:= (7 - 9) \times (1 + (\sqrt{9})!! - 8!) &= (8! - (\sqrt{9})!! - 1) \times (9 - 7). \\
 70584 &:= 7! \times (0! + 5 + 8) + 4! &= 4! + (8 + 5 + 0!) \times 7!. & 79335 &:= ((7! + 9) \times 3 + 3!!) \times 5 &= 5 \times (3!! + 3 \times (9 + 7!)). \\
 71273 &:= 7 \times (-1 + 2 \times 7!) + 3!! &= 3!! + (7! \times 2 - 1) \times 7. & 79488 &:= (7! - \sqrt{9} \times 4!) \times (8 + 8) &= (8 + 8) \times (-4! \times \sqrt{9} + 7!). \\
 71568 &:= 71 \times (5! + 6) \times 8 &= 8 \times (6 + 5!) \times \sqrt{1 + 7!}. & 79565 &:= 7! - ((\sqrt{9})!! - 5^6) \times 5 &= 5 \times (-6! + 5^{(\sqrt{9})!}) + 7!. \\
 71993 &:= -7 + (1 + 99) \times 3!! &= 3!! \times (9 + 91) - 7. & 79853 &:= (7 - (\sqrt{9})!!) \times (8 - 5!) - 3 &= -3 + (5! - 8) \times ((\sqrt{9})!! - 7). \\
 72035 &:= (7 + 20 \times 3!!) \times 5 &= 5 \times ((3! - 0!)!^2 + 7). & 79854 &:= (7 - (\sqrt{9})!!) \times (8 - 5!) - \sqrt{4} &= -\sqrt{4} + (5! - 8) \times ((\sqrt{9})!! - 7). \\
 72549 &:= (7 + 2)! / 5 - 4! - \sqrt{9} &= (\sqrt{\sqrt{9^4}}) / 5 - 27. & 79859 &:= (7 - (\sqrt{9})!!) \times (8 - 5!) + \sqrt{9} &= \sqrt{9} + (5! - 8) \times ((\sqrt{9})!! - 7). \\
 72576 &:= (7 + 2)! / 5 \times (7 - 6) &= (\sqrt{6 + 75})! / (-2 + 7). & 79913 &:= -7 + (-9 + ((\sqrt{9})! - 1)!) \times 3!! &= ((3! - 1)! - 9) \times (\sqrt{9})!! - 7. \\
 72585 &:= (7 + 2) \times (5 + 8!) / 5 &= (5 + 8!) / 5 \times (2 + 7). & 79927 &:= 7 + (\sqrt{9})!! \times (-9 + (-2 + 7)!) &= ((7 - 2)! - 9) \times (\sqrt{9})!! + 7. \\
 73079 &:= -7! + (3! - 0!)^2 - (\sqrt{9})! &= -(\sqrt{9})! - 7! + (-0! + 3!)^2. & 80352 &:= (8! - (0 + 3)!! / 5) \times 2 &= 2 \times (-5! - (3 + 0)!) + 8!. \\
 73085 &:= -7! + (3! - 0!)^8 / 5 &= 5^{8-(0/3)!} - 7!. & 80394 &:= (8! - (-0! + 3)!) - \sqrt{(9)} \times \sqrt{4} &= \sqrt{4} \times 8! - (3 - 0!)^8. \\
 73389 &:= (7! - 3 - 3!!) \times (8 + 9) &= -(9 + 8) \times (3!! + 3 - 7!). & 80399 &:= -8! - 0! + (-3!! + 9!) / \sqrt{9} &= (9! - (\sqrt{9})!!) / 3 - 0! - 8!. \\
 73433 &:= -7 + 34 \times 3 \times 3!! &= 3!! \times 34 \times 3 - 7. & 80402 &:= (8! + 0! - (4 + 0)!) \times 2 &= 2 \times (0! - (4 + 0)!) + 8!. \\
 73435 &:= -5 + 3! \times (4! \times 3!! - 7!) &= (-7! + 3!! \times 4!) \times 3! - 5. & 80424 &:= 4! + 2 \times (-4 + 0!) + 8! &= (8! - (0! + 4)!) \times 2 + 4!. \\
 73464 &:= (-7! + 3!! \times 4!) \times 6 + 4! &= 4! + 6 \times (4! \times 3!! - 7!). & 80448 &:= (8! / (0 + 4) - 4!) \times 8 &= (8! / 4 - 4!) \times (0 + 8). \\
 73474 &:= (7! - 3!! + \sqrt{4}) \times (-7 + 4!) &= (4! - 7) \times (\sqrt{4} - 3!! + 7!). & 80474 &:= (8! + 0!) \times \sqrt{4} - 7 \times 4! &= -4! \times 7 + \sqrt{4} \times (0! + 8!). \\
 73745 &:= 7^3 \times (7! / 4! + 5) &= (-5 + (-4 + 6!) \times 3!!) / 7. & 80479 &:= (-8! + 0! - 4!) \times 7 + 9! &= 9! - 7 \times (4! - 0! + 8!). \\
 73975 &:= (7 \times 3!)^{\sqrt{9}} + 7 - 5! &= -5! + (7 \times (\sqrt{9})!)^3 + 7. & 80494 &:= (8! - 0! - 4! \times \sqrt{9}) \times \sqrt{4} &= \sqrt{4} \times (-\sqrt{9} \times 4! - 0! + 8!). \\
 74064 &:= 7! + 4 \times (-0! + 6!) \times 4! &= 4 \times (6! - 0!) \times 4! + 7!. & 80497 &:= -8! + 0! + 4! \times (-\sqrt{9})! + 7! &= (7! - (\sqrt{9})!) \times 4! + 0! - 8!.
 \end{aligned}$$

$$\begin{aligned}
80518 &:= 8! - 0! - 5! - 1 + 8! &= 8! - 1 - 5! - 0! + 8!. \\
80519 &:= 8! - 0! - 5! + (-1 + 9)! &= (9 - 1)! - 5! - 0! + 8!. \\
80528 &:= 8 + 0 - 5! + 2 \times 8! &= 8! \times 2 - 5! + 0 + 8. \\
80534 &:= (8! + 0 - 53) \times \sqrt{4} &= \sqrt{4} \times (-3 - 50 + 8!). \\
80572 &:= (8! + 0! - 5 \times 7) \times 2 &= 2 \times (-7 \times 5 + 0! + 8!). \\
80584 &:= -8 + \sqrt{-0! + 5} \times (8! - 4!) &= \sqrt{4} \times (8! - (5 - 0!))! - 8. \\
80592 &:= (8! - (0 - 5 + 9)! ) \times 2 &= 2 \times (-9 - 5)! + (0 + 8)!). \\
80594 &:= (8! + 0! - (-5 + 9)! ) \times \sqrt{4} &= \sqrt{4} \times (-9 - 5)! + 0! + 8!). \\
80595 &:= 8! \times \sqrt{-0! + 5} - 9 \times 5 &= -5 \times 9 + \sqrt{5 - 0!} \times 8!. \\
80622 &:= (8! - 0! - 6 - 2) \times 2 &= 2 \times ((2 + 6)! - 0! - 8). \\
80623 &:= (8! - 0! - 6) \times 2 - 3 &= -3 + 2 \times (-6 - 0! + 8!). \\
80624 &:= (8! + 0 - 6) \times 2 - 4 &= -4 + 2 \times (-6 + 0 + 8!). \\
80625 &:= (8! + 0! - 6) \times 2 - 5 &= -5 + 2 \times (-6 + 0! + 8!). \\
80626 &:= (8! - 0! - 6) \times \sqrt{-2 + 6} &= \sqrt{(6 - 2)} \times (-6 - 0! + 8!). \\
80628 &:= 8! + 0 - 6 \times 2 + 8! &= 8! - 2 \times 6 - 0 + 8!. \\
80629 &:= (8! - (0/6)! ) \times 2 - 9 &= \sqrt{9} + 2 \times (-6 - 0! + 8!). \\
80632 &:= (8! - 0! - 6 + 3) \times 2 &= 2 \times (3 + 6 - 0!)! - 8. \\
80634 &:= (8! + 0 - 6 + 3) \times \sqrt{4} &= \sqrt{4} \times (3 - 6 + 0 + 8!). \\
80635 &:= (5 + 3)! - 6 + 0! + 8! &= 8! \times (0 + 6/3) - 5. \\
80638 &:= 8! + 0 - 6/3 + 8! &= 8! + 3 - 6 + 0! + 8!. \\
80639 &:= (8! \times (0 + 6) - 3)/\sqrt{9} &= 9!/(3 + 6) - 0! + 8!. \\
80652 &:= (8! + (0/6)! + 5) \times 2 &= 2 \times (5 + (6 \times 0)! + 8!). \\
80662 &:= (8! - 0! + 6 + 6) \times 2 &= 2 \times (6 + 6 - 0! + 8!). \\
80664 &:= (8! - 0 + 6 + 6) \times \sqrt{4} &= \sqrt{4} \times (6!/60 + 8!). \\
80682 &:= (8 - 0!) \times 6 + (8! \times 2) &= 2 \times 8! + 6 \times (-0! + 8). \\
80688 &:= 8! + 8 \times 6 + 0 + 8! &= 8 \times (0 + 6) + (8! + 8!). \\
80692 &:= (8! - 0! + \sqrt{6! + 9}) \times 2 &= 2 \times \left( \sqrt{\sqrt{9^6} - 0! + 8!} \right). \\
80694 &:= (8! + \sqrt{(0 + 6)! + 9}) \times \sqrt{4} &= \sqrt{4} \times \left( \sqrt{\sqrt{9^6} + (0 + 8)!} \right). \\
80755 &:= 8! + (0! + 7)! + 5! - 5 &= 5! - 5 + (7 + 0!)! + 8!. \\
80782 &:= (\sqrt{(8 \times 0)! + 7! + 8!}) \times 2 &= 2 \times (8! + \sqrt{7! + (0/8)!}). \\
80784 &:= 8 \times (0! + 7! + 8) \times \sqrt{4} &= \sqrt{4} \times (8 + 7! + 0!) \times 8. \\
80792 &:= (2 \times (9 + 7!) + 0!) \times 8 &= 8 \times (0! + (7! + 9) \times 2). \\
80794 &:= (8! + \sqrt{0! + 7!} + (\sqrt{9!})) \times \sqrt{4} &= \sqrt{4} \times ((\sqrt{9!})! + \sqrt{7! + 0!} + 8!). \\
80802 &:= (8! + 0! + 80) \times 2 &= 2 \times (0! + 80 + 8!). \\
80824 &:= (80 + 8!) \times 2 + 4! &= 4! + 2 \times (80 + 8!). \\
81346 &:= (8! - 1 - 3!) \times \sqrt{4} + 6! &= 6! + \sqrt{4} \times (-3! - 1 + 8!). \\
81355 &:= -(8 - 1)! + 3!! \times 5! - 5 &= -5 + 5! \times 3!! - (-1 + 8)!). \\
81357 &:= -\sqrt{\sqrt{81} + 3!!} \times (5! - 7) &= (-7 + 5!) \times 3!! - \sqrt{1 + 8}. \\
81359 &:= 8! - 1 + 3!! + (5 + \sqrt{9})! &= (\sqrt{9} + 5)! + 3!! - 1 + 8!. \\
81384 &:= 8! + 1 \times 3!! + 8! + 4! &= 4! + 8! + 3!! + 1 \times 8!. \\
81936 &:= 8! - (1 + (\sqrt{9})!) + 3!^6 &= 6^{3!} - ((\sqrt{9})! + 1)! + 8!. \\
81937 &:= 8! + 1 + (\sqrt{9})!^{3!} - 7! &= -7! + 3!^{(\sqrt{9})!} + 1 + 8!. \\
82082 &:= ((8 - 2)! + 0! + 8!) \times 2 &= 2 \times (8! + 0! + (-2 + 8)!). \\
82084 &:= (8! + 2 + (\sqrt{0! + 8})!) \times \sqrt{4} &= \sqrt{4} \times ((\sqrt{8 + 0!})! + 2 + 8!). \\
82086 &:= 8 + 2 \times (-0! + 8! + 6!) &= (6! + (8! - 0!)) \times 2 + 8. \\
82088 &:= 8 + 2 \times ((\sqrt{0! + 8})! + 8!) &= (8! + (\sqrt{8 + 0!})!) \times 2 + 8. \\
82092 &:= (8! + (2 + 0!)! + (\sqrt{9})!) \times 2 &= 2 \times ((\sqrt{9})! + (0! + 2)! + 8!). \\
82284 &:= (822 + 8!) \times \sqrt{4} &= \sqrt{4} \times (822 + 8!). \\
82368 &:= 8! \times 2 + \sqrt{3!^6} \times 8 &= 8 \times 6^3 + 2 \times 8!. \\
82793 &:= 8! \times 2 - 7 + \sqrt{9} \times 3!! &= 3 \times (\sqrt{9})! - 7 + 2 \times 8!. \\
82942 &:= 8^2 \times (\sqrt{9})!^4 - 2 &= -2 + 4!^{\sqrt{9}} \times (-2 + 8). \\
82944 &:= 8/2 \times (\sqrt{9} \times 4)^4 &= 4^4 \times 9 + 2 \times 8!. \\
82952 &:= 8 + (2 \times (\sqrt{9})! / 5)^2 &= (2^5 \times 9)^2 + 8. \\
83157 &:= -8 + (3! + 1)! + 5^7 &= 7! + 5^{1+3!} - 8. \\
83232 &:= 2 \times (\sqrt{3!^{(2^3)}} + 8!) &= (8! + \sqrt{3!^{(2^3)}}) \times 2. \\
83304 &:= (8 - 3!!) \times (3 - (0! + 4)!) &= ((4 + 0!)! - 3) \times (3! - 8). \\
83424 &:= (8! + (3!! - 4!) \times 2) \times \sqrt{4} &= (\sqrt{4}) \times (2 \times (-4! + 3!!) + 8!). \\
83488 &:= (-8 + 3!!) \times 4 + 8! + 8! &= 8! + 8! + 4 \times (3! - 8). \\
83534 &:= (-4! + 3!!) \times 5! + 3! + 8 &= 8 + 3! + 5! \times (3! - 4!). \\
83544 &:= 8! + 3 \times 5!^{\sqrt{4}} + 4! &= 4! + (-4 + 5!) \times (\sqrt{\sqrt{\sqrt{3^8}}})!. \\
84952 &:= -8 + (\sqrt{4 \times 9})! \times (5! - 2) &= (-2 + 5!) \times (\sqrt{9 \times 4})! - 8. \\
84954 &:= -8 + \sqrt{4} + (\sqrt{9})! \times (5! - \sqrt{4}) &= (-\sqrt{4} + 5!) \times (\sqrt{9})! + \sqrt{4} - 8. \\
84955 &:= (-8 - 4 + (\sqrt{9})!) \times 5! + 5 &= -5 + 5! \times ((\sqrt{9})! - 4 - 8). \\
84996 &:= 8! \times \sqrt{4} + (\sqrt{9})! \times ((\sqrt{9})! + 6!) &= 6 \times ((\sqrt{9})! + (\sqrt{9})!) + \sqrt{4} \times 8!. \\
85437 &:= (8! - 5!) \times \sqrt{4} - 3 + 7! &= 7! - 3 + \sqrt{4} \times (-5! + 8!). \\
85448 &:= 8 + 5! \times ((4 + \sqrt{4})! - 8) &= (-8 + (4 + \sqrt{4})!) \times 5! + 8. \\
85456 &:= 8 \times (-5! + \sqrt{4}) + 5! \times 6! &= 6! \times 5! + (\sqrt{4} - 5!) \times 8. \\
85568 &:= 8 + 5! + 5! \times (6! - 8) &= (-8 + 6!) \times 5! + 5! + 8. \\
85573 &:= 8 + 5 + 5! \times (-7 + 3!!) &= (3! - 7) \times 5! + 5 + 8. \\
85664 &:= 8 + 5! \times (6! - 6) - 4! &= -4! + (6! - 6) \times 5! + 8. \\
85666 &:= -8 + 5! \times (6! - 6) - 6 &= -6 + (6! - 6) \times 5! - 8. \\
85669 &:= -8 + 5! \times (6! - 6) - \sqrt{9} &= -\sqrt{9} + (6! - 6) \times 5! - 8. \\
85672 &:= -8 + 5! \times (6! - (\sqrt{7 + 2})!) &= ((\sqrt{2 + 7})! - 6) \times 5! - 8. \\
85675 &:= (-8 + 5!) \times 6! + 7! - 5 &= -5 + 7! + 6! \times (5! - 8). \\
85679 &:= 8! + 5 - 6 + 7! \times 9 &= 9 \times 7! - 6 + 5 + 8!. \\
85705 &:= -8! + 5 \times (7! + 0!) \times 5 &= 5 \times (0! + 7!) \times 5 - 8!. \\
85739 &:= 8! + 5 + (7! + 3!) \times 9 &= 9 \times (3! + 7!) + 5 + 8!. \\
85792 &:= -8 + 5! \times (-7 + (\sqrt{9})! + 2) &= (2 + (\sqrt{9})! - 7) \times 5! - 8. \\
85795 &:= 8! + 5! + 7! \times 9 - 5 &= 5! + 9 \times 7! - 5 + 8!. \\
85928 &:= 8 + 5! \times ((\sqrt{9})! - \sqrt{2 \times 8}) &= (-8/2 + (\sqrt{9})!) \times 5! + 8. \\
86151 &:= (-8 + 6!) \times (1 + 5!) - 1 &= -1 + (5! + 1) \times (6! - 8). \\
86152 &:= (-8 + 6!) \times (-1 + 5! + 2) &= ((\sqrt{25})! + 1) \times (6! - 8). \\
86154 &:= (-8 + 6!) \times (1 + 5!) + \sqrt{4} &= \sqrt{4} + (5! + 1) \times (6! - 8). \\
86256 &:= 8! - 6! + (-2 + 5)!^6 &= 6^{(5-2)!} - 6! + 8!. \\
86351 &:= -8 \times 6 + 3!! \times 5! - 1 &= -1 + 5! \times 3!! - 6 \times 8. \\
86352 &:= -8 \times 6 + 3! \times 5!^2 &= (\sqrt{25})! \times 3!! - 6 \times 8. \\
86354 &:= -8 \times 6 + 3!! \times 5! + \sqrt{4} &= \sqrt{4} + 5! \times 3!! - 6 \times 8. \\
86356 &:= -8 - 6 \times 3! + 5! \times 6! &= 6! \times 5! - 36 - 8. \\
86384 &:= 8 + 6! \times (-3 + 8)! - 4! &= -4! + (8 - 3!) \times 6! + 8. \\
86386 &:= -8 + 6! \times (-3 + 8)! - 6 &= 6! \times (8 - 3!) - 6 - 8. \\
86389 &:= -8 + 6! \times (-3 + 8)! - \sqrt{9} &= -\sqrt{9} + (8 - 3!) \times 6! - 8. \\
86391 &:= -8 + 6!/3! \times (\sqrt{9})! - 1 &= -1 + (\sqrt{9})!/3! \times 6! - 8. \\
86392 &:= -8 + 6! \times (\sqrt{(3 \times 9 - 2)!}) &= (2 + 9/3)! \times 6! - 8. \\
86393 &:= -8 + (6 + 3!! \times (\sqrt{9})!)/3! &= (3! + (\sqrt{9})! \times 3!)/6 - 8. \\
86394 &:= -8 + 6!/3! \times (\sqrt{9})! + \sqrt{4} &= 4^{\sqrt{9}} \times 3!! - 6 + 8!. \\
86395 &:= 8 \times 6! \times (3! + 9) - 5 &= -5 + (9 + 3!) \times 6! \times 8. \\
86397 &:= 8! + 6! - 3 + 9 \times 7! &= 7! \times 9 + (-3 + 6!) + 8!. \\
86398 &:= -8 + 6 + 3!! \times (-\sqrt{9} + 8)! &= (8 - \sqrt{9})! \times 3!! + 6 - 8. \\
86399 &:= 8 + 6!/3! \times (\sqrt{9})! - 9 &= -9 + (\sqrt{9})!/3! \times 6! + 8.
\end{aligned}$$





$$\begin{aligned}
94032 &:= (\sqrt{9})!! + (4 - 0!)^{3!} \times 2 &= 2 \times 3!(0! + \sqrt{4})! + (\sqrt{9})!! \\
94464 &:= \left( (\sqrt{9})!! - \sqrt{\sqrt{4^{4!}}} \right) \times 6 \times 4! = \sqrt{4} \times (\sqrt{64})! + 4!^{\sqrt{9}} \\
94944 &:= ((9 + 4!) \times (\sqrt{9})!! - 4!) \times 4 &= 4 \times (-4! + (9 + 4!) \times (\sqrt{9})!!) \\
94976 &:= 9! - 4^9 - 7! - 6! &= -6! - 7! + 9! - 4^9 \\
95237 &:= (9 + 5! + 2) \times (3!! + 7) &= (7 + 3!!) \times (2 + 5! + 9) \\
95368 &:= ((\sqrt{9})! + 5^3) \times (6! + 8) &= (8 + 6!) \times (3! + 5^{\sqrt{9}}) \\
95494 &:= (9 + 5! + 4) \times ((\sqrt{9})!! - \sqrt{4}) &= (-\sqrt{4} + (\sqrt{9})!!) \times (4 + 5! + 9) \\
95499 &:= (9 + 5! + \sqrt{4}) \times 9^{\sqrt{9}} &= 9^{\sqrt{9}} \times (\sqrt{4} + 5! + 9) \\
95532 &:= (-\sqrt{9})! + 5! \times (5! + 3!! - 2) &= (-2 + 3!! + 5!) \times (5! - (\sqrt{9})!) \\
95745 &:= -\sqrt{9} \times 5 + 7! \times (4! - 5) &= (-5 + 4!) \times 7! - 5 \times \sqrt{9} \\
95755 &:= 95 \times 7!/5 - 5 &= -5 + 5! \times 7 \times (5! - (\sqrt{9})!) \\
95757 &:= -\sqrt{9} + 5! \times 7 \times 5! - 7! &= -7! + 5! \times 7 \times 5! - \sqrt{9} \\
95784 &:= ((\sqrt{9})! + 5) \times 7! + 8! + 4! &= 4! + 8! + 7! \times (5 + (\sqrt{9})!) \\
95976 &:= (9 + 5!) \times ((\sqrt{9} + 7)!) + 6! &= (6! + (\sqrt{7 + 9})!) \times (5! + 9) \\
96558 &:= ((\sqrt{9})! + 6!) \times (5! + 5 + 8) &= (8 + 5 + 5!) \times (6 + (\sqrt{9})!) \\
96768 &:= ((\sqrt{9})! + 6!)/(7! - 6!/8) &= \sqrt{8^6} \times 7 \times \sqrt{6! + 9} \\
96957 &:= \sqrt{9^6} \times ((\sqrt{9})! + 5! + 7) &= (7 + 5! + (\sqrt{9})!) \times (6! + 9) \\
96984 &:= -9!/6 + \sqrt{9^8} \times 4! &= 4! \times (8 \times 9!/6! + 9) \\
97209 &:= ((\sqrt{9})!! + 7! \times 2 + 0!) \times 9 &= ((\sqrt{9})!! + 0! + 2 \times 7!) \times 9 \\
97464 &:= ((\sqrt{9})!! + 7 \times \sqrt{4!^6}) - 4! &= 4^6 \times 4! - 7!/(\sqrt{9})! \\
97632 &:= -(\sqrt{9})!! + 7! + 6^{3!} \times 2 &= 2 \times 3!^6 + 7! - (\sqrt{9})!! \\
97792 &:= 9 + 7^7 - 9! \times 2 &= -2 \times 9! + 7^7 + 9 \\
98297 &:= \sqrt{9} \times 8^{2 + \sqrt{9}} - 7 &= -7 + (\sqrt{9})! \times 2^{8 + (\sqrt{9})!} \\
98304 &:= 9 \times 8^{3!}/(0 + 4!) &= 4^{(0+3)!} \times 8 \times \sqrt{9} \\
98328 &:= \sqrt{9} \times (8^{3+2} + 8) &= (8^{2+3} + 8) \times \sqrt{9} \\
98415 &:= 9^{8-4} \times 15 &= 5 \times (-1 + 4)^8 \times \sqrt{9} \\
98424 &:= (\sqrt{9} + 8^4 + 2) \times 4! &= 4! \times (\sqrt{2^{4!}} + 8 - \sqrt{9}) \\
98503 &:= (9 + 8 + 5!) \times (-0! + 3!!) &= (3!! - 0!) \times (5! + 8 + 9) \\
99024 &:= (\sqrt{9})!! + (\sqrt{9} + 0!)! \times \sqrt{2^{4!}} &= 4! \times \sqrt{2^{(0! + \sqrt{9})!}} + (\sqrt{9})!! \\
99354 &:= -(\sqrt{9})! + (\sqrt{9})!! \times (-3! + 5! + 4!) &= (4! + 5! - 3!) \times (\sqrt{9})! - (\sqrt{9})! \\
99355 &:= (\sqrt{9})!! \times (\sqrt{9} \times 3! + 5!) - 5 &= -5 + (5! + 3 \times (\sqrt{9})!) \times (\sqrt{9})! \\
99369 &:= (9! + 9^{\sqrt{36}})/9 &= (9^{6-3})! + 9!/9 \\
99408 &:= (\sqrt{9})! \times ((\sqrt{9})!! \times (4! - 0!) + 8) &= (8 + (-0! + 4!) \times (\sqrt{9})!) \times (\sqrt{9})! \\
99495 &:= (\sqrt{9^9} + 4! \times 9) \times 5 &= 5 \times (9 \times 4! + \sqrt{9^9}) \\
99648 &:= \sqrt{(9 + 9)^6} \times 4! - 8! &= -8! + 4! \times (6 \times \sqrt{9})^{\sqrt{9}} \\
99792 &:= 99 \times 7!/( \sqrt{9} + 2) &= 2 \times 9 \times (7! + 9!)/(\sqrt{9})!
\end{aligned}$$

## 5.2. Selfie representations in order of digits

$$\begin{aligned}
120 &:= ((1 + 2)! - 0!)! \\
127 &:= -1 + 2^7 \\
240 &:= 2 \times (4 + 0!)! \\
360 &:= 3! \times 60 \\
384 &:= 3! \times \sqrt{8^4} \\
660 &:= 6! - 60 \\
736 &:= 7 + 3^6 \\
799 &:= 79 + (\sqrt{9})!! \\
1285 &:= (1 + 2^8) \times 5 \\
1288 &:= \sqrt{(1 + 2)!^8} - 8 \\
1294 &:= -1 \times 2 + (\sqrt{9})!^4 \\
1298 &:= 1 \times 2 + \sqrt{(\sqrt{9})!^8} \\
1673 &:= -1 - 6 + 7!/3 \\
1679 &:= 1 + (-6 + 7!)/\sqrt{9} \\
1680 &:= (1 + 6)!/\sqrt{8 + 0!} \\
1684 &:= \sqrt{16} + 8!/4! \\
1764 &:= 1 \times (7 \times 6)^{\sqrt{4}} \\
1944 &:= 1 \times \sqrt{9^4} \times 4! \\
2139 &:= -21 + 3 \times (\sqrt{9})!! \\
2187 &:= (2 + 1^8)^7 \\
2378 &:= -23 + \sqrt{7^8} \\
2472 &:= -2 \times 4! + 7!/2 \\
2496 &:= (2 + 4!) \times 96 \\
2502 &:= 2 + 50^2 \\
2592 &:= 2^5 \times 9^2 \\
2737 &:= (2 \times 7)^3 - 7 \\
2744 &:= \sqrt{(2 \times 7)^{4 + \sqrt{4}}} \\
2746 &:= 2 + \sqrt{(7 \times \sqrt{4})^6} \\
2880 &:= \sqrt{2 \times 8} \times (\sqrt{8 + 0!})!! \\
2995 &:= -29 + 9!/5! \\
3249 &:= (3!! + 2)/\sqrt{4} \times 9 \\
3454 &:= 3!! \times 4!/5 - \sqrt{4} \\
3528 &:= (3! + 5!) \times 28 \\
3550 &:= 3!! \times 5 - 50 \\
3564 &:= 3!! \times 5 - \sqrt{6^4} \\
3565 &:= -35 + 6! \times 5 \\
3590 &:= 3!! \times 5 - 9 - 0! \\
3630 &:= (3! + 6!) \times (3! - 0!) \\
3645 &:= 3(\sqrt{\sqrt{6^3}}) \times 5 \\
3685 &:= (3^6 + 8) \times 5 \\
3738 &:= -3! + 7! - \sqrt{3!^8} \\
3774 &:= -3! + 7! - 7!/4 \\
3844 &:= \sqrt{(38 + 4!)^4} \\
3960 &:= 3! \times ((\sqrt{9})!! - 60) \\
3972 &:= 3 + (9 \times 7)^2 \\
4320 &:= \sqrt{4} \times 3!! \times (2 + 0!) \\
4330 &:= 4 + 3! \times (3!! + 0!) \\
4331 &:= (\sqrt{4} + 3!!) \times 3! - 1 \\
4363 &:= 43 + 6 \times 3!! \\
4372 &:= \sqrt{4} \times 3^7 - 2 \\
4374 &:= 4 \times 3^7/\sqrt{4} \\
4480 &:= (4 + 4)!/(8 + 0!) \\
4560 &:= -4 \times 5! + (6 + 0!)! \\
4608 &:= \sqrt{4!^6}/(0! + 8) \\
4795 &:= -\sqrt{4} + 7! - \sqrt{9^5} \\
4913 &:= (\sqrt{4} \times 9 - 1)^3 \\
4970 &:= (\sqrt{49})! - 70 \\
4973 &:= -4^{\sqrt{9}} + 7! - 3 \\
4974 &:= -4^{\sqrt{9}} + 7! - \sqrt{4} \\
4976 &:= -4^{\sqrt{9}} + 7 \times 6! \\
4979 &:= -4^{\sqrt{9}} + 7! + \sqrt{9} \\
4991 &:= -49 + ((\sqrt{9})! + 1)! \\
4997 &:= -49 + (\sqrt{9})! + 7! \\
5090 &:= 50 + ((\sqrt{9})! + 0!)! \\
5177 &:= 5! + 17 + 7! \\
5280 &:= 5! \times 2 + (8 - 0!)! \\
5836 &:= -6! + 3^8 - 5 \\
5864 &:= 5! + 8 \times (6! - \sqrt{4}) \\
6394 &:= -6 + (3!!/9)^{\sqrt{4}} \\
6455 &:= (6^4 - 5) \times 5 \\
6475 &:= 6! \times (\sqrt{4} + 7) - 5 \\
6480 &:= 6!^{\sqrt{4}}/80 \\
6495 &:= (6^4 + \sqrt{9}) \times 5 \\
6498 &:= (6! + \sqrt{4}) \times 9!/8! \\
6552 &:= (6 + 5!) \times 52 \\
6840 &:= (6! + 8!)/(4 - 0!)! \\
7985 &:= -79 + 8!/5 \\
8062 &:= 8!/(-0! + 6) - 2 \\
8064 &:= 8!/((0/6)! + 4) \\
8065 &:= (8! - 0! + 6)/5 \\
8397 &:= 8!/3 - \sqrt{9} - 7! \\
8405 &:= (8!/4! + 0!) \times 5 \\
8644 &:= (8 + 6! \times 4!)/\sqrt{4} \\
8974 &:= (8!/9 + 7) \times \sqrt{4} \\
9360 &:= (\sqrt{9})!! \times (3! + 6 + 0!) \\
9576 &:= ((\sqrt{9})! + 5!) \times 76 \\
9648 &:= -(\sqrt{9})!! + 6^4 \times 8 \\
9894 &:= -(\sqrt{9})! + (8! - (\sqrt{9})!)/4
\end{aligned}$$

$$\begin{aligned}
10000 &:= 100^{0!+0!}. \\
10024 &:= 100^2 + 4!. \\
10072 &:= -10 + (0! + 7!) \times 2. \\
10078 &:= (1 + 0!) \times \left( -0! + \left( \sqrt{\sqrt{\sqrt{78}}} \right)! \right). \\
10729 &:= 107^2 - (\sqrt{9})!. \\
10785 &:= (10! - 7!)/(8!/5!). \\
10815 &:= (1 + (\sqrt{0! + 8})!) \times 15. \\
10944 &:= (10 + 9) \times 4! \times 4!. \\
11264 &:= 11 \times 2^{6+4}. \\
11349 &:= (1 + (1 + 3!)/4) \times 9. \\
11495 &:= \sqrt{11^4} \times 95. \\
11520 &:= (1 + 15) \times (2 + 0!)!. \\
12096 &:= (1 + 2 + 0!)! \times 9!/6!. \\
12240 &:= (1 + 2)!! \times (2^4 + 0!). \\
12850 &:= (1 + 2^8) \times 50. \\
12955 &:= 12 \times 9 \times 5! - 5. \\
12999 &:= (1 + (2 + (\sqrt{9})!)) \times (\sqrt{9})! \times \sqrt{9}. \\
13440 &:= (1 + 3 + 4)!/(4 - 0!). \\
13441 &:= 1 + (3! + \sqrt{4})!/(4 - 1). \\
13443 &:= 1 \times 3 + (4 + 4)!/3. \\
13448 &:= (1 + (3! + \sqrt{4})!)/4! \times 8. \\
13449 &:= 1 + ((3! + \sqrt{4})! + 4!)/\sqrt{9}. \\
13452 &:= -1 - 3 + (-4 + 5!)^2. \\
13489 &:= 1 + (3! \times 4! + 8!)/\sqrt{9}. \\
13560 &:= (-1 + 3!)! \times (5! - 6 - 0!). \\
13577 &:= (-1 + (\sqrt{3!!/5})!/7!)/7. \\
13583 &:= -1 + 3!!/5 + 8!/3. \\
13680 &:= (13 + 6) \times (\sqrt{8 + 0!})!. \\
13683 &:= 1 \times (3^6 + 8!)/3. \\
13695 &:= \sqrt{(1 + 3)!^6 - 9 - 5!}. \\
13817 &:= (1 + 3)!^{\sqrt{81}} - 7. \\
13826 &:= -1 + 3 + \sqrt{(8/2)!^6}. \\
13843 &:= 1 + 3^8 \times \sqrt{4 + 3!}. \\
13849 &:= 1 + 3 \times 8 + 4!^{\sqrt{9}}. \\
13920 &:= -(1 + 3)! + (\sqrt{9})!! \times 20. \\
13943 &:= -1 + 3!!/(\sqrt{9})! + 4!^3. \\
13949 &:= (-1 + 3!)^{\sqrt{9}} + 4!^{\sqrt{9}}. \\
14320 &:= -1 \times (4 - 3!!) \times 20. \\
14390 &:= (-1 + \sqrt{4} \times 3!!) \times (9 + 0!). \\
14394 &:= -(-1 + 4)! - 3!! + 9!/4!. \\
14549 &:= (-1 + 4)!! + 5 + 4!^{\sqrt{9}}. \\
14640 &:= (1 + 4 + 6)^4 - 0!. \\
14665 &:= 1 + \sqrt{4!^6} + 6! + 5!. \\
14689 &:= 1 + 4! \times 68 \times 9. \\
14739 &:= 1 \times (4! - 7)^3 \times \sqrt{9}. \\
14760 &:= (-1 + 4) \times (7! - (6 - 0!)!). \\
14784 &:= (-14 + 7!/8) \times 4!. \\
14884 &:= \sqrt{\left( (1 + 4)! + \sqrt{\sqrt{8 + 8}} \right)^4}. \\
14906 &:= (1 + 4)^{(\sqrt{9})!} + 0! - 6!. \\
15120 &:= (1 + 5)! \times (1 + 20). \\
15121 &:= 1 + (5 + 1)! \times 21. \\
15123 &:= (1 + (-5 + 12)!) \times 3. \\
15125 &:= (1 + 5!) \times 125. \\
15424 &:= (1 + 5! \times \sqrt{4}) \times \sqrt{\sqrt{2^4!}}. \\
15504 &:= -1 - 5! + 5^{(0!+\sqrt{4})!}. \\
15506 &:= 1 - 5! + 5^{0+6}. \\
15544 &:= ((1 + 5)^5 - 4) \times \sqrt{4}. \\
15546 &:= (1 + 5)^5 \times \sqrt{4 - 6}. \\
15549 &:= (1 + 5)^5 \times \sqrt{4 - \sqrt{9}}. \\
15612 &:= -1 + 5^6 - 12. \\
15613 &:= 1 + 5^6 - 13. \\
15615 &:= 1 + 5^6 - \sqrt{1 + 5!}. \\
15617 &:= 1 \times 5^6 - 1 - 7. \\
15618 &:= 1 \times 5^6 + 1 - 8. \\
15620 &:= 1 + 5^6 - (2 + 0!)!. \\
15621 &:= -1 + 5^6 - 2 - 1. \\
15622 &:= 1 + 5^6 - 2 - 2. \\
15626 &:= 1 + 5^{6^2/6}. \\
15628 &:= 1 + 5^6 + \sqrt{\sqrt{2} \times 8}. \\
15629 &:= -1 + 5^6 + 2 + \sqrt{9}. \\
15642 &:= 1 + 5^6 + 4^2. \\
15643 &:= 1 \times 5^6 + 4! - 3!. \\
15644 &:= -1 + 5^6 + 4! - 4. \\
15645 &:= 1 \times 5^6 + 4 \times 5. \\
15648 &:= -1 + 5^6 + (-4 + 8)!. \\
15650 &:= 1 + 5^6 + (5 - 0!)!. \\
15656 &:= 1 + 5^6 + 5 \times 6. \\
15662 &:= 1 + 5^6 + 6^2. \\
15667 &:= 1 \times 5^6 + 6 \times 7. \\
15674 &:= 1 \times 5^6 + \sqrt{7^4}. \\
15688 &:= -1 + 5^6 + 8 \times 8. \\
15697 &:= 1 \times 5^6 + 9!/7!. \\
15698 &:= 1 + 5^6 + 9 \times 8. \\
15746 &:= 1 + 5! + (7 - \sqrt{4})^6. \\
15753 &:= 1 + 5! + 7 + 5^{3!}. \\
15839 &:= -1 + (\sqrt{\sqrt{5^8} - 3}) \times (\sqrt{9})!. \\
15949 &:= -\sqrt{(1 + 5!)^{\sqrt{9}} + 4!} \times (\sqrt{9})!. \\
16224 &:= ((\sqrt{16})! + 2)^2 \times 4!. \\
16245 &:= (1 + 6!/2) \times 45. \\
16339 &:= (-1 + 6)^{3!} + 3!! - (\sqrt{9})!. \\
16343 &:= (-1 + 6)^{3!} - \sqrt{4} + 3!!. \\
16347 &:= -1 - 6 \times 3! + 4^7. \\
16349 &:= (-1 + 6)^{3!} + 4 + (\sqrt{9})!. \\
16382 &:= \sqrt{\sqrt{16^{3!+8}} - 2}. \\
16383 &:= -1 + (6/3)^{8+3!}. \\
16408 &:= (\sqrt{16})! + 4^{(-0!+8)}. \\
16447 &:= -1 + 64 + 4^7. \\
16704 &:= (\sqrt{16})! \times ((7 - 0!)! - 4!). \\
16783 &:= -(\sqrt{16})! + 7^{8-3}. \\
16791 &:= -16 + \sqrt{7^{9+1}}. \\
16795 &:= (-1 + 6 \times 7!/9) \times 5. \\
16799 &:= -1 + 6! \times 7!/(\sqrt{9})!^{\sqrt{9}}. \\
16805 &:= -\sqrt{\sqrt{16} + (8 - 0!)^5}. \\
16849 &:= 1 + \sqrt{6^8} \times (4 + 9). \\
16875 &:= 1 \times 68 + 7^5. \\
16885 &:= (1 - 6! + \sqrt{8^8}) \times 5. \\
17246 &:= -17 \times 2 + 4! \times 6!. \\
17263 &:= -17 + (-2 + 6)! \times 3!!. \\
17459 &:= 17 \times (4^5 + \sqrt{9}). \\
17472 &:= 1 \times 7 \times (-4! + 7!/2). \\
17489 &:= 17 + 4! \times (8 + (\sqrt{9})!). \\
17526 &:= 1 + 7^5 - 2 + 6!.
\end{aligned}$$

$$\begin{aligned}
17528 &:= 1 + 7^5 + (-2 + 8)!. \\
17529 &:= 1 \times 7^5 + 2 + (\sqrt{9})!!. \\
17533 &:= 1 \times 7^5 + 3! + 3!!. \\
17536 &:= 1 \times 7^5 + 3^6. \\
17584 &:= 1 \times 7! + (5! - 8)^{\sqrt{4}}. \\
17647 &:= (1 + 7!)/(6 - 4) \times 7. \\
17688 &:= (17 + 6!) \times (\sqrt{8 + 8})!. \\
17849 &:= -\sqrt{1 + 7!} + 8! \times 4/9. \\
17944 &:= (1 + 7)!/9 \times 4 + 4!. \\
17999 &:= -1 + (7 + 9 + 9) \times (\sqrt{9})!!. \\
18144 &:= (1 + 8)!/((1 + 4) \times 4). \\
18145 &:= 1 + (\sqrt{81})!/(4 \times 5). \\
18396 &:= (-1 + 8^3) \times (\sqrt{9})! \times 6. \\
18432 &:= 18 \times 4^{3+2}. \\
18433 &:= 1 + 8 \times 4!^3/3!. \\
18450 &:= 18 \times (4^5 + 0!). \\
18479 &:= -1 + (8! \times 4 + 7!)/9. \\
18793 &:= 1 + 87 \times (\sqrt{9})!^3. \\
19044 &:= 1 \times ((\sqrt{9})! \times (-0! + 4!))^{\sqrt{4}}. \\
19099 &:= (1 + 9!)/(0! + 9 + 9). \\
19437 &:= (-1 + (\sqrt{9})!)^{\sqrt{4}} - 3 + 7!. \\
19440 &:= 1 \times (\sqrt{9} + 4!) \times (4 - 0!)!!. \\
19453 &:= 19 \times 4^5 - 3. \\
19454 &:= 19 \times 4^5 - \sqrt{4}. \\
19456 &:= 19 \times \sqrt{\sqrt{45!^6}}. \\
19459 &:= 19 \times 4^5 + \sqrt{9}. \\
19539 &:= -1 \times (\sqrt{9})!!/5 + 3^9. \\
19628 &:= (-19 + 6!) \times 28. \\
19682 &:= -1 + \sqrt{\sqrt{96 \times (8-2)}}. \\
19739 &:= (-1 + 9) \times 7 + 3^9. \\
19792 &:= (1 + \sqrt{9}) \times (7! - 92). \\
19800 &:= 1 \times (-\sqrt{9})!! + 8!/(0! + 0!). \\
19801 &:= 1 + (-\sqrt{9})!! + 8!/(0! + 1). \\
19824 &:= 1 \times (-\sqrt{9})!! + 8!/2 + 4!. \\
20160 &:= 2^{0!+1} \times (6 + 0!)!. \\
20162 &:= 2 + (0! + 1 + 6)!/2. \\
20164 &:= ((2 \times 0)! + (1 + 6)!) \times 4. \\
20328 &:= ((2 + 0!)! + 3!) \times 28. \\
20465 &:= (-2 - 0! + 4^6) \times 5. \\
20667 &:= 2 + (-0! + 6)^6 + 7!. \\
20738 &:= 2 + \sqrt{(-0! + 7 + 3!)^8}. \\
20882 &:= 2 + (\sqrt{0! + 8})!! + 8!/2. \\
20884 &:= (2 + 0!)!! + (8 + 8!)/\sqrt{4}. \\
20909 &:= (20 + 9) \times (0! + (\sqrt{9})!!). \\
21184 &:= (2^{11} + 8!)/\sqrt{4}. \\
21579 &:= -21 + 5 \times (7! - (\sqrt{9})!!). \\
21594 &:= -(2 + 1)! + 5! \times (\sqrt{9})!!/4. \\
21598 &:= 2 \times (-1 + 5! \times (\sqrt{9})!!/8). \\
21630 &:= (2 - 1 + 6!) \times 30. \\
22316 &:= -2 - 2 + 31 \times 6!. \\
22319 &:= -2/2 + 31 \times (\sqrt{9})!!. \\
23024 &:= (2 \times 3!! - 0!) \times 2^4. \\
23024 &:= 4^2 \times (-0! + 3!! \times 2). \\
23040 &:= (2 + 30) \times (4 - 0!)!!. \\
23298 &:= 2 + 32 \times ((\sqrt{9})!! + 8). \\
23330 &:= 2 + 3!^3/(3 - 0!). \\
23332 &:= (2^3 + 3!^3)/2. \\
23335 &:= -2 + 3 \times (3 + 3!^5). \\
23342 &:= 2 + (3!^3 + 4!)/2. \\
23354 &:= 2 + 3 \times 3!^5 + 4!. \\
23465 &:= (2 + 3!!)/\sqrt{4} \times 65. \\
23595 &:= (-2 + 35) \times ((\sqrt{9})!! - 5). \\
23669 &:= \sqrt{(23 + 6)^6} - (\sqrt{9})!!. \\
23760 &:= -2 \times 3!! + 7! \times (6 - 0!). \\
23843 &:= 2 + 3^8 + 4! \times 3!!. \\
24328 &:= ((2 + 4!) \times 3!)^2 - 8. \\
24334 &:= (2 + (4! - 3))^3 \times \sqrt{4}. \\
24389 &:= (24 - 3 + 8)^{\sqrt{9}}. \\
24390 &:= (2 + 4! + 3)^{\sqrt{9}} + 0!. \\
24431 &:= (\sqrt{2^{4!}} - 4!) \times 3! - 1. \\
24432 &:= (\sqrt{2^{4!}} - 4!) \times 3 \times 2. \\
24434 &:= (\sqrt{2^{4!}} - 4!) \times 3! + \sqrt{4}. \\
24453 &:= \sqrt{\sqrt{2^{4!}} + (4! + 5)^3}. \\
24456 &:= (\sqrt{2^{4!}} - 4 \times 5) \times 6. \\
24504 &:= (-2 + 4^5 - 0!) \times 4!. \\
24528 &:= (-2 + 4^5) \times (\sqrt{2 \times 8})!. \\
24538 &:= (\sqrt{2^{4!}} - 5) \times 3! - 8. \\
24546 &:= (2 + 4) \times (-5 + 4^6). \\
24565 &:= \sqrt{(-2 + 4! - 5)^6} \times 5. \\
24568 &:= 2^{\sqrt{4!+5!}} \times 6 - 8. \\
24598 &:= (\sqrt{2^{4!}} + 5) \times (\sqrt{9})! - 8. \\
24606 &:= (\sqrt{2^{4!}} + 6 - 0!) \times 6. \\
24612 &:= (\sqrt{2^{4!}} + 6) \times (1 + 2)!. \\
24696 &:= \sqrt{2^{4!}} \times 6 + (\sqrt{9})!!/6. \\
24739 &:= 2^4 + 7! + 3^9. \\
24960 &:= (2 + 4!) \times 960. \\
25135 &:= ((2 + 5)! - 13) \times 5. \\
25137 &:= 2 + 5 \times (-13 + 7!). \\
25200 &:= (2 + 5)! \times ((2 + 0!)! - 0!). \\
25344 &:= ((2 + 5)! + 3!^4) \times 4. \\
25395 &:= ((2 + 5)! + 39) \times 5. \\
25397 &:= 2 + 5 \times (39 + 7!). \\
25668 &:= (-2 - 5 + 6!) \times \sqrt{\sqrt{6^8}}. \\
25790 &:= (-2 + 5! + 7!) \times ((\sqrt{9})! - 0!). \\
25893 &:= -3 \times 9 + 8! - 5!^2. \\
25914 &:= -(-2 + 5)! + 9!/14. \\
26364 &:= 26^3 \times 6/4. \\
26493 &:= (2 + 6)! - 4!^{\sqrt{9}} - 3. \\
26498 &:= 2 - (6 \times 4)^{\sqrt{9}} + 8!. \\
26499 &:= (2 + 6)! - 4!^{\sqrt{9}} + \sqrt{9}. \\
26638 &:= -(2 + 6!) + 6! \times 38. \\
26832 &:= (-(-2 + 6)! + 8!/3) \times 2. \\
26879 &:= (-2 + 6 \times 8! - 7!)/9. \\
26880 &:= ((2 + 6)! + 8!)/\sqrt{8 + 0!}. \\
26884 &:= 2 \times (6 + 8!) \times 8/4!. \\
26890 &:= 2 \times (6 + 8!/\sqrt{9} - 0!). \\
26891 &:= 2 \times (6 + 8!/\sqrt{9}) - 1. \\
26896 &:= 2 \times ((6 + 8!)/\sqrt{9} + 6). \\
26995 &:= (2 \times (6 + 9))^{\sqrt{9}} - 5. \\
26998 &:= -2 + (6 + 9)^{\sqrt{9}} \times 8. \\
27384 &:= (\sqrt{2 + 7})!! \times 38 + 4!. \\
27392 &:= 2^7 \times (3!^{\sqrt{9}} - 2). \\
27639 &:= 2^7 \times 6^3 - 9.
\end{aligned}$$

$$\begin{aligned}
27746 &:= 2 \times (7 \times 7 + \sqrt{4!^6}). \\
27837 &:= -2 - \sqrt{7^8} + 3! \times 7!. \\
28320 &:= 2 \times (8!/3 + (2 + 0!)!). \\
28438 &:= -2 + 8! - (4 \times 3)!/8!. \\
28544 &:= -2^8 + \sqrt{5!^4 \times 4}. \\
28563 &:= \sqrt{(3 \times 6 - 5)^8} + 2. \\
28576 &:= (2^8 + 5!) \times 76. \\
28640 &:= -(\sqrt{2 \times 8} - 6!) \times 40. \\
28671 &:= \sqrt{(2 \times 8)^6} \times 7 - 1. \\
28672 &:= \sqrt{(2 \times 8)^6} \times 7^2. \\
28674 &:= \sqrt{(2 \times 8)^6} \times 7 + \sqrt{4}. \\
28704 &:= (-2^8 + 7!) \times (0! + \sqrt{4})!. \\
28775 &:= (2 + 8!/7 - 7) \times 5. \\
28790 &:= (-2 + 8!/7) \times ((\sqrt{9})! - 0!). \\
29280 &:= 2 \times (\sqrt{(9 + 2)^8} - 0!). \\
29281 &:= 2 \times \sqrt{(9 + 2)^8} - 1. \\
29282 &:= 2 \times (9 + 2)^{8/2}. \\
29284 &:= 2 + \sqrt{(9 + 2)^8} \times 4. \\
29294 &:= 2 \times ((\sqrt{9})! + (2 + 9)^4). \\
29414 &:= (-2 + (\sqrt{9}!)) \times 41 - 4!. \\
29435 &:= \sqrt{29^4} \times 35. \\
29520 &:= ((-2 + 9!) - 5!) \times (2 + 0!)!. \\
29522 &:= 2 + (\sqrt{9}!)! + 5!^2 \times 2. \\
29524 &:= (2 \times 9^5 - 2)/4. \\
29526 &:= 2 \times (\sqrt{9} + 5!^2) + 6!. \\
29641 &:= -2 + (\sqrt{9} + 6!) \times 41. \\
29676 &:= (2 - 96 + 7!) \times 6. \\
29728 &:= -2^9 + 7! \times (-2 + 8). \\
29790 &:= ((-2 + (\sqrt{9}!)! + 7)^{\sqrt{9}} - 0!). \\
29952 &:= 2^{(\sqrt{9}!)} \times 9 \times 52. \\
29979 &:= -29 \times 9 + 7! \times (\sqrt{9})!. \\
30270 &:= 3! \times ((0! + 2)! + 7! - 0!). \\
30312 &:= 3! \times ((0! + 3!)! + 12). \\
30360 &:= (3! - 0!)! + 3! \times (6 + 0!)!. \\
30532 &:= -3!! + (0! + 5^3!) \times 2. \\
30624 &:= 3! \times ((0! + 6)! + \sqrt{\sqrt{2^4}}). \\
30672 &:= 3! \times ((0! + 6)! + 72). \\
30792 &:= 3! \times ((0 + 7)! + 92). \\
30984 &:= \left( -3! + 0! + \sqrt{(\sqrt{9})!^8} \right) \times 4!. \\
31104 &:= \sqrt{3!^{1 \times 10}} \times 4. \\
31253 &:= 3 + 1 \times 2 \times 5^3!. \\
31256 &:= 3! + 1 \times 2 \times 5^6. \\
31684 &:= (31 \times 6 - 8)^{\sqrt{4}}. \\
31974 &:= 3! \times (1 + 9!/7!)^{\sqrt{4}}. \\
32085 &:= -3!! + (2 + 0!)^8 \times 5. \\
32355 &:= 3^2 \times (3!! \times 5 - 5). \\
32400 &:= ((3 \times 2)!/4)^{0!+0!}. \\
32424 &:= ((3 \times 2)!/4)^2 + 4!. \\
32445 &:= (3!! + 2/\sqrt{4}) \times 45. \\
32490 &:= (3!! + 2/\sqrt{4}) \times 90. \\
32548 &:= -(3 \times 2)^5 + 4 + 8!. \\
32759 &:= (3 - 2 + 7)^5 - 9. \\
32760 &:= (-3!!/2 + 7!) \times (6 + 0!). \\
32765 &:= -3 + (2 \times 7 - 6)^5. \\
32772 &:= 3! \times (2 + 7!) + 7!/2. \\
32785 &:= (3 + 2 \times 7) + 8^5. \\
32804 &:= 3!^2 + 8^{0!+4}. \\
32848 &:= 3!! - 2 \times 8^4 + 8!. \\
32888 &:= (3 + 2)! + 8 \times \sqrt{8^8}. \\
32977 &:= (-329 + 7!) \times 7. \\
32985 &:= (3!^2 + \sqrt{9^8}) \times 5. \\
32989 &:= (-3 + 2 + 9!)/(8 + \sqrt{9}). \\
32992 &:= (32 + 9!)/(9 + 2). \\
32994 &:= (3!!/2 - 9) \times 94. \\
33124 &:= (3!!/(3 + 1) + 2)^{\sqrt{4}}. \\
33482 &:= 3!! - 3! + 4^8/2. \\
33485 &:= -3 + (3 \times \sqrt{4})! + 8^5. \\
33492 &:= 3 + (3!!/4 + \sqrt{9})^2. \\
33585 &:= (-3 + (3!! + 5!) \times 8) \times 5. \\
33741 &:= (-3!! + 3^7) \times (4! - 1). \\
33759 &:= -3 \times 3^7 + (5 + \sqrt{9})!. \\
33840 &:= 3!! \times 3! \times 8 - (4 \times 0)!. \\
33844 &:= 3!! + ((3!! + 8)/4)^{\sqrt{4}}. \\
33845 &:= 5 + 48 \times 3!! - 3!!. \\
33876 &:= 3! \times (3! + 8!/7) - 6!. \\
33885 &:= 3! - 3^8 + 8! + 5!. \\
34344 &:= (3 + 4!) \times (3!^4 - 4!). \\
34425 &:= 3^4 \times 425. \\
34440 &:= 3!! \times 4! \times \sqrt{4} - (4 + 0!)!. \\
34445 &:= (3^4 + \sqrt{4})^{\sqrt{4}} \times 5. \\
34480 &:= (3!! \times 4! \times \sqrt{4}) - 80. \\
34492 &:= (-34 + 4! \times (\sqrt{9}!)!) \times 2. \\
34550 &:= (3!! - 4! - 5) \times 50. \\
34632 &:= 3! \times (4 \times 6! + 3!) \times 2. \\
34650 &:= (-3 - 4! + 6!) \times 50. \\
34713 &:= (-3^4 + 7!) \times (1 + 3!). \\
34727 &:= (-3^4 + 7! + 2) \times 7. \\
34752 &:= 3 \times 4^7 - 5!^2. \\
34776 &:= (-3 \times 4! + 7!) \times 7!/6!. \\
34795 &:= 3!! + 47 \times ((\sqrt{9}!)! + 5). \\
34839 &:= \sqrt{\sqrt{(3 + 4)^8}} \times (3!! - 9). \\
34848 &:= (3!! - \sqrt{4} + 8) \times 48. \\
34950 &:= (3 - 4! + (\sqrt{9}!)!) \times 50. \\
34956 &:= 3! \times (4! \times \sqrt{9^5} - 6). \\
34995 &:= 3 + 4! \times (\sqrt{9})! \times \sqrt{9^5}. \\
35037 &:= -3^5 + (0! + 3!) \times 7!. \\
35231 &:= (-3 + 52) \times (3!! - 1). \\
35270 &:= -3 + (5 + 2) \times (7! - 0!). \\
35273 &:= (-3!! + (5 \times 2)!) \times 7/3!!!. \\
35328 &:= (3!!/5 - 3!) \times 2^8. \\
35344 &:= ((3! - 53) \times 4)^{\sqrt{4}}. \\
35378 &:= (3!! + 5 - 3) \times \sqrt{\sqrt{7^8}}. \\
35672 &:= (3 + 5 + 6!) \times 7^2. \\
35721 &:= 3^5 \times 7 \times 21. \\
35784 &:= 3! \times (-5! + \sqrt{78^4}). \\
35793 &:= 3 \times 97 \times (5! + 3). \\
35850 &:= (3!! + 5 - 8) \times 50. \\
35880 &:= 3!! - 5! + 8! - (8 - 0!)!. \\
35910 &:= (3!! \times 5 - 9) \times 10. \\
35928 &:= -3 \times 5! + 9!/(2 + 8). \\
35945 &:= 35 \times (\sqrt{9} + 4^5). \\
35949 &:= \sqrt{3!!/5} + (9 + 4!)^{\sqrt{9}}. \\
35950 &:= (3!! + 5 - (\sqrt{9})!) \times 50.
\end{aligned}$$

$$\begin{aligned}
35970 &:= -3! \times (5 + (\sqrt{9})!) + (7 + 0!)!. \\
35999 &:= \left( \sqrt{(3!! \times 5)^{\sqrt{9}}} - (\sqrt{9})! \right) / (\sqrt{9})!. \\
36000 &:= 3! \times 6000. \\
36007 &:= 3!! + (6 + 0!) \times (0! + 7!). \\
36049 &:= 3!! + (6! + 0!) \times 49. \\
36050 &:= ((\sqrt{36})! + 0!) \times 50. \\
36051 &:= -3!! + (6! + 0!) \times 51. \\
36150 &:= (3 + 6!) \times 1 \times 50. \\
36250 &:= (3 + 6! + 2) \times 50. \\
36284 &:= (3 + 6!) / (2 + 8) - 4. \\
36348 &:= -3 - \sqrt{63^4} + 8!. \\
36414 &:= (-3! + 6!)^{\sqrt{4}} / 14. \\
36432 &:= (3^6 \times 4! + 3!!) \times 2. \\
36438 &:= (3! - 6^4 \times 3) + 8!. \\
36450 &:= 3\sqrt{\sqrt{6^4}} \times 50. \\
36465 &:= (\sqrt{3^6} + 4!) \times (6! - 5). \\
36550 &:= (3!! + 6 + 5) \times 50. \\
36720 &:= 3!! + 6! \times (7^2 + 0!). \\
36850 &:= (3^6 + 8) \times 50. \\
36984 &:= 3!! / 6 + 9 \times 8^4. \\
37179 &:= 3^7 \times (1 + 7 + 9). \\
37428 &:= -(3!! + 7! + 4!) / 2 + 8!. \\
37467 &:= 3^7 + (\sqrt{4} + 6!) - 7!. \\
37485 &:= \sqrt{(3 \times 7)^4} \times 85. \\
37587 &:= 3^7 + 5! + 8! - 7!. \\
37752 &:= (3! + 7! / 7) \times 52. \\
37794 &:= -3! + 7 \times (7! + (\sqrt{9})!) / \sqrt{4}. \\
37814 &:= 3! + 7! + 8!^{+4}. \\
37893 &:= -3^7 + 8! - (\sqrt{9})! / 3. \\
37899 &:= 3^7 \times (8 + 9) + (\sqrt{9})!. \\
37998 &:= 3!^7 - (\sqrt{9})! \times (\sqrt{9} + 8!). \\
38127 &:= -3! + 8! - (1 + 2)^7. \\
38137 &:= 3 + 8! + 1 - 3^7. \\
38160 &:= 3!! \times (-8 + 1 + 60). \\
38162 &:= -3!! + 8! + (1 - 6!) \times 2. \\
38163 &:= 3 + 8! - 1 \times 6! \times 3. \\
38164 &:= 3!! + 8! + (1 - 6!) \times 4. \\
38169 &:= 3! + 8! + (1 - 6!) \times \sqrt{9}. \\
38304 &:= -3!! + 8! - 3!^{0+4}. \\
38394 &:= \sqrt{3!^8} \times (3!! - 9) / 4!. \\
38405 &:= (3! + 8)^4 - \sqrt{0! + 5!}. \\
38408 &:= (3! + 8)^4 - 0 - 8. \\
38409 &:= (3! + 8)^4 - 0! - (\sqrt{9})!. \\
38413 &:= (3! + 8)^4 - 1 \times 3. \\
38414 &:= (3! + 8)^4 - 1 \times \sqrt{4}. \\
38415 &:= (3! + 8)^4 - 1^5. \\
38416 &:= (38 - 4!)^{\sqrt{16}}. \\
38417 &:= (3! + 8)^4 + 1^7. \\
38419 &:= (3! + 8)^4 + 1 \times \sqrt{9}. \\
38424 &:= (3! + 8)^4 + 2 \times 4. \\
38434 &:= (3! + 8)^4 - 3! + 4!. \\
38437 &:= (3! + 8)^4 + 3 \times 7. \\
38475 &:= \sqrt{3^8} \times 475. \\
38479 &:= (3! + 8)^4 + 7 \times 9. \\
38496 &:= -3! \times (\sqrt{8^4} - 9 \times 6!). \\
38544 &:= (3! + \sqrt{(8 \times 5)^4}) \times 4!. \\
38638 &:= 3^8 \times 6 - 3!! - 8. \\
38646 &:= 3^8 \times \sqrt{\sqrt{6^4}} - 6!. \\
38694 &:= -3! + 8! - 6! \times 9 / 4. \\
38728 &:= -3!! - 872 + 8!. \\
38793 &:= -3^8 + 7! \times 9 - 3!. \\
38800 &:= -3!! + 8! - 800. \\
38808 &:= -3 \times 8! / 80 + 8!. \\
38838 &:= 3! \times (-88 + 3^8). \\
38856 &:= (3^8 - 85) \times 6. \\
38874 &:= -3! + 8! - 8! / (7 \times 4). \\
38895 &:= -\sqrt{3!^8} + 8! - 9 - 5!. \\
38952 &:= \sqrt{(\sqrt{3!^8})} \times (9 \times 5! + 2). \\
38970 &:= -3!! + 8! - 9 \times 70. \\
38986 &:= -3 + 8! - \sqrt{(\sqrt{9} + 8)^6}. \\
38988 &:= -\sqrt{3!^8} - \sqrt{\sqrt{(\sqrt{9})!^8} + 8!}. \\
39248 &:= 3!! \times 9 + \sqrt{2^4!} \times 8. \\
39249 &:= (3!! + 9^2) \times 49. \\
39283 &:= 3^9 \times 2 - 83. \\
39294 &:= 3^9 \times 2 - \sqrt{9} \times 4!. \\
39297 &:= (3! \times (\sqrt{9})! - 2)^{\sqrt{9}} - 7. \\
39318 &:= 3! \times (9^{3+1} - 8). \\
39342 &:= (3^9 - 3 \times 4) \times 2. \\
39343 &:= 39 + 34^3. \\
39354 &:= 3! \times (\sqrt{9^{3+5}} - \sqrt{4}). \\
39358 &:= 3^9 \times (-3 + 5) - 8. \\
39360 &:= 3! \times (9 \times 3^6 - 0!). \\
39372 &:= (3 + 9 \times 3^7) \times 2. \\
39378 &:= -3!! - (\sqrt{9})! \times 37 + 8!. \\
39388 &:= (3! - 938) + 8!. \\
39402 &:= (3! + 9^4) \times (0! + 2)!. \\
39408 &:= 3! \times (9^4 - 0! + 8). \\
39412 &:= (3^9 + 4! - 1) \times 2. \\
39414 &:= (3^9 + 4!) \times 1 \times \sqrt{4}. \\
39494 &:= (3^9 + 4^{\sqrt{9}}) \times \sqrt{4}. \\
39495 &:= 3! \times 9^4 + 9 + 5!. \\
39550 &:= -3!! + (\sqrt{9} + 5)! - 50. \\
39570 &:= -3!! - (\sqrt{9})! \times 5 + (7 + 0!)!. \\
39590 &:= -3!! - 9 + (5 + \sqrt{9})! - 0!. \\
39654 &:= (3^9 + 6! / 5) \times \sqrt{4}. \\
39799 &:= 39 + (-7! + 9!) / 9. \\
39840 &:= 3!! / \sqrt{9} + 8! - (4 - 0!)!. \\
39842 &:= 3^9 + (8! - \sqrt{4}) / 2. \\
39843 &:= 3^9 + 8! / (-4 + 3!). \\
39844 &:= 3^9 + (8! + \sqrt{4}) / \sqrt{4}. \\
39848 &:= (-3!^{\sqrt{9}} + 8!) - \sqrt{4^8}. \\
39849 &:= 3^9 + 8! / \sqrt{4} + (\sqrt{9})!. \\
39924 &:= 3!! + 99^2 \times 4. \\
39930 &:= (3! + (\sqrt{9})!) \times (9 \times 3! + 0!). \\
39954 &:= -3! + (\sqrt{9})! \times (-9 + 5!) / \sqrt{4}. \\
39960 &:= (3!! - 9 \times (\sqrt{9})!) \times 60. \\
40088 &:= 4! - (0! + 0!)^8 + 8!. \\
40260 &:= (4 \times (0 + 2))! - 60. \\
40270 &:= -(4! + 0!) \times 2 + (7 + 0!)!. \\
40290 &:= -4! - (0! + 2)! + (9 - 0!)!. \\
40310 &:= (\sqrt{4^{0+3}})! - 10. \\
40355 &:= 40 + (3 + 5)! - 5. \\
40360 &:= 40 + (3 + 6 - 0!)!.
\end{aligned}$$

$$\begin{aligned}
40378 &:= \sqrt{4} + (0! + 3!) \times 7 \times 8. \\
40399 &:= -(4 \times 0)! + (3!! + 9!)/9. \\
40656 &:= ((4 - 0)!) + 6! \times 56. \\
40688 &:= (40 + 6) \times 8 + 8!. \\
40788 &:= (4 - 0)! \times 78 + 8!. \\
40829 &:= -4 + 0! + 8! + 2^9. \\
40879 &:= -(4 \times 0)! + 8! + 7!/9. \\
40984 &:= 4! + (0! + 9) \times 8^4. \\
41040 &:= (-\sqrt{4} + 10)! + (4 - 0)!!. \\
41338 &:= 4^{(-1+3!)} - 3! + 8!. \\
41344 &:= 4^{(-1+3!)} + (4 + 4)!. \\
41463 &:= (4 - 1) \times (\sqrt{4!^6} - 3). \\
41466 &:= (4 - 1) \times \sqrt{4!^6} - 6. \\
41469 &:= (4 - 1) \times \sqrt{4!^6} - \sqrt{9}. \\
41493 &:= 4! + (-1 + 4!^{\sqrt{9}}) \times 3. \\
41496 &:= 4! \times (1 + \sqrt{(4 \times \sqrt{9})^6}). \\
41758 &:= -\sqrt{4} + (-1 + 7)! \times 58. \\
41760 &:= (-4! + (-1 + 7)!) \times 60. \\
41998 &:= -\sqrt{4} + (1 + (\sqrt{9})!)/\sqrt{9} + 8!. \\
42873 &:= -\sqrt{4} + (28 + 7)^3. \\
42879 &:= 4 + (28 + 7)^{\sqrt{9}}. \\
42960 &:= (-4 + (2 \times \sqrt{9})!) \times 60. \\
42975 &:= (4!^2 - \sqrt{9}) \times 75. \\
42984 &:= -4! + 2^9 \times 84. \\
42995 &:= (4! + 2 + 9)^{\sqrt{9}} + 5!. \\
43152 &:= (4! + (3!! - 1) \times 5!)/2. \\
43205 &:= (4! \times 3!!/2 + 0!) \times 5. \\
43224 &:= 4! + 3!!^2 \times 2/4!. \\
43230 &:= (4! + 3!) \times (2 \times 3!! + 0!). \\
43260 &:= (4! + 3!^2) \times (6! + 0!). \\
43320 &:= (\sqrt{4} + 3!) \times 3 \times 20. \\
43328 &:= 4 \times (3!! + 32) + 8!. \\
43440 &:= (4 + 3!)/\sqrt{4} \times (4 + 0)!. \\
43452 &:= (4! + (3!! + 4) \times 5!)/2. \\
43562 &:= (4 + 3!! + 5! \times 6!)/2. \\
43564 &:= 4 + (3!! + 5! \times 6!)/\sqrt{4}. \\
43593 &:= -\sqrt{4} + 35^{\sqrt{9}} + 3!!. \\
43599 &:= 4 + 35^{\sqrt{9}} + (\sqrt{9})!!. \\
43631 &:= (4!^3 + 6!) \times 3 - 1. \\
43632 &:= (4!^3 + 6!) \times 3!/2. \\
43740 &:= 4 \times 3^7 \times (4 + 0!). \\
43744 &:= 4 + 3^7 \times (4! - 4). \\
43775 &:= (4 \times 3^7 + 7) \times 5. \\
43776 &:= 4! \times (-3 + 7)! \times 76. \\
43856 &:= -4^3 + 8! + 5 \times 6!. \\
43920 &:= (4^3 - \sqrt{9}) \times (2 + 0)!!. \\
43924 &:= 4 - 3!! \times (\sqrt{9} - \sqrt{\sqrt{2^4}}). \\
44298 &:= 442 \times 9 + 8!. \\
44386 &:= -4! + 4^{3!} + 8! - 6. \\
44389 &:= -4! + 4^{3!} + 8! + \sqrt{9}. \\
44392 &:= -4! + 4^{3!} + ((\sqrt{9})! + 2)!. \\
44398 &:= \sqrt{\sqrt{4^4!}} - 3 \times (\sqrt{9})! + 8!. \\
44418 &:= \sqrt{4} + 4^{(4-1)!} + 8!. \\
44428 &:= \sqrt{\sqrt{4^4!}} + 4!/2 + 8!. \\
44438 &:= 4! - \sqrt{4} + 4^{3!} + 8!. \\
44640 &:= (4 + 4)! + 6 \times (4 - 0)!!. \\
44652 &:= (4! + (4! + 6!) \times 5!)/2. \\
44662 &:= 4! - \sqrt{4} + 6! \times 62. \\
44938 &:= (-\sqrt{\sqrt{4^4!}} + 9! + 3!)/8. \\
44998 &:= (-4 \times (4 + (\sqrt{9})!) + 9!)/8. \\
45125 &:= ((4! - (5! - 1))^2) \times 5. \\
45298 &:= -(4 + 5!)/2 + 9!/8. \\
45328 &:= (\sqrt{4} + 5)! - 32 + 8!. \\
45344 &:= (4^5 + 3!) \times (4! + \sqrt{4}). \\
45398 &:= (4^5 - 3!! + 9!)/8. \\
45478 &:= \sqrt{4} + 5! - 4 + 7! + 8!. \\
45568 &:= \sqrt{\sqrt{\sqrt{4^5!^5}}} \times (6! - 8). \\
45576 &:= -4! + 5! \times 5 \times 76. \\
45598 &:= -\sqrt{4} + 5! + 5! + 9!/8. \\
45631 &:= -4^5 + 6^{3!} - 1. \\
45634 &:= -4^5 + 6^{3!} + \sqrt{4}. \\
45824 &:= (-4 + (-5 + 8)!) \times \sqrt{\sqrt{2^4!}}. \\
45840 &:= \sqrt{4} \times 5! \times (8 \times 4! - 0!). \\
45945 &:= (4^5 - \sqrt{9}) \times 45. \\
45947 &:= 4 \times 5 + 9^4 \times 7. \\
45978 &:= (4! - 5! + 9! + 7!)/8. \\
45990 &:= ((\sqrt{4} + 5)! + 9!)/(9 - 0!). \\
45999 &:= ((\sqrt{4} + 5)! - 9) \times 9 + (\sqrt{9})!!. \\
46104 &:= 4! + 6! \times \sqrt{\sqrt{(1 + 0)!^4!}}. \\
46506 &:= (-4! + 6^5 - 0!) \times 6. \\
46512 &:= (-4! + 6^5) \times (1 + 2)!. \\
46616 &:= -4! + 6^6 - 16. \\
46630 &:= 4 + 6^6 - 30. \\
46640 &:= 4! + 6^6 - 40. \\
46650 &:= -\sqrt{4} + 6^6 - 5 + 0!. \\
46670 &:= (\sqrt{4} - 6!) \times (6 - \sqrt{7! + 0!}). \\
46690 &:= 4! + 6^6 + 9 + 0!. \\
46699 &:= 46 + 6^{(\sqrt{9})!} - \sqrt{9}. \\
46784 &:= (4 + 6! + 7) \times \sqrt{8^4}. \\
46992 &:= -4! + 6^{(\sqrt{9})!} + (\sqrt{9})!!/2. \\
46998 &:= (\sqrt{4!^6} + 9! - (\sqrt{9})!)/8. \\
47397 &:= (4!^{7-3} + \sqrt{9})/7. \\
47520 &:= (4 + 7)!/(5! + (2 + 0)!). \\
47524 &:= (4 + 7 - 5!)^2 \times 4. \\
47526 &:= (4! + 7 - 5!)^2 \times 6. \\
47548 &:= 4 \times (7 + (\sqrt{5! + 4!})!)/8!. \\
47744 &:= (\sqrt{4} + 7)!/7 - \sqrt{\sqrt{4^4!}}. \\
47872 &:= (-4^7 + 8 \times 7!) \times 2. \\
47876 &:= -4 + 7!/8 \times 76. \\
48095 &:= -\sqrt{4} + 8! + 0! + (\sqrt{9})!^5. \\
48236 &:= -4 + (8^2 + 3) \times 6!. \\
48334 &:= -\sqrt{4} + 3!^{3!} + 8!/4!. \\
48355 &:= -4! + 8! \times 3!/5 - 5. \\
48360 &:= -4! + 8! \times 3!/(6 - 0!). \\
48385 &:= 4 + 8! - 3 + 8!/5. \\
48488 &:= -4! + 8! + 4^8/8. \\
48528 &:= (4! + 8!/5) \times (-2 + 8). \\
48564 &:= (4! \times 8!/5 + 6!)/4. \\
48664 &:= (-4 + 6!) \times 68 - 4!. \\
48729 &:= 4^8 - 7^{2+\sqrt{9}}. \\
49068 &:= 4 \times \sqrt{9^{0!+6}} + 8!. \\
49147 &:= -\sqrt{4} + \sqrt{9} \times (-1 + 4^7). \\
49173 &:= (4^{(\sqrt{9})!+1} + 7) \times 3.
\end{aligned}$$

$$\begin{aligned}
49368 &:= (\sqrt{4 \times 9} + 3!!) \times 68. \\
49374 &:= (4! + 7!) \times 39/4. \\
49456 &:= 49 \times 4^5 - 6!. \\
49575 &:= \sqrt{4^{\sqrt{9 \times 5}} + 7^5}. \\
49693 &:= 4 + 9 + 69 \times 3!!!. \\
49723 &:= (4! \times 9 + 7)^2 - 3!. \\
49770 &:= (-\sqrt{4} + (\sqrt{9})!! - 7) \times 70. \\
49896 &:= -4! \times (\sqrt{\sqrt{9^8}} - \sqrt{9} \times 6!). \\
50653 &:= (-5 + (0! + 6)!/5!)^3. \\
50745 &:= (5!/(0! + 7))^4 + 5!. \\
51425 &:= (5! + 1) \times 425. \\
51686 &:= (-5! + 1 + 6!) \times 86. \\
51960 &:= 5! + 1 \times 9!/(6 + 0!). \\
51961 &:= 5! + 1 + 9!/(6 + 1). \\
52488 &:= (5 - 2 \times 4)^{8 \times 8}. \\
52822 &:= \sqrt{(5 + 2)^8} \times 22. \\
53289 &:= (5! - 3!)^2 + 8! - (\sqrt{9})!!!. \\
53376 &:= ((5 + 3)! + 3!^7)/6. \\
53448 &:= (5! + 3^{4+4}) \times 8. \\
53475 &:= (-5 + 3!! - \sqrt{4}) \times 75. \\
53742 &:= (-5! + 3^7) \times (4! + 2). \\
53880 &:= 5! \times \sqrt{(-3 + 8) \times 8! + 0!}. \\
53883 &:= 5! + 3 + 8! + 8!/3. \\
53886 &:= 5! + 3! + 8 \times 8!/6. \\
53984 &:= ((5 \times 3!)^{\sqrt{9}} - 8) \times \sqrt{4}. \\
53994 &:= ((5 \times 3!)^{\sqrt{9}} - \sqrt{9}) \times \sqrt{4}. \\
54075 &:= ((\sqrt{5 + 4})!! + 0!) \times 75. \\
54238 &:= (5! - \sqrt{4})^2 - 3! + 8!. \\
54244 &:= (5! - \sqrt{4})^2 + (4 + 4)!. \\
54248 &:= (5! - \sqrt{4})^2 + 4 + 8!. \\
54336 &:= 5! \times 4^3 + 3!^6. \\
54375 &:= (5 + (\sqrt{4} \times 3!)) \times 75. \\
54476 &:= (5! + 4!^4 - 7!)/6. \\
54675 &:= \sqrt{(5 + 4)^6} \times 75. \\
54678 &:= (5 - 4! + 6!) \times 78. \\
54715 &:= 5!^{\sqrt{4}} + (7 + 1)! - 5. \\
54720 &:= 5!^{\sqrt{4}} + (7 + (2 \times 0))!!. \\
54748 &:= 5!^{\sqrt{4}} + 7 \times 4 + 8!. \\
54756 &:= 54 \times (7!/5 + 6). \\
54768 &:= 5!^{\sqrt{4}} + (7! + 6) \times 8. \\
54840 &:= 5!^{\sqrt{4}} + 8! + (4 + 0)!!. \\
54872 &:= (5!/4 + 8)^{\sqrt{7+2}}. \\
54979 &:= -5 + (-4! + (\sqrt{9})!!) \times 79. \\
55680 &:= (-5!/5 + 6!) \times 80. \\
55875 &:= (5! + \sqrt{5^8}) \times 75. \\
55948 &:= 5 + 5^{(\sqrt{9})!} - \sqrt{4} + 8!. \\
56280 &:= 5! + 6! \times (-2 + 80). \\
56644 &:= (5! - 6/6)^{\sqrt{4}} \times 4. \\
56649 &:= 5 + (-6 + 6!)^{\sqrt{4}}/9. \\
56760 &:= (5 + 6) \times (7! + (6 - 0)!!). \\
56950 &:= -5^6 + 9!/5 - 0!. \\
56951 &:= -5^6 + 9!/5 \times 1. \\
57480 &:= -5! + (7 - 4)! \times 80. \\
57504 &:= (-5 + 7^{(5-0)!}) \times 4!. \\
57600 &:= 5 \times (7! + 6!) \times (0! + 0!). \\
57744 &:= (5 + (7 \times 7)^{\sqrt{4}}) \times 4!. \\
57845 &:= 5^7 - 8!/\sqrt{4} - 5!. \\
57960 &:= 5! \times 7 \times (9 + 60). \\
57969 &:= (5! - 7) \times (9!/6! + 9). \\
57974 &:= 5^7 + 9 - 7! \times 4. \\
58119 &:= -5! + 81 \times (-1 + (\sqrt{9})!!). \\
58195 &:= -5! + 81 \times (\sqrt{9})!! - 5. \\
58344 &:= (-5 + 8)! \times 3^4 + 4!. \\
58560 &:= 5! \times 8 \times (\sqrt{5 \times 6!} + 0!). \\
58564 &:= (5! + 8 + 5! - 6)^{\sqrt{4}}. \\
58795 &:= 5 \times (8! - 7!)/\sqrt{9} - 5. \\
58799 &:= (5 \times (8! - 7!) - \sqrt{9})/\sqrt{9}. \\
58937 &:= -5! + 8 + \sqrt{9^{3+7}}. \\
58960 &:= (5 \times 8)^{\sqrt{9}} - (6 + 0)!!. \\
58962 &:= (5! \times 8 - 9) \times 62. \\
58969 &:= (-(-5 + 8)! + 9^6)/9. \\
58982 &:= -58 + (\sqrt{9})!! \times 82. \\
58991 &:= -58 + \sqrt{9^{9+1}}. \\
58995 &:= -(-5 + 8)! \times 9 + 9^5. \\
59050 &:= (5 + \sqrt{9} + 0!)^5 + 0!. \\
59054 &:= 5 + 9^{(0/5)!+4}. \\
59324 &:= (42 - 3)^{\sqrt{9}} + 5. \\
59352 &:= (-5! + 9!/3!!) \times (5! - 2). \\
59472 &:= (5! + (\sqrt{9})!) \times 472. \\
59554 &:= -5! + 9^5 + (5^4). \\
59635 &:= -5! + 9!/6 - 3!! - 5. \\
59640 &:= -5! + 9!/6 - (4 - 0)!!. \\
59644 &:= (5^{(\sqrt{9})!} - 6!) \times 4 + 4!. \\
59664 &:= -5! + 9!/6 - 6! + 4!. \\
59784 &:= -5! + ((\sqrt{9})!)^7 - 8!/4. \\
59956 &:= (-5! + 9! - 9!/5!)/6. \\
59975 &:= -5^{(\sqrt{9})!} + \sqrt{9} \times 7! \times 5. \\
59996 &:= (5! + 9!)/(\sqrt{9})! - 9!/6!. \\
60496 &:= ((6 - 0)! - 4! + 9!)/6. \\
60593 &:= -6 - 0! + 5! + 9!/3!. \\
60696 &:= \sqrt{6^{0+6}} + 9!/6. \\
60984 &:= (6 + (\sqrt{0 + 9})!!) \times 84. \\
61285 &:= (6! + 1^2) \times 85. \\
62208 &:= 6^{2+0!} \times 8. \\
62436 &:= (62 + 4!) \times (3! + 6!). \\
62640 &:= 6! \times (2^6 + 4! - 0!). \\
63504 &:= (63 \times (5 - 0!))^{\sqrt{4}}. \\
63648 &:= 6 \times 3 \times 6^4 + 8!. \\
63888 &:= \left(6 + \left(\sqrt{\sqrt{3^8}}\right)!!\right) \times 88. \\
63945 &:= 63 \times (-9 + 4^5). \\
63985 &:= 6! \times (3!! - 9)/8 - 5. \\
63990 &:= ((6 - 3)!! - 9) \times 90. \\
63995 &:= (6!/(3 \times (\sqrt{9})!))^{\sqrt{9}} - 5. \\
64080 &:= 6! \times ((4 - 0)!/8 - 0!). \\
64096 &:= -6! + 4^{(-0!+9)} - 6!. \\
64528 &:= ((\sqrt{64})!/5 + 2) \times 8. \\
64550 &:= (6^4 - 5) \times 50. \\
64620 &:= 6!/4 \times (6!/2 - 0!). \\
64638 &:= (-6^4 + 6! \times 3!!)/8. \\
64696 &:= (6! + 9!)/6 + 4^6. \\
64784 &:= -6! + (4^7 - 8) \times 4. \\
64796 &:= -6! - 4 + 7! + 9!/6. \\
64798 &:= (6!^{\sqrt{4}} - 7 - 9)/8.
\end{aligned}$$



$$\begin{aligned}
 64950 &:= (6^4 + \sqrt{9}) \times 50. \\
 65248 &:= -6!/5 \times 2 + 4^8. \\
 65471 &:= -65 + 4^{7+1}. \\
 65495 &:= (-6! - 5 + 4!^{\sqrt{9}}) \times 5. \\
 65507 &:= 65/5 \times (-0! + 7!). \\
 65520 &:= (6 + 5!) \times 520. \\
 65548 &:= \sqrt{6 \times 5!}/5 + 4^8. \\
 66234 &:= -6 + 6! \times 23 \times 4. \\
 66240 &:= 6! \times (6 - 2) \times (4! - 0!). \\
 66246 &:= 6 + 6! \times 2 \times 46. \\
 66816 &:= 6^6 + 8!/\sqrt{\sqrt{16}}. \\
 66960 &:= 6! \times (-\sqrt{6!} + 9 + (6 - 0!)!). \\
 67234 &:= 6 + 7^{2+3} \times 4. \\
 67534 &:= -6 + 7! + 5^{3!} \times 4. \\
 67680 &:= (6 + 7!/6) \times 80. \\
 67968 &:= (\sqrt{6^{7+\sqrt{9}}} + 6!) \times 8. \\
 68352 &:= 2^5 \times 3 \times (-8 + 6!). \\
 68395 &:= (6! + 8! - 3)/\sqrt{9} \times 5. \\
 68448 &:= (6! + 8) \times 4 + 4^8. \\
 69465 &:= (69 + \sqrt{4!^6}) \times 5. \\
 69714 &:= -6! + (-9 + 7!) \times 14. \\
 69744 &:= 6! \times 97 - 4 \times 4!. \\
 69759 &:= 69 \times (7!/5 + \sqrt{9}). \\
 69770 &:= 6! \times 97 - 70. \\
 69774 &:= (6 \times (\sqrt{9})!^7 - 7!)/4!. \\
 69795 &:= 6! \times 97 - 9 \times 5. \\
 69804 &:= (-6! + (\sqrt{9})!^{(8-0!)})/4. \\
 69835 &:= 6! \times 98 - 3!! - 5. \\
 69840 &:= 6! \times (98 - (4 \times 0)!). \\
 69954 &:= 6 + 9 \times ((\sqrt{9})!^5 - 4). \\
 69982 &:= 6 \times 9 \times \sqrt{(\sqrt{9})!^{18} - 2}. \\
 69990 &:= 6 + 9 \times \sqrt{(\sqrt{9})!^{9+0!}}. \\
 70560 &:= 70/5 \times (6 + 0!)!. \\
 70993 &:= 7^{(\sqrt{0+9})!} - (\sqrt{9})!^{3!}. \\
 72350 &:= (7 + 2 \times 3!!) \times 50. \\
 72495 &:= -\sqrt{(7+2)^4} + 9!/5. \\
 72538 &:= (7 + 2)!/5 - 38. \\
 72546 &:= (7 + 2)!/5 - 4! - 6. \\
 72551 &:= ((7 + 2)! - 5!)/5 - 1. \\
 72552 &:= ((7 + 2)! - 5!)/\sqrt{5^2}. \\
 72554 &:= ((7 + 2)! - 5!)/5 + \sqrt{4}. \\
 72556 &:= (7 + 2)!/5 - 5!/6. \\
 72564 &:= (7 + 2)!/5 - 6 \times \sqrt{4}. \\
 72565 &:= (7 + 2)!/5 - 6 - 5. \\
 72570 &:= (7 + 2)!/5 - 7 + 0!. \\
 72577 &:= (7 + 2)!/5 + 7/7. \\
 72582 &:= (7 + 2)!/5 + 8 - 2. \\
 72584 &:= (7 + 2)!/5 + \sqrt{\sqrt{8^4}}. \\
 72594 &:= (7 + 2)!/5 + 9 \times \sqrt{4}. \\
 72595 &:= 7 \times 2 + 5 + 9!/5. \\
 72597 &:= (7 + 2)!/5 + \sqrt{9} \times 7. \\
 72688 &:= 7 \times (2 + \sqrt{6^8}) \times 8. \\
 73364 &:= (7 \times 3!)^3 - 6! - 4. \\
 73368 &:= (7 \times 3!)^3 - \left(\sqrt{\sqrt{\sqrt{6^8}}}\right)!. \\
 73440 &:= (7! - 3!!) \times (4 \times 4 + 0!). \\
 73959 &:= (7 \times 3!)^{\sqrt{9}} - 5! - 9. \\
 73984 &:= ((7 + 3 \times 9) \times 8)^{\sqrt{4}}. \\
 73994 &:= (7 \times 3!)^{\sqrt{9}} - 94. \\
 73998 &:= (7 \times 3!)^{\sqrt{9}} - (\sqrt{9})!!/8. \\
 74880 &:= -7! + \sqrt{4} \times 8! - (\sqrt{8 + 0})!!!. \\
 74887 &:= 7 + \sqrt{4} \times 8! - 8!/7. \\
 74896 &:= 7! + 4^8 + (\sqrt{9})! \times 6!. \\
 74904 &:= (7^4 + (\sqrt{9})!!) \times (0 + 4)!). \\
 75168 &:= (7 + 5!) \times \sqrt{6^8}. \\
 75375 &:= (7!/5 - 3) \times 75. \\
 75578 &:= -7 - (5! - 5! \times 7!)/8. \\
 75600 &:= 7! \times 5 \times 6/(0! + 0!). \\
 75615 &:= (7! - 5 + 6) \times 15. \\
 75624 &:= 7! \times 5 \times 6/2 + 4!. \\
 75685 &:= (7! \times 5! + 6!)/8 - 5. \\
 75690 &:= (7! \times 5! + 6!)/(9 - 0!). \\
 75975 &:= (75 + \sqrt{9} \times 7!) \times 5. \\
 76335 &:= (7 + 6!) \times 3 \times 35. \\
 76608 &:= 7^6 - 6! - 0! - 8!. \\
 76609 &:= 7^6 - 6! - (-0! + 9!)!. \\
 76832 &:= \sqrt{(7!/6!)^8} \times 32. \\
 77329 &:= (7 \times 7)^3 - (2^{\sqrt{9}})!. \\
 77957 &:= -7 \times (\sqrt{7 + 9})! + 5^7. \\
 78047 &:= -78 + (0! + 4!)^7. \\
 78652 &:= 7 \times (8 + 6 - 5!)^2. \\
 79233 &:= 7^{((\sqrt{9})! - 2)} \times 33. \\
 79524 &:= (7 \times \sqrt{9} + 5!)^2 \times 4. \\
 79538 &:= (7^{(\sqrt{9})!} + 5)/3 + 8!. \\
 79800 &:= -7!/(\sqrt{9})! + 8! \times (0! + 0!). \\
 79802 &:= -7!/(\sqrt{9})! + (8! + 0!) \times 2. \\
 79824 &:= -7!/(\sqrt{9})! + 8! \times 2 + 4!. \\
 79899 &:= -7 \times (\sqrt{9} + 8!) - (\sqrt{9})!! + 9!. \\
 79926 &:= -7! + ((\sqrt{9})! - (\sqrt{9})!!)^2/6. \\
 79954 &:= (-7^{\sqrt{9}} + (\sqrt{9} + 5!)) \times \sqrt{4}. \\
 80354 &:= (8! + 0! - 3!!/5) \times \sqrt{4}. \\
 80384 &:= (8! - (-0! + 3!)! - 8) \times \sqrt{4}. \\
 80400 &:= (8! - (0! + 4!)!) \times (0! + 0!). \\
 80484 &:= (-80 + \sqrt{4} + 8!) \times \sqrt{4}. \\
 80522 &:= (8! + 0! - 5!/2) \times 2. \\
 80532 &:= (8! - 0! - 53) \times 2. \\
 80544 &:= (8!/\sqrt{-0! + 5} - 4!) \times 4. \\
 80570 &:= 8! \times \sqrt{-0! + 5} - 70. \\
 80599 &:= -8! - 0! + (-5! + 9!)/\sqrt{9}. \\
 80630 &:= (8! + 0! - 6) \times (3 - 0!). \\
 80636 &:= (8! + 0!) \times 6/3 - 6. \\
 80650 &:= (8! - 0! + 6) \times \sqrt{5 - 0!}. \\
 80654 &:= (8! + 0! + 6!/5!) \times \sqrt{4}. \\
 80760 &:= 8! + (0! + 7!) + (6 - 0!)!. \\
 80800 &:= (80 + 8!) \times (0! + 0!). \\
 81920 &:= 8^{1+\sqrt{9}} \times 20. \\
 82560 &:= 8 \times 2 \times (5! + (6 + 0!)!). \\
 82656 &:= (-8^2 + 6!) \times (5! + 6). \\
 82896 &:= (-8 + (\sqrt{2 \times 8})!^{\sqrt{9}}) \times 6. \\
 82936 &:= -8 + (-2 + (\sqrt{9})!)^3 \times 6. \\
 82937 &:= (8/2)!^{\sqrt{9}} \times 3! - 7. \\
 83328 &:= 8^2 \times (3! + \sqrt{3!^8}). \\
 83384 &:= (8 + 3!)^3 + 8! \times \sqrt{4}. \\
 83456 &:= -8^{3!} + 4 \times 5! \times 6!.
 \end{aligned}$$

$$\begin{aligned}
83584 &:= -8! + (3 \times 5! - 8)^{\sqrt{4}}. \\
83640 &:= (8 - 3)! \times (6! - 4! + 0!). \\
83656 &:= -\sqrt{(8 + 3!)^6} + 5! \times 6!. \\
83755 &:= (-8!/3!! + 7^5) \times 5. \\
83957 &:= 8 \times 3^{(\sqrt{9})!} + 5^7. \\
83994 &:= -8!/3! - (\sqrt{9})! + 9!/4. \\
84050 &:= (8!/4! + 0!) \times 50. \\
84672 &:= \sqrt{((8 + 4)^6)} \times 7^2. \\
84736 &:= 8! \times \sqrt{4} + (7 - 3)^6. \\
84743 &:= 8! \times \sqrt{4} + 7 + 4^{3!}. \\
84755 &:= (8 - \sqrt{4})! + 7^5 \times 5. \\
85440 &:= (-8 + (\sqrt{5 + 4})!) \times (4 + 0!)!. \\
85442 &:= (8! + (5 + \sqrt{4})^4) \times 2. \\
85560 &:= -8 \times 5! + 5! \times (6! + 0!). \\
85680 &:= (-8 + 5!) \times 6! + (8 - 0!)!. \\
85734 &:= (-8 + (5 \times 7)^3) \times \sqrt{4}. \\
86314 &:= -86 + 3!! \times (1 + 4)!. \\
86400 &:= (8! + 6! \times 4) \times (0! + 0!). \\
86402 &:= (8! + 6! \times 4 + 0!) \times 2. \\
86404 &:= 8 + 6! \times (4 + 0!)! - 4. \\
86408 &:= 8 + 6! \times (40/8)!. \\
86440 &:= (8 + 6! \times 4!) \times (4 + 0!). \\
86528 &:= (-8 + 6! + 5!)^2/8. \\
86640 &:= (8 - 6 + 6!) \times (4 + 0!)!. \\
86938 &:= 8! + 6^{(\sqrt{9})!} - 38. \\
86956 &:= 8! + 6^{(\sqrt{9})!} - 5!/6. \\
86970 &:= 8! + 6^{(\sqrt{9})!} - 7 + 0!. \\
86984 &:= 8! + 6^{(\sqrt{9})!} + \sqrt{\sqrt{8^4}}. \\
86996 &:= (8 + 6!) \times ((\sqrt{9})!! - \sqrt{9})/6. \\
87352 &:= -8 + 7!/3 \times 52. \\
87355 &:= (8!/7! + 3!!) \times 5! - 5. \\
87379 &:= ((8!/7!)^{3!} - 7)/\sqrt{9}. \\
87536 &:= 8 \times 7 + 5! \times 3^6. \\
87595 &:= (-8 + 7^5 + (\sqrt{9})!) \times 5. \\
88704 &:= (88 \times 7!)/(0! + 4). \\
89460 &:= -8! + (\sqrt{9})!!/4 \times (6! + 0!). \\
89471 &:= 8! + \sqrt{9} \times 4^7 - 1. \\
89474 &:= 8 + (9! + 4! - 7!)/4. \\
89595 &:= 8!/9 \times 5!/( \sqrt{9})! - 5. \\
89599 &:= (8!/( \sqrt{9})! \times 5! - 9)/9. \\
90494 &:= (-904 + 9!)/4. \\
90534 &:= (9! - ((-0! + 5)! + 3!!))/4. \\
90690 &:= (9! - (-0! + 6!))/( \sqrt{9} + 0!). \\
90719 &:= 90 \times 7! - 1 - 9!. \\
90794 &:= \sqrt{9} + \sqrt{0! + 7!} + 9!/4. \\
90894 &:= -(\sqrt{9})! + ((0! + 8)! + (\sqrt{9})!)/4. \\
91435 &:= 9! \times 1/4 + 3!! - 5. \\
91439 &:= (\sqrt{9} \times 3)!/4 - 1 + (\sqrt{9})!. \\
91440 &:= 9! \times 1/4 + (4 - 0!)!. \\
91446 &:= (9! + 1 \times 4!)/4 + 6!. \\
91464 &:= 9! \times 1/4 + 6! + 4!. \\
91560 &:= ((\sqrt{9})! + 1)! + 5! \times (6! + 0!). \\
91744 &:= (9! + (1 + 7^4))/4. \\
92032 &:= 2 \times (3!! - 0!) \times 2^{(\sqrt{9})!}. \\
92184 &:= (\sqrt{9})!! \times 2^{(-1+8)} + 4!. \\
92416 &:= ((\sqrt{9})!! + 2) \times \sqrt{4^{1+6}}. \\
92880 &:= (\sqrt{9})!! \times (2 \times (8 \times 8) + 0!). \\
92928 &:= ((\sqrt{9})!!/2 + \sqrt{9}) \times 2^8. \\
93252 &:= (\sqrt{9})!^{3!} \times 2 - 5!/2. \\
93256 &:= (\sqrt{9})!^{3!} \times 2 - 56. \\
93300 &:= ((\sqrt{9})!^{3!} - 3!) \times (0! + 0!). \\
93320 &:= 9 + 3!^{3!} \times 2 - 0!. \\
93330 &:= (9 + 3!^{3!}) \times (3 - 0!). \\
93384 &:= (\sqrt{9} + 3 \times \sqrt{3!^8}) \times 4!. \\
93562 &:= ((\sqrt{9})!^{3!} + \sqrt{5^6}) \times 2. \\
93744 &:= 9!/3!! \times (7!/4! - 4!). \\
93756 &:= (\sqrt{9})! \times (-3! + 7 + 5^6). \\
93888 &:= 9 \times (\sqrt{3!^8} + 8) \times 8. \\
93927 &:= ((\sqrt{9})!! - 3) \times (\sqrt{9} + 2^7). \\
94315 &:= 9!/4 + (3!! - 1) \times 5. \\
94335 &:= 9!/4 + (3 + 3!!) \times 5. \\
94365 &:= 9!/4 + 3^6 \times 5. \\
94494 &:= (9!/4! - 4! + 9!)/4. \\
94512 &:= ((\sqrt{9})!! - 4) \times (5! + 12). \\
94751 &:= 94 \times 7!/5 - 1. \\
94752 &:= 94 \times 7!/\sqrt{5^2}. \\
94754 &:= 94 \times 7!/5 + \sqrt{4}. \\
94816 &:= 9!/4 + 8^{\sqrt{16}}. \\
94824 &:= (9!/4 + 8) + \sqrt{2^{4!}}. \\
94848 &:= (9 + 4!) \times 8^4 - 8!. \\
94864 &:= ((9!/\sqrt{4} + 8!)/6!)^{\sqrt{4}}. \\
94957 &:= -\sqrt{9} + (4 + (\sqrt{9})!)^5 - 7!. \\
95035 &:= \left( \sqrt{(\sqrt{9})!!/5} \right)! / (0! + 3!)! - 5. \\
95037 &:= -\sqrt{9} + ((5 - 0!) \times 3!)/7!. \\
95040 &:= \left( \sqrt{(\sqrt{9})!!/5} \right)! / (0! + (4 - 0!)!)!. \\
95064 &:= \left( \sqrt{(\sqrt{9})!!/5} \right)! / (0! + 6)! + 4!. \\
95496 &:= (-9! + 5!^4/\sqrt{9})/6!. \\
95749 &:= 9!/4 + 7! - 5 - (\sqrt{9})!. \\
95754 &:= -(\sqrt{9})!!/5! + 7! \times (-5 + 4!). \\
95937 &:= (\sqrt{9})! \times 5^{(\sqrt{9})!} + 3^7. \\
95994 &:= -(\sqrt{9})! + (5!^{\sqrt{9}})/(9 \times \sqrt{4}). \\
95999 &:= -\left( \sqrt{9} - 5!^{\sqrt{9}}/(\sqrt{9})! \right) / \sqrt{9}. \\
96475 &:= (\sqrt{9})!! \times (6 + \sqrt{4^7}) - 5. \\
96480 &:= (\sqrt{9})!! \times (6 + \sqrt{4^{(8-0!)}}). \\
96759 &:= 96 \times 7!/5 - 9. \\
97344 &:= ((9 + 7 - 3) \times 4!)^{\sqrt{4}}. \\
97447 &:= -(\sqrt{9})!! + (7 + 4)^4 \times 7. \\
97917 &:= -\sqrt{9} + (7! + (\sqrt{9})!) \times 17. \\
97920 &:= ((\sqrt{9})!! + 7!) \times (-\sqrt{9} + 20). \\
97947 &:= \sqrt{9^7} + 9!/4 + 7!. \\
98301 &:= \sqrt{9} \times (8^{3!-0!} - 1). \\
98302 &:= \sqrt{9} \times 8^{3!-0!} - 2. \\
98313 &:= 9 + 8^{3!-1} \times 3. \\
98334 &:= (9 \times 8^{3!} + 3!!)/4!. \\
98385 &:= \sqrt{\sqrt{9^8}} + 3 \times 8^5. \\
98444 &:= ((\sqrt{9})! + 8^4) \times 4! - 4. \\
98448 &:= ((\sqrt{9})! + 8^4) \times (-4 + 8)!. \\
98496 &:= -(\sqrt{9})!^8/4 + (\sqrt{9})!! \times 6!. \\
98517 &:= \sqrt{9} \times (8^5 + \sqrt{1 + 7!}). \\
98535 &:= \sqrt{9^8} \times 5 \times 3 + 5!.
\end{aligned}$$

$$\begin{aligned}
98598 &:= \sqrt{9} \times (8^5 + 98). & 99360 &:= (\sqrt{9})!! \times (\sqrt{9} \times 3! + (6 - 0!)!). \\
98634 &:= -(\sqrt{9})! + 8! + 6! \times 3^4. & 99378 &:= 9 + \sqrt{9^{3+7}} + 8!. \\
98640 &:= (\sqrt{9})!! \times (-8 + 6 \times 4! + 0!). & 99584 &:= (\sqrt{9})!! \times (\sqrt{9})!!/5 - 8^4. \\
98784 &:= \left( \sqrt{(\sqrt{9})!^8 \times 7 + 8!} \right) \times \sqrt{4}. & 99594 &:= -(\sqrt{9})! + 9!/5! \times (9 + 4!). \\
99127 &:= ((\sqrt{9})!!/(\sqrt{9})! - 1)^2 \times 7. & 99720 &:= (-9 \times (\sqrt{9})! + 7!) \times 20. \\
99342 &:= 9! - ((\sqrt{9})! + 3!)^{\sqrt{4}}/2. & 99846 &:= (9 + (-\sqrt{9} + 8)!)^{\sqrt{4}} \times 6.
\end{aligned}$$

### 5.3. Selfie representations in reverse order of digits

$$\begin{aligned}
25 &:= 5^2. & 3159 &:= \sqrt{9^5} \times 13. & 4796 &:= -6!/\sqrt{9} + 7! - 4. \\
64 &:= \sqrt{4^6}. & 3237 &:= (7! - 3!)/2 + 3!!. & 4797 &:= 7! - \sqrt{9^{7-4}}. \\
125 &:= 5^{2+1}. & 3369 &:= (9 + 6)^3 - 3!. & 4802 &:= 2 \times (0! - 8)^4. \\
126 &:= 6 \times 21. & 3372 &:= 2 \times (7!/3 + 3!). & 4957 &:= 7! - 59 - 4!. \\
153 &:= 3 \times 51. & 3375 &:= (5 + 7 + 3)^3. & 4967 &:= 7! - 69 - 4. \\
289 &:= (9 + 8)^2. & 3378 &:= (8 + 7)^3 + 3. & 4992 &:= (-2^9 + (\sqrt{9})!!) \times 4!. \\
337 &:= 7^3 - 3!. & 3384 &:= 4! + 8!/(3! + 3!). & 5175 &:= 5! + 7! + 15. \\
624 &:= 4! \times 26. & 3483 &:= \sqrt{3^8} \times 43. & 5785 &:= \sqrt{5^8} + 7! + 5!. \\
625 &:= \sqrt{5^{2+6}}. & 3845 &:= \sqrt{5^{\sqrt{4}+8}} + 3!!. & 5864 &:= -(\sqrt{4} - 6!) \times 8 + 5!. \\
688 &:= 8 \times 86. & 3867 &:= (-7 + \sqrt{6^8}) \times 3. & 5880 &:= 5! + 8!/(8 - 0!). \\
719 &:= (\sqrt{9})!! - 17. & 3891 &:= (1 + \sqrt{(\sqrt{9})!^8}) \times 3. & 6048 &:= 8!/40 \times 6. \\
864 &:= 4! \times \sqrt{\sqrt{6^8}}. & 3894 &:= (\sqrt{4} + \sqrt{(\sqrt{9})!^8}) \times 3. & 6144 &:= 4^{4+1} \times 6. \\
1024 &:= \sqrt{\sqrt{4^{20}}} \times 1. & 3977 &:= 7! - 7^{\sqrt{9}} - 3!!. & 6475 &:= -5 + (7 + \sqrt{4}) \times 6!. \\
1345 &:= 5^4 + 3!! \times 1. & 4092 &:= \sqrt{2^{(\sqrt{9}+0)!}} - 4. & 6478 &:= 8!/7 - \sqrt{4} + 6!. \\
1359 &:= 9 \times (5! + 31). & 4215 &:= 5! - 1 + \sqrt{2^{4!}}. & 6655 &:= 5 \times \sqrt{(5 + 6)^6}. \\
1395 &:= 5 \times 9 \times 31. & 4216 &:= (6 - 1)! + \sqrt{2^{4!}}. & 6715 &:= -5 + (1 + 7)!/6. \\
1436 &:= 6! + 3!! - 4 \times 1. & 4331 &:= -1 + 3! \times (3!! + \sqrt{4}). & 6748 &:= (8! + 4! \times 7)/6. \\
1477 &:= 7 \times (7!/4! + 1). & 4356 &:= \sqrt{((6 + 5) \times 3!)^4}. & 6992 &:= 2^9 + 9 \times 6!. \\
2189 &:= \sqrt{9^{8-1}} + 2. & 4394 &:= (4 + 9)^3 \times \sqrt{4}. & 7335 &:= 5 \times (-3!! + 3^7). \\
2197 &:= (7 + (\sqrt{9})!)^{1+2}. & 4478 &:= 8!/(7 + \sqrt{4}) - \sqrt{4}. & 7992 &:= ((2 + 9)! + 9!)/7!. \\
2403 &:= (3! + 0!)^4 + 2. & 4489 &:= \sqrt{(\sqrt{9} + \sqrt{8^4})^4}. & 8057 &:= 8!/(0 + 5) - 7. \\
2517 &:= (7! - 1 - 5)/2. & 4598 &:= 8!/9 + 5! - \sqrt{4}. & 8058 &:= 8!/5 - (\sqrt{0! + 8})!. \\
2575 &:= -5 + (7! + 5!)/2. & 4624 &:= (4 + 2^6)^{\sqrt{4}}. & 8496 &:= 6! + \sqrt{(\sqrt{9})!^{\sqrt{4}+8}}. \\
2736 &:= 6^3 + 7!/2. & 4675 &:= -5 + 7! - 6!/\sqrt{4}. & 8576 &:= 67 \times (5! + 8). \\
2876 &:= (6! + 7! - 8)/2. & 4782 &:= -2^8 + 7! - \sqrt{4}. & 9375 &:= \sqrt{5^{7+3}} \times 9. \\
2916 &:= (6 \times 1 \times 9)^2. & 4784 &:= \sqrt{(\sqrt{4^8} - 7!)^{\sqrt{4}}}. & 9575 &:= 5 \times 7! - 5^{\sqrt{9}}!. \\
3072 &:= 2^7 \times (0! + 3)!. & & & 9865 &:= 5^6 - 8 \times (\sqrt{9})!!
\end{aligned}$$

$$\begin{aligned}
10344 &:= 4! \times (430 + 1). & 13248 &:= (8! - 4!^2)/3 \times 1. \\
10369 &:= 9!/(6 \times 3! - 0!) + 1. & 13368 &:= (8! - 6^3)/3 \times 1. \\
10785 &:= 5!/8 \times ((7 - 0!)! - 1). & 13398 &:= 8!/\sqrt{9} - 3! \times (3! + 1). \\
10919 &:= 9! \times ((\sqrt{9})! - 0!)! - 1. & 13432 &:= ((2^3)! - 4!)/3 \times 1. \\
10935 &:= 5 \times 3^{(9-0!-1)}. & 13438 &:= 8!/3 - 4 + 3 - 1. \\
11163 &:= 3 \times 61^{1+1}. & 13453 &:= -3 + (5! - 4)^{3-1}. \\
11339 &:= 9!/(33 - 1) - 1. & 13456 &:= (-6 + 5! + \sqrt{4})^{3-1}. \\
11869 &:= ((\sqrt{9})! + 6!)/8! - 11. & 13458 &:= (8! + 54)/3 \times 1. \\
12504 &:= 4! \times (0 + 521). & 13459 &:= \sqrt{9} + (5! - 4)^{3-1}. \\
12543 &:= (3! + \sqrt{4} - 5!)^2 - 1. & 13464 &:= 4! + (\sqrt{6^4})/3 \times 1. \\
12595 &:= -5 + ((\sqrt{9})!! - 5!) \times 21. & 13488 &:= 8 \times (8!/4! + 3!) \times 1. \\
12605 &:= 5 \times ((0! + 6!)/2 + 1). & 13536 &:= 6! + 3!^5 + (3! + 1)!. \\
12759 &:= -9 + (5! - 7!)^2 - 1. & 13704 &:= \sqrt{4!^{(-0!+7)}} - (3! - 1)!. \\
12769 &:= ((\sqrt{9})!!/6 - 7)^2 \times 1. & 13725 &:= 5 \times ((2 \times 7)^3 + 1). \\
12939 &:= (\sqrt{9})!! \times 3 \times (\sqrt{9})! - 21. & 13834 &:= 4!^3 + 8 + 3 - 1. \\
12981 &:= 18 \times (\sqrt{9})!! + 21. & 13864 &:= \sqrt{4!^6} + 8 \times (3! - 1). \\
12995 &:= (5! - 9 + \sqrt{9})^2 - 1. & 13925 &:= (5! - 2)^{(\sqrt{9})/3} + 1. \\
13239 &:= 9 \times (3!! \times 2 + 31). & 13942 &:= -2 + 4!^{\sqrt{9}} + (3! - 1)!.
\end{aligned}$$

$$\begin{aligned}
13944 &:= \sqrt{4!^{\sqrt{4 \times 9}} + (3! - 1)!}. \\
13945 &:= 5! + 4!^{9/3} + 1. \\
14155 &:= -5 + (5! - 1)^{\sqrt{4}} - 1. \\
14156 &:= -6 + (5! - 1)^{\sqrt{4}} + 1. \\
14159 &:= -\sqrt{9} + (5! - 1)^{\sqrt{4}} + 1. \\
14161 &:= (-1 + (6 - 1)!)^{\sqrt{4}} \times 1. \\
14255 &:= -5! + 5!^2 - 4! - 1. \\
14325 &:= 5!^2 - 3 \times (4! + 1). \\
14373 &:= -3^7 + 3!! \times (4! - 1). \\
14375 &:= 5^{7-3} \times (4! - 1). \\
14393 &:= -3! + ((\sqrt{9})!!/3!)^{\sqrt{4}} - 1. \\
14419 &:= ((\sqrt{9})!! + 1) \times (4! - 4) - 1. \\
14423 &:= (3 + 2)!^{\sqrt{4}} + 4! - 1. \\
14425 &:= 5^2 \times (4!^{\sqrt{4}} + 1). \\
14435 &:= 5 \times ((3!! + \sqrt{4}) \times 4 - 1). \\
14445 &:= 5!^{\sqrt{4}} + 44 + 1. \\
14495 &:= (5 \times (\sqrt{9})!! + 4!) \times 4 - 1. \\
14519 &:= ((\sqrt{9})! - 1)! + 5!^{\sqrt{4}} - 1. \\
14525 &:= 5!^2 + 5^{4-1}. \\
14564 &:= 4 \times (6! \times 5 + 41). \\
14579 &:= \sqrt{9} \times 7! - 541. \\
14664 &:= \sqrt{4!^6} + 6! + (4 + 1)!. \\
14856 &:= (-6 + \sqrt{5^8}) \times 4! \times 1. \\
14885 &:= (5! + \sqrt{\sqrt{8+8}})^{\sqrt{4}} + 1. \\
14909 &:= (9! - (0! + (\sqrt{9})!!))/4! - 1. \\
14939 &:= (9!/3! - (\sqrt{9})!!)/4 - 1. \\
14979 &:= \sqrt{9} \times (7! - (\sqrt{9})! - 41). \\
14995 &:= -5^{\sqrt{9}} + 9!/4! \times 1. \\
15069 &:= \sqrt{9} \times (6 + 0!)! - 51. \\
15239 &:= 9!/(3! - 2)! + 5! - 1. \\
15264 &:= \sqrt{4!^6} + 2 \times (5 + 1)!. \\
15425 &:= 5!^2 + 4^5 + 1. \\
15562 &:= 2 \times (6^5 + 5) \times 1. \\
15565 &:= 5^6 - 5!/\sqrt{5} - 1. \\
15568 &:= (8 + 6^5) \times \sqrt{5} - 1. \\
15614 &:= (4 + 1)^6 - \sqrt{5!} + 1. \\
15629 &:= (\sqrt{9} + 2)^6 + 5 - 1. \\
15984 &:= (\sqrt{4} \times 8! - (\sqrt{9})!!)/5 \times 1. \\
16128 &:= 8! \times 2/(\sqrt{16} + 1). \\
16225 &:= 52^2 \times 6 + 1. \\
16374 &:= 4^7 - 3 - 6 - 1. \\
16448 &:= \sqrt{8^4} + 4^{6+1}. \\
16495 &:= 5! - 9 + 4^{6+1}. \\
16499 &:= -(\sqrt{9})!! + (\sqrt{9})!! \times 4! - 61. \\
16585 &:= 5! \times 8 + 5^6 \times 1. \\
16742 &:= (-2 + 4!) \times 761. \\
16783 &:= -3 \times 8 + 7^{6-1}. \\
16794 &:= -4 - 9 + 7^{6-1}. \\
16797 &:= -7 - \sqrt{9} + 7^{6-1}. \\
16813 &:= 3! + (-1 + 8)^{6-1}. \\
16927 &:= 7^{2+\sqrt{9}} + (6 - 1)!. \\
17974 &:= 4 \times 7! - \sqrt{9^7} + 1. \\
18729 &:= 9^{(-2+7)} - 8! \times 1. \\
18742 &:= -2 + 4! \times 781. \\
18744 &:= (\sqrt{4 \times 4})! \times 781. \\
18864 &:= \sqrt{4!^6} + 8!/8 \times 1. \\
18954 &:= \sqrt{4} \times (5! - \sqrt{9}) \times 81. \\
19264 &:= 4 \times (6! + \sqrt{2^{(\sqrt{9}+1)!}}). \\
19323 &:= -3!!/2 + 3^9 \times 1. \\
19349 &:= (\sqrt{9} + 4!) \times 3!! - 91. \\
19438 &:= (8! - 3!)/\sqrt{4} - (\sqrt{9})!! + 1. \\
19474 &:= (4 + 7!/4!) \times 91. \\
19656 &:= \sqrt{6^5 \times 6} \times 91. \\
19736 &:= (6 + 3^7) \times 9 - 1. \\
19747 &:= 7 \times (4! + 7) \times 91. \\
19803 &:= 3^{0!+8} + ((\sqrt{9})! - 1)!. \\
20148 &:= 8!/\sqrt{4} - 10 - 2. \\
20158 &:= 8! \times 5/10 - 2. \\
20159 &:= ((\sqrt{9} + 5)! - 1 - 0!)/2. \\
20268 &:= (8! + 6^{2+0!})/2. \\
20448 &:= (8! + 4!^{\sqrt{4}})/(0 + 2). \\
20449 &:= (9 \times 4 \times 4 - 0!)^2. \\
20485 &:= 5 \times (8^4 + (0/2)!). \\
20665 &:= 5^6 + (6 + (0/2)!). \\
20736 &:= (6 \times 3 \times (7 + 0!))^2. \\
20785 &:= \sqrt{5^8} + (7 + 0!)!/2. \\
20873 &:= (3!! - 7) + 8!/(0 + 2). \\
20876 &:= 6! + (-7 + 8! - 0!)/2. \\
20883 &:= 3!! + (8! + \sqrt{8 + 0!})/2. \\
21603 &:= 30 \times 6! + 1 + 2. \\
21844 &:= (-4 + 4^8)/(1 + 2). \\
21848 &:= (8 + 4^8)/(1 + 2). \\
21952 &:= (25 + \sqrt{9})^{1+2}. \\
22264 &:= 46 \times 22^2. \\
22398 &:= 8!/9 \times (3 + 2) - 2. \\
22472 &:= (2 + 7!/4!)^2/2. \\
22528 &:= (8/2)^5 \times 22. \\
22599 &:= 9 \times (-9 + (5 + 2)!/2). \\
22675 &:= -5 + (7! + (6 + 2)!)/2. \\
22678 &:= (8! + 7 \times 6!)/2 - 2. \\
22679 &:= (9 \times 7! - 6)/2 + 2. \\
22757 &:= 7 \times (57^2 + 2). \\
22966 &:= (6^6 - (\sqrt{9})!!)/2 - 2. \\
22969 &:= ((\sqrt{9})!^6 - (\sqrt{9})!! + 2)/2. \\
23008 &:= ((\sqrt{8 + 0!})!! - 0!) \times 32. \\
23066 &:= -6 + (6! + 0!) \times 32. \\
23069 &:= -\sqrt{9} + (6! + 0!) \times 32. \\
23072 &:= ((\sqrt{2 + 7})!! + 0!) \times 32. \\
23296 &:= 6^{(\sqrt{9})!}/2 - 32. \\
23304 &:= -4! - 0 + 3!^{3!}/2. \\
23319 &:= -9 + 1 \times 3!^{3!}/2. \\
23331 &:= 1 \times 3 + 3!^{3!}/2. \\
23364 &:= 4 \times (-6! + 3^{3!+2}). \\
23377 &:= 7 \times 7 + 3!^{3!}/2. \\
23409 &:= (9 + (0 + 4)! \times 3!)^2. \\
23436 &:= 63 \times (4! + 3!)/2. \\
23513 &:= -(3! + 1)^5 + (3! + 2)! \\
23762 &:= (26 + 7) \times 3!! + 2. \\
24191 &:= -1 + 9!/(-1 + 4^2). \\
24194 &:= \sqrt{4} + 9!/(-1 + 4^2). \\
24332 &:= 23^3 \times \sqrt{4} - 2. \\
24346 &:= (6! - 4) \times 34 + 2. \\
24367 &:= 7 \times (63 - 4)^2. \\
24575 &:= 5 \times (7! - \sqrt{5^{4+2}}). \\
24579 &:= (-9 + 7!) \times 5 - 4!^2.
\end{aligned}$$

$$\begin{aligned}
 24649 &:= (9 + 4 + 6 \times 4!)^2. \\
 24695 &:= -5^{(9-6)!} + (4 \times 2)!. \\
 24768 &:= 8! - 6^{(7-\sqrt{4})} \times 2. \\
 24964 &:= (\sqrt{4^6} + 94)^2. \\
 25088 &:= 8 \times (8!/(0! + 5)!)^2. \\
 25575 &:= 5 \times (75 + (5 + 2)!). \\
 25577 &:= (7! + 75) \times 5 + 2. \\
 25915 &:= -5 + (-1 + 9)! - 5!^2. \\
 25917 &:= (7 + 1)! - \sqrt{9} - 5!^2. \\
 25938 &:= 8! + 3 \times (\sqrt{9})! - 5!^2. \\
 25998 &:= (8!/9 + (\sqrt{9})!) \times 5 - 2. \\
 26064 &:= (4 + 6!) \times (0 + 6^2). \\
 26136 &:= (6 + 3!) \times 1 \times 6^2. \\
 26208 &:= (8 + (0! + 2)!) \times 6^2. \\
 26279 &:= (9!/7 - 2 + 6!)/2. \\
 26352 &:= (2 + 5!) \times 3! \times 6^2. \\
 26488 &:= 8! - 8 - 4!^{6/2}. \\
 26489 &:= -9 + 8! - \sqrt{4!^6} + 2. \\
 26635 &:= -5 + 3!! + 6! \times 6^2. \\
 26664 &:= 4! + 6! + 6! \times 6^2. \\
 26848 &:= 8 \times (-4 + 8!/(6 \times 2)). \\
 26898 &:= 8! + (9 - 8!/6) \times 2. \\
 26937 &:= 73 \times (9 + 6!/2). \\
 26964 &:= (4! + 6)^{\sqrt{9}} - 6^2. \\
 26973 &:= 37 \times 9^{6/2}. \\
 26994 &:= \sqrt{((4! + (\sqrt{9})!)^{\sqrt{9}} - 6)^2}. \\
 27198 &:= 8! - \sqrt{9^{1+7}} \times 2. \\
 27456 &:= (6 + 5) \times (-4! + 7!/2). \\
 27497 &:= -7 - (\sqrt{9})!! + (4! \times 7)^2. \\
 27534 &:= (4!^3 - 57) \times 2. \\
 27634 &:= (\sqrt{4!^{\sqrt{36}} - 7}) \times 2. \\
 27642 &:= 2 \times (\sqrt{4!^6} - \sqrt{7 + 2}). \\
 27662 &:= (\sqrt{(-2 + 6!)^6 + 7}) \times 2. \\
 27715 &:= 5 \times (-1 + 7!) + 7!/2. \\
 27728 &:= 8^{(-2+7)} - (\sqrt{7^2})!. \\
 27735 &:= 5 \times (3 + 7!) + 7!/2. \\
 27783 &:= \sqrt{3^8} \times 7 \times 7^2. \\
 27889 &:= ((\sqrt{9})!! - 887)^2. \\
 28479 &:= ((\sqrt{9})! + 7)^4 - 82. \\
 28497 &:= (7 + (\sqrt{9})!)^4 - 8^2. \\
 28561 &:= (1 + \sqrt{6!/5})^{8/2}. \\
 28575 &:= (5! + 7) \times (5!/8)^2. \\
 28656 &:= 6^5 + 6! + 8!/2. \\
 28735 &:= 5^{3!} \times 7 - 8! \times 2. \\
 28764 &:= (-4! + 6 \times \sqrt{7^8}) \times 2. \\
 28944 &:= (4!^4 + 9!)/(8/2)!. \\
 28974 &:= -4^7 + 9!/8 - 2. \\
 29184 &:= 4! + 81 \times (\sqrt{9})!!/2. \\
 29196 &:= (6! + 91) \times (\sqrt{9})!^2. \\
 29523 &:= (3^{2 \times 5} - \sqrt{9})/2. \\
 29529 &:= (9^{\sqrt{25}} + 9)/2. \\
 29561 &:= (1 + 6!) \times (5 + (\sqrt{9})!^2). \\
 29646 &:= (6!/\sqrt{4} + 6) \times 9^2. \\
 29735 &:= -5^{3!} + 7! \times \sqrt{9^2}. \\
 29736 &:= 6 \times (-3 + 7! - 9^2). \\
 29754 &:= (\sqrt{4 + 5})! \times (7! - 9^2). \\
 29768 &:= 8 \times (67 - (\sqrt{9})!)^2. \\
 29789 &:= (\sqrt{9} \times 8 + 7)^{\sqrt{9}} - 2. \\
 29876 &:= 6 \times 7! - (8 + (\sqrt{9})!)/2. \\
 29929 &:= (92 + 9 \times 9)^2. \\
 29946 &:= 6 \times (-49 + (9 - 2)!). \\
 29984 &:= -\sqrt{4^8} + (\sqrt{9})! \times (9 - 2)!. \\
 29997 &:= 7! \times (\sqrt{9})! - \sqrt{9} \times 9^2. \\
 30137 &:= 7! \times 3! - 103. \\
 30175 &:= -5 + (7! - 10) \times 3!. \\
 30176 &:= 6 \times 7! - (1 + 0!)^{3!}. \\
 30239 &:= 9!/(3! \times 2) - (0/3)!. \\
 30324 &:= 42 \times (3 - 0! + 3!)). \\
 30365 &:= \sqrt{5^6} + 3! \times (0! + 3!)). \\
 30475 &:= -5 + (7! + 40) \times 3!. \\
 30576 &:= (6 + 7! + 50) \times 3!. \\
 30738 &:= (83 + 7!) \times (0 + 3)!). \\
 30786 &:= (6!/8 + 7! + 0!) \times 3!. \\
 31782 &:= (2^8 + 7! + 1) \times 3!. \\
 32128 &:= 8! - 2^{1+2 \times 3!}. \\
 32258 &:= -8!/5 + 2 + (2^3)!). \\
 32403 &:= (3!/(0 + 4))^2 + 3. \\
 32406 &:= (6!/(0 + 4))^2 + 3!. \\
 32537 &:= -7 - 3!^5 + (2^3)!). \\
 32568 &:= 8! - 6^5 + (-2 + 3!)!). \\
 32648 &:= 8 \times 4^6 - (2 + 3)!). \\
 32758 &:= 8^5 - \sqrt{7^2} - 3. \\
 32832 &:= 2^{3!} + 8^{2+3}. \\
 32849 &:= \sqrt{9^4} + 8^{2+3}. \\
 33458 &:= 8! + (5 - 4!)^3 - 3. \\
 33484 &:= -4 + (8 \times 4)^3 + 3!!. \\
 33579 &:= 9 \times 7 \times 533. \\
 33585 &:= 5 \times (8 \times (5! + 3!)) - 3). \\
 33587 &:= -7 + 8! \times 5/3! - 3!. \\
 33589 &:= (-\sqrt{9})! + 8!) \times 5/3! - 3!. \\
 33594 &:= (\sqrt{4^{\sqrt{9}}})! \times 5/3! - 3!. \\
 33597 &:= 7!/9 \times \sqrt{5} \times 3! - 3. \\
 33598 &:= ((8! - \sqrt{9}) \times 5 + 3)/3!. \\
 33599 &:= (9!/9 \times 5 - 3!)/3!. \\
 33744 &:= 4! \times (\sqrt{4} \times 7^3 + 3!)). \\
 33769 &:= (9! \times 67 + 3!)/3!!. \\
 33792 &:= 2^{\sqrt{9+7}} \times 33. \\
 34047 &:= (7!/4 + 0!) \times (4! + 3). \\
 34416 &:= 61 \times 4!^{\sqrt{4}} - 3!!. \\
 34435 &:= -5^3 + 4! \times \sqrt{4} \times 3!!. \\
 34452 &:= 2 \times (-54 + 4! \times 3!)). \\
 34496 &:= (6! + (\sqrt{9})!) \times 4! - 4^3. \\
 34524 &:= 4!/2 \times (5! \times 4! - 3). \\
 34575 &:= 5 \times (7! + 5^4 \times 3). \\
 34578 &:= (8!/7 + \sqrt{5 + 4}) \times 3!. \\
 34624 &:= 4! \times 2 \times 6! + 4^3. \\
 34632 &:= 2 \times (36 + 4! \times 3!)). \\
 34656 &:= 6!/5 \times (6! + \sqrt{4})/3. \\
 34768 &:= -\sqrt{8^6} + 7 \times (4 + 3)!). \\
 34937 &:= (-7 + 3!!) \times ((\sqrt{9})! + 43). \\
 34974 &:= 47 \times ((\sqrt{9})!! + 4!) + 3!. \\
 34993 &:= (3 + (9 + 9)^4)/3. \\
 35394 &:= 49 \times 3! + 5! - 3!. \\
 35427 &:= 7^2 \times (\sqrt{4 + 5} + 3!)). \\
 35496 &:= (-6! + 9!)/(\sqrt{4} \times 5) - 3!!.
 \end{aligned}$$

$$\begin{aligned}
35557 &:= 7^5 + 5^5 \times 3!. \\
35648 &:= 8 \times (4^6 + 5! \times 3). \\
35792 &:= 2^9 - 7! + (5 + 3)!. \\
35864 &:= -4^6 + 8! - 5! \times 3. \\
35937 &:= (-7 - 3!!/9 + 5!)^3. \\
35943 &:= 3!!/5! + (9 + 4!)^3. \\
35973 &:= -3^7 + (\sqrt{9})!! \times 53. \\
36007 &:= 7 \times (0! + (0! + 6)!) + 3!!. \\
36015 &:= 5 \times (10 \times 6! + 3). \\
36153 &:= -3!! + 5! \times (6! + 3). \\
36248 &:= 8! + 4! - (-2 + 6)^{3!}. \\
36289 &:= 9!/(8 + 2) + 6/3!. \\
36481 &:= (-1 + 8 \times 4!)^{6/3}. \\
36501 &:= \sqrt{(1 - (-0! + 5)!)^6} \times 3. \\
36714 &:= (-\sqrt{4} + 17 \times 6!) \times 3. \\
36715 &:= -5 + 17 \times 6! \times 3. \\
36846 &:= (-6 + 4! \times \sqrt{8^6}) \times 3. \\
36944 &:= (4!^4 + (\sqrt{9})!!)/(6 + 3). \\
37248 &:= 8! - 4 \times 2^7 \times 3!. \\
37488 &:= 8! + (8^4 - 7!) \times 3. \\
37584 &:= (4! \times 8)^{(-5+7)} + 3!!. \\
37668 &:= 86 \times 6 \times 73. \\
37795 &:= -5 + 9 \times (7! - 7!/3!). \\
37938 &:= 8! - 397 \times 3!. \\
37968 &:= 8!/6! \times ((\sqrt{9})!! - 7 \times 3!). \\
38139 &:= -\sqrt{9^{3!+1}} + 8! + 3!. \\
38248 &:= 8! - 4! - 2^{8+3}. \\
38278 &:= 8 \times (7! - 2^8) + 3!. \\
38328 &:= 8! - (-2 + 3!)! \times 83. \\
38427 &:= (7 \times 2)^4 + 8 + 3. \\
38448 &:= 8! - 4! \times 48 - 3!!. \\
38472 &:= (2 \times 7)^4 + 8!/3!!. \\
38523 &:= -3!!/2 \times 5 + 8! + 3. \\
38526 &:= -6!/2 \times 5 + 8! + 3!. \\
38528 &:= 8^{\sqrt{25}} + 8 \times 3!!. \\
38584 &:= (48 + 5) \times (8 + 3!!). \\
38592 &:= -(-2 + 9)!/5 + 8! - 3!!. \\
38767 &:= -7!/6 + 7 + 8! - 3!!. \\
38855 &:= -5! - \sqrt{5^8} + 8! - 3!!. \\
38863 &:= -3^6 - 8 + 8! - 3!!. \\
38934 &:= (-4! \times 3 + \sqrt{9^8}) \times 3!. \\
38936 &:= 6! \times 3! \times 9 + 8!/3!!. \\
38963 &:= 3!! \times 6 \times 9 + 83. \\
38975 &:= -5^{\sqrt{7+9}} + 8! - 3!!. \\
38976 &:= (6! - (\sqrt{7+9})!) \times 8!/3!!. \\
38992 &:= -(2 + 9)^{\sqrt{9}} + 8! + 3. \\
38994 &:= -(4 \times \sqrt{9})!/9! + 8! - 3!. \\
38995 &:= -(5 + (\sqrt{9})!)^{\sqrt{9}} + 8! + 3!. \\
39088 &:= 8! - 8^{\sqrt{0+9}} - 3!!. \\
39298 &:= ((8 + 9) \times 2)^{\sqrt{9}} - 3!. \\
39304 &:= (40 + 3 - 9)^3. \\
39356 &:= 6 \times (-5 + 3^9)/3. \\
39392 &:= 2^9 + 3!! \times 9 \times 3!. \\
39435 &:= 53 \times (4! + (\sqrt{9})!!) + 3. \\
39472 &:= -2^7 + (\sqrt{4^{\sqrt{9}}})! - 3!!. \\
39585 &:= 5 \times (8!/5 - \sqrt{9}) - 3!!. \\
39628 &:= 8! + \sqrt{2^6 + (\sqrt{9})!!} - 3!!. \\
39728 &:= 8! + 2^7 - (9 - 3)!. \\
39758 &:= 8! - 5 - 7!/9 + 3. \\
39805 &:= -\sqrt{5! + 0!} + 8! - 9!/3!!. \\
39809 &:= -(\sqrt{9})! - 0! + 8! - 9!/3!!. \\
39813 &:= -3 + 1 \times 8! - 9!/3!!. \\
39814 &:= -\sqrt{4} + 1 \times 8! - 9!/3!!. \\
39819 &:= \sqrt{9} + 1 \times 8! - 9!/3!!. \\
39824 &:= 4 \times 2 + 8! - 9!/3!!. \\
39879 &:= 9 \times 7 + 8! - 9!/3!!. \\
39928 &:= 8! - 2^9 + (\sqrt{9})!!/3!. \\
39936 &:= 6^{3!} - 9!/(9 \times 3!). \\
39982 &:= -2 + 8! \times ((\sqrt{9})!! - (\sqrt{9})!)/3!!. \\
39994 &:= (-4 \times (\sqrt{9})!! + 9!)/9 - 3!. \\
40024 &:= 4! + 200^{\sqrt{4}}. \\
40348 &:= 40 - 3 \times 4 + 8!. \\
40348 &:= 8! + \sqrt{4} + 30 - 4. \\
40349 &:= (\sqrt{9})! + (\sqrt{4^3})! - 0! + 4!. \\
40349 &:= 4! - 0! + 3! + (\sqrt{4^{\sqrt{9}}})!. \\
40352 &:= 2^5 + (3 + 0! + 4)!. \\
40378 &:= 8 \times 7 \times (3!! + 0!) + \sqrt{4}. \\
40498 &:= 8! + (\sqrt{9})!!/4 + 0 - \sqrt{4}. \\
40738 &:= 8! + 3! \times 70 - \sqrt{4}. \\
40828 &:= 8! + 2^{8+0!} - 4. \\
40878 &:= 8! + 7 \times 80 - \sqrt{4}. \\
40945 &:= 5^4 + (9 - (0/4)!)!. \\
40964 &:= 4^6 \times (9 + 0!) + 4. \\
40978 &:= 8! + 7 \times (90 + 4). \\
41468 &:= (8 \times 6^4 - 1) \times 4. \\
41538 &:= 8! - 3! + 5! \times 4!. \\
41544 &:= (4 + 4)! + 5! \times 4!. \\
41548 &:= 8! + 4! \times 5! + 4. \\
41578 &:= 8! + 7!/(5 - 1) - \sqrt{4}. \\
41638 &:= 8! + (3!! - 6!) \times \sqrt{4}. \\
41688 &:= 8! + (8!/6! + 1) \times 4!. \\
41748 &:= 8! + \sqrt{4} \times 714. \\
41756 &:= 6! \times (57 + 1) - 4. \\
41958 &:= 8! + (5! - \sqrt{9}) \times 14. \\
42288 &:= 8! + 82 \times 24. \\
42378 &:= 8! + 7^3 \times (2 + 4). \\
42436 &:= (6 \times 34 + 2)^{\sqrt{4}}. \\
42736 &:= 6 \times 3!! + (7 \times 2)^4. \\
42837 &:= (7! + (-3 + 8!) \times 2)/\sqrt{4}. \\
42848 &:= (8! + 4^8 \times 2)/4. \\
42952 &:= (-2 + 5!) \times ((\sqrt{9})!!/2 + 4). \\
42955 &:= -5 + 5! \times ((\sqrt{9})!!/2 - \sqrt{4}). \\
42976 &:= (-6! + 7!) \times 9 + \sqrt{2^{4!}}. \\
43179 &:= -\sqrt{9} \times (7 - (-1 + 3!)!^{\sqrt{4}}). \\
43185 &:= 5!/8 \times (-1 + 3!! \times 4). \\
43344 &:= (\sqrt{\sqrt{4^{4!}} + 3!!}) \times \sqrt{3^4}. \\
43388 &:= 8! + 8^3 \times 3! - 4. \\
43392 &:= 2^9 \times 3! + (3! + \sqrt{4})!. \\
43488 &:= (8! + (8 - \sqrt{4})^{3!})/\sqrt{4}. \\
43659 &:= ((\sqrt{9})! + 5) \times \sqrt{63^4}. \\
43681 &:= (1 - 8 + 6^3)^{\sqrt{4}}. \\
43728 &:= 8! + 2 \times (7!/3 + 4!). \\
43824 &:= (4! - 2) \times 83 \times 4!. \\
43904 &:= (4 \times (0! + (\sqrt{9})!))^3 \times \sqrt{4}.
\end{aligned}$$

$$\begin{aligned}
43916 &:= 61 \times (9 - 3)! - 4. \\
43923 &:= 3 \times (2 + \sqrt{9} \times 3)^4. \\
43959 &:= 9^5 - (9! - 3!)/4!. \\
43995 &:= 5^{(\sqrt{9})!} \times \sqrt{9} - 3!! \times 4. \\
44095 &:= -5 + (((\sqrt{9})! + 0!)/4!)^{\sqrt{4}}. \\
44176 &:= 6! + 7! + 14^4. \\
44517 &:= 71 \times (5^4 + \sqrt{4}). \\
44519 &:= (91 + 5!)^{\sqrt{4}} - \sqrt{4}. \\
44521 &:= (1 + (2 + 5)!/4!)^{\sqrt{4}}. \\
44736 &:= (6! - 3 \times 7) \times \sqrt{\sqrt{\sqrt{4!}}}. \\
44736 &:= (\sqrt{\sqrt{\sqrt{4!}}}) \times (-7 \times 3 + 6!). \\
44798 &:= (8! + 9!)/(7 + \sqrt{4}) - \sqrt{4}. \\
44937 &:= -7 + (3!^{\sqrt{9}} - 4)^{\sqrt{4}}. \\
44995 &:= -5 - ((\sqrt{9})!! - 9!/4)/\sqrt{4}. \\
45359 &:= 9!/(5 + 3) - 5 + 4. \\
45478 &:= 8! + 7! + \sqrt{4} + 5! - 4. \\
45592 &:= (-2 + 95 \times 5!) \times 4. \\
45595 &:= -5 + 95 \times 5! \times 4. \\
45696 &:= (4 + \sqrt{5} \times 6!) \times ((\sqrt{9})!! - 6). \\
45696 &:= (6! - (\sqrt{9})!) \times (\sqrt{6!} \times 5 + 4). \\
45732 &:= (4! + (5! + 7) \times 3!)/2. \\
45783 &:= 3^8 \times 7 - 5! - 4!. \\
45796 &:= (6^{\sqrt{9}} - 7 + 5)^{\sqrt{4}}. \\
45897 &:= 7 \times \sqrt{9^8} - 5!/4. \\
45962 &:= 2^6 \times (\sqrt{9})!! - 5! + \sqrt{4}. \\
45966 &:= 6^6 - (\sqrt{9})!! + 5!/4. \\
45979 &:= 9 \times 7! - (\sqrt{9})! + 5^4. \\
45996 &:= 6^{(\sqrt{9})!} - (\sqrt{9})!! + 5!/\sqrt{4}. \\
46076 &:= 6! \times (70 - 6) - 4. \\
46142 &:= \sqrt{\sqrt{2^{4!}}} \times (1 + 6!) - \sqrt{4}. \\
46148 &:= \sqrt{8^4} \times (1 + 6!) + 4. \\
46232 &:= (2 + 3!!) \times 2^6 + 4!. \\
46296 &:= 6^{\sqrt{9} \times 2} - 6!/\sqrt{4}. \\
46328 &:= -8 + 2^{3!} \times (6! + 4). \\
46337 &:= -7^3 + 3!^6 + 4!. \\
46476 &:= 6^{(7-4)!} - 6!/4. \\
46488 &:= 88^{\sqrt{4}} \times 6 + 4!. \\
46528 &:= 8^2 \times (5 + 6! + \sqrt{4}). \\
46533 &:= 3!^{3!} - 5! - 6/\sqrt{4}. \\
46539 &:= (\sqrt{9})!^{3!} - 5! + 6/\sqrt{4}. \\
46599 &:= (\sqrt{9})!^{(\sqrt{9})!} - (5! - 6)/\sqrt{4}. \\
46623 &:= -3^2 + 6^6 - 4!. \\
46643 &:= -\sqrt{3^4} + 6^6 - 4. \\
46671 &:= 17 + 6^6 - \sqrt{4}. \\
46681 &:= 1^8 + 6^6 + 4!. \\
46682 &:= 28 + 6^6 - \sqrt{4}. \\
46683 &:= \sqrt{\sqrt{\sqrt{3^8}}} + 6^6 + 4!. \\
46684 &:= 4 \times 8 + 6^6 - 4. \\
46685 &:= \sqrt{\sqrt{5^8}} + 6^6 + 4. \\
46686 &:= \sqrt{\sqrt{\sqrt{6^{8 \times 6}}}} + 6 + 4!. \\
46687 &:= \sqrt{\sqrt{\sqrt{7^8}}} + 6^6 + 4!. \\
46688 &:= \sqrt{8 \times 8} + 6^6 + 4!. \\
46689 &:= 9!/8! + 6^6 + 4!. \\
46691 &:= -1 + (\sqrt{9})!^6 + \sqrt{6^4}. \\
46693 &:= 39 + 6^6 - \sqrt{4}. \\
46736 &:= 6^{3!} + 76 + 4. \\
46797 &:= -7! + 9!/7 - 6/\sqrt{4}. \\
46871 &:= -1 + 7 \times (8!/6 - 4!). \\
46874 &:= \sqrt{4} + 7 \times (8!/6 - 4!). \\
46881 &:= \sqrt{(1 + 8)^8} + (\sqrt{64})!. \\
46883 &:= 3^8 + 8! + 6 - 4. \\
46889 &:= \sqrt{9^8} + 8! + \sqrt{64}. \\
46899 &:= \sqrt{9} \times (\sqrt{9} - 8)^6 + 4!. \\
46936 &:= 6^{3!} + 9!/6^4. \\
46997 &:= 7^{\sqrt{9}} + (\sqrt{9})!^6 - \sqrt{4}. \\
47369 &:= (\sqrt{9})!^6 + 3!! - \sqrt{\sqrt{7^4}}. \\
47516 &:= 6 \times (\sqrt{1 + 5!})!/7! - 4. \\
47538 &:= 8! + 3 \times (5 + 7^4). \\
47544 &:= 4! + (\sqrt{4!} + 5!)/(7! \times \sqrt{4}). \\
47639 &:= (-9 + 3!!) \times 67 + \sqrt{4}. \\
47799 &:= 9 \times (-9 + 7!) + 7!/\sqrt{4}. \\
47858 &:= -8^5 + (8! - 7) \times \sqrt{4}. \\
47868 &:= 8! - 6 \times (8 - 7!)/4. \\
47875 &:= -5 + 7! + 8! + 7!/\sqrt{4}. \\
47883 &:= -3! + 8! + \sqrt{87^4}. \\
47895 &:= (5! + 9!)/8 + 7!/\sqrt{4}. \\
47898 &:= 8! + 9 + 87^{\sqrt{4}}. \\
47916 &:= 6^{(\sqrt{1 \times 9})!} + 7!/4. \\
48333 &:= 3!^{3!} - 3 + 8!/4!. \\
48336 &:= 6^{3+3} + 8!/4!. \\
48339 &:= \sqrt{9} + 3!^{3!} + 8!/4!. \\
48344 &:= (4! - 4)^3 + 8! + 4!. \\
48366 &:= 6^6 + (3!! + 8!)/4!. \\
48596 &:= 69 \times 5! + 8! - 4. \\
48606 &:= 6 \times (0! + (6!/8)^{\sqrt{4}}). \\
48636 &:= 6 \times (3! + (6!/8)^{\sqrt{4}}). \\
48973 &:= 37^{\sqrt{9}} - 8!/4!. \\
49096 &:= (69 - 0!) \times ((\sqrt{9})!! + \sqrt{4}). \\
49392 &:= (-2 + 9)^3 \times (\sqrt{9})! \times 4!. \\
49528 &:= 82 \times (-5! + (\sqrt{9})!! + 4). \\
49542 &:= (\sqrt{\sqrt{2^{4!}}} + 5) \times ((\sqrt{9})!! - \sqrt{4}). \\
49556 &:= (6! + 5!) \times 59 - 4. \\
49609 &:= ((\sqrt{9})!! - 0!) \times 69 - \sqrt{4}. \\
49613 &:= (3!! - 1) \times 69 + \sqrt{4}. \\
49668 &:= -8 + 6! \times 69 - 4. \\
49824 &:= -4!^2 - 8! + 9!/4. \\
49905 &:= -(5 + 0!)! + (9 + (\sqrt{9})!)^4. \\
49906 &:= -6! + 0! + (9 + (\sqrt{9})!)^4. \\
49984 &:= 4^8 - \sqrt{(\sqrt{9})!^9} \times 4!. \\
50349 &:= -\sqrt{9} \times (4! - (3! + 0!)^5). \\
50625 &:= (5!/(2 + 6))^{(-0!+5)}. \\
50967 &:= 7 \times (6! + 9^{(-0!+5)}). \\
51697 &:= 7! + (\sqrt{9})!^6 + 1^5. \\
51719 &:= 9!/(1 \times 7) - 1 - 5!. \\
51839 &:= 9 \times 3!! \times 8 - 1^5. \\
51845 &:= (5 + 4!)/(8 - 1) + 5. \\
51879 &:= 9!/7 - 81 + 5!. \\
52079 &:= 9!/7 - 0! + 2 \times 5!. \\
52483 &:= 3^8 \times 4 \times 2 - 5. \\
52493 &:= (3 \times (\sqrt{9})!)^4/2 + 5. \\
52498 &:= 8 \times 9^4 + 2 \times 5.
\end{aligned}$$

$$\begin{aligned}
52928 &:= 8!/2 + ((\sqrt{9})! + 2)^5. \\
52944 &:= 4! + (4! - \sqrt{9})^2 \times 5!. \\
53337 &:= 73 \times 3^3! + 5!. \\
53688 &:= 8 \times (8!/6 + 3!) - 5!. \\
53712 &:= -(2 + 1)!! + 7 \times 3!^5. \\
53713 &:= -3!! + 1 + 7 \times 3!^5. \\
53808 &:= 8 \times (0! + 8!/3! + 5). \\
53824 &:= (4! - 2^8)^{(-3+5)}. \\
53848 &:= 8 \times (-4 + 8!/3!) + 5!. \\
53856 &:= 6! \times 5! - 8! + 3!^5. \\
53946 &:= (6 + 4! \times 9) \times 3^5. \\
54264 &:= \sqrt{4!^6} + (2 \times 4!)! + 5!. \\
54396 &:= (-6! + 9! \times 3)/(4 \times 5). \\
54397 &:= 7 \times ((\sqrt{9})!^{3+\sqrt{4}} - 5). \\
54576 &:= (6! + 7! \times 54)/5. \\
54636 &:= (6!/3 - 6)^{\sqrt{4}} - 5!. \\
54688 &:= 8 \times (8!/6 - 4 + 5!). \\
54742 &:= -2 + 4! \times (7^4 - 5!). \\
54795 &:= (5 \times \sqrt{9^7} + 4!) \times 5. \\
54869 &:= (-9! + 6^8)/4! + 5. \\
55939 &:= 9!/3!! \times (-9 + 5!) - 5. \\
56087 &:= 78 \times (-0! + 6!) + 5. \\
56485 &:= (-5 + 84) \times (6! - 5). \\
56957 &:= (-7 + 5!) \times 9!/6! + 5. \\
56997 &:= 79 \times (\sqrt{9} + 6!) - 5!. \\
57126 &:= (6 + 2)! - 1 + 7^5. \\
57127 &:= (7 + 2 - 1)! + 7^5. \\
57128 &:= 8! + 2 - 1 + 7^5. \\
57456 &:= (-6 + 5!)/\sqrt{4} \times 7!/5. \\
57465 &:= 5^6 \times 4 - 7! + 5. \\
57843 &:= 3!! - 4 + 8! + 7^5. \\
57847 &:= (7 - 4)!! + 8! + 7^5. \\
57849 &:= (\sqrt{9})!! + \sqrt{4} + 8! + 7^5. \\
58315 &:= (5 + 1)! \times \sqrt{3^8} - 5. \\
58329 &:= 9^{2+3} - (8 - 5)!!. \\
58362 &:= (2 + 6!) \times \sqrt{3^8} - 5!. \\
58368 &:= 8 \times (6! + 3^8) + 5!. \\
58459 &:= 9!/(5 \times 4) + 8! - 5. \\
58464 &:= (-4! + 6!)/4 \times 8!/5!. \\
58688 &:= 8 \times (-8 - 6! + 8!/5). \\
58928 &:= 82 \times (\sqrt{9})!! + 8 - 5!. \\
58935 &:= -5! + 3! + (9!/8!)^5. \\
58959 &:= -9 \times (5 - \sqrt{9^8} + 5). \\
58997 &:= -7 + 9 \times (\sqrt{9^8} - 5). \\
59013 &:= -3!^{1+0!} + 9^5. \\
59019 &:= -\sqrt{9} \times 10 + 9^5. \\
59023 &:= -3! - 20 + 9^5. \\
59024 &:= -4! - 2 + 0! + 9^5. \\
59025 &:= -5^2 + 0! + 9^5. \\
59026 &:= -(6 - 2)! + 0! + 9^5. \\
59035 &:= -5 \times 3 + 0! + 9^5. \\
59036 &:= -6 - 3! - 0! + 9^5. \\
59038 &:= -8 - 3 + 0 + 9^5. \\
59039 &:= -9 - (3 \times 0)! + 9^5. \\
59043 &:= -3 - 4 + 0! + 9^5. \\
59045 &:= -5 + (4 \times 0)! + 9^5. \\
59046 &:= -6 + 4 - 0! + 9^5. \\
59048 &:= -(84 \times 0)! + 9^5. \\
59062 &:= 2 \times 6 + 0! + 9^5. \\
59073 &:= 3 \times (7 + 0!) + 9^5. \\
59074 &:= 4! + (7 \times 0)! + 9^5. \\
59086 &:= \sqrt{\sqrt{6^8}} + 0! + 9^5. \\
59098 &:= 8 \times (\sqrt{9})! + 0! + 9^5. \\
59129 &:= 9^2 - 1 + 9^5. \\
59144 &:= 4 \times 4! - 1 + 9^5. \\
59145 &:= 5! - 4! + 1 \times 9^5. \\
59159 &:= 9^5 - 1 - 9 + 5!. \\
59175 &:= 5! + 7 - 1 + 9^5. \\
59193 &:= 3^{9+1} + (\sqrt{9})!!/5. \\
59194 &:= 4! \times (\sqrt{9})! + 1 + 9^5. \\
59229 &:= (\sqrt{9})!!/2^2 + 9^5. \\
59263 &:= \sqrt{3!^6} - 2 + 9^5. \\
59275 &:= (5! - 7) \times 2 + 9^5. \\
59283 &:= 3!! \times 82 + \sqrt{9^5}. \\
59289 &:= (-\sqrt{9} + 8)! \times 2 + 9^5. \\
59349 &:= \sqrt{9!/4 - 3!} + 9^5. \\
59375 &:= 5^{7-3} \times 95. \\
59385 &:= (5! - 8) \times 3 + 9^5. \\
59392 &:= (-2 + 9)^3 + 9^5. \\
59397 &:= (-7! + 9!)/3! - \sqrt{9^5}. \\
59409 &:= 90 \times 4 + 9^5. \\
59455 &:= (5! - 5) \times (\sqrt{4^9} + 5). \\
59481 &:= 18 \times 4! + 9^5. \\
59529 &:= ((\sqrt{9})! - 2) \times 5! + 9^5. \\
59645 &:= -5! - 4 + 6! + 9^5. \\
59655 &:= 5 \times 5! + 6 + 9^5. \\
59683 &:= 3!! - 86 + 9^5. \\
59776 &:= 6! + \sqrt{7 \times 7} + 9^5. \\
59793 &:= 3!! + (\sqrt{9 + 7})! + 9^5. \\
59796 &:= -6! + (\sqrt{9} + 7!) \times \sqrt{(\sqrt{9})!!/5}. \\
59874 &:= 4! + 7!/8 \times 95. \\
59904 &:= -\sqrt{4^{0+9}} \times (\sqrt{9} - 5!). \\
59945 &:= (5^4 + (\sqrt{9})!) \times 95. \\
59949 &:= (\sqrt{9})!!/4 + (\sqrt{9})!! + 9^5. \\
59968 &:= -\sqrt{8^6} + 9!/((\sqrt{9})!!/5!). \\
60359 &:= (9! - 5 - 3!! - 0!)/6. \\
60456 &:= \sqrt{6!/5} \times (-\sqrt{4} + (0! + 6)!). \\
60459 &:= (9! - 5! - (4 - 0!)!)/6. \\
60469 &:= 9!/6 - 4 - 0! - 6. \\
60495 &:= -5 + (9! + (4 + 0!)!)/6. \\
60595 &:= -5 + (9! + (5 + 0!)!)/6. \\
60992 &:= 2^9 + 9!/(0 + 6). \\
61834 &:= (-4 + 3!!/8) \times (-1 + 6!). \\
62504 &:= 4 \times (0! + \sqrt{5^{2 \times 6}}). \\
63468 &:= 86 \times (4! - 3! + 6!). \\
63624 &:= (4! + 2^6) \times (3 + 6!). \\
63924 &:= ((4! - 2)^{\sqrt{9}} + 3!) \times 6. \\
63994 &:= (49 - 9)^3 - 6. \\
64368 &:= 8! + 6^3/\sqrt{4} + 6!. \\
64449 &:= (9 - 4!)^4 + \sqrt{4!^6}. \\
64518 &:= 8!/15 \times 4! + 6. \\
64792 &:= 2^{9+7} - 4! - 6!. \\
64806 &:= (6! + 0! + 8!/4) \times 6. \\
64809 &:= 9 \times (0! + (8 + \sqrt{4}) \times 6!). \\
64814 &:= (4 \times 1)^8 - \sqrt{4} - 6!.
\end{aligned}$$



$$\begin{aligned}
 64836 &:= (6! + 3! + 8!/4) \times 6. \\
 64888 &:= 8! - 8 + 8^4 \times 6. \\
 64896 &:= \sqrt{(6 + 98)^4} \times 6. \\
 64986 &:= 6!/8 \times ((\sqrt{9})!! + \sqrt{4}) + 6. \\
 65125 &:= 521 \times \sqrt{5^6}. \\
 65284 &:= 4^8 - 2 \times (5! + 6). \\
 65422 &:= 2^{(2^4)} - 5! + 6. \\
 65484 &:= 4^8 + 4 - 56. \\
 65488 &:= 8 \times (8 \times 4^5 - 6). \\
 65528 &:= -8 + 2^{5+5+6}. \\
 65536 &:= (6/3)^{5+5+6}. \\
 65735 &:= -5^{3!} + (-7 + 5!) \times 6!. \\
 66396 &:= -6 + 93 \times (6! - 6). \\
 66399 &:= -\sqrt{9} + 93 \times (6! - 6). \\
 66738 &:= 8! + 37 \times (6! - 6). \\
 67195 &:= -5 + (9! + (1 + 7!))/6. \\
 67239 &:= 93 \times (\sqrt{2 + 7 + 6!}). \\
 67509 &:= 9 \times (0! + \sqrt{5^7 \times 6!}). \\
 67536 &:= (6 + 3!)/5 - 7 \times 6!. \\
 67969 &:= -(\sqrt{9})!! \times 69 + 7^6. \\
 68579 &:= 97 \times (-5 - 8 + 6!). \\
 68992 &:= (2^9 + (\sqrt{9})!!) \times 8!/6!. \\
 69152 &:= 2^5 \times (1 + \sqrt{9} \times 6!). \\
 69216 &:= (6! + 1^2) \times 96. \\
 69312 &:= (2 + 1 \times 3!!) \times 96. \\
 69336 &:= 6^3 + 3!! \times 96. \\
 69399 &:= -9 + (\sqrt{9} + 3!!) \times 96. \\
 69497 &:= -7 + ((\sqrt{9})!! + 4) \times 96. \\
 69504 &:= (4 + (0! + 5!)) \times 96. \\
 69693 &:= -3 + ((\sqrt{9})! + 6!) \times 96. \\
 69694 &:= -\sqrt{4} + ((\sqrt{9})! + 6!) \times 96. \\
 69699 &:= \sqrt{9} + ((\sqrt{9})! + 6!) \times 96. \\
 69791 &:= -1 + ((\sqrt{9})!! + 7) \times 96. \\
 69792 &:= ((2 \times \sqrt{9})! + 7) \times 96. \\
 69794 &:= \sqrt{4} + ((\sqrt{9})!! + 7) \times 96. \\
 69847 &:= 7! + 4^8 - 9 - 6!. \\
 70585 &:= \sqrt{5^8} \times (5! + 0!) - 7!. \\
 72559 &:= 9!/5 - 5 \times 2 - 7. \\
 72569 &:= (\sqrt{9} + 6)!/\sqrt{5^2} - 7. \\
 72581 &:= (1 + 8!)/5 - 2 + 7. \\
 72583 &:= (\sqrt{\sqrt{3^8}}!)/\sqrt{5^2} + 7. \\
 72893 &:= (3 \times (\sqrt{9})!!/8)^2 - 7. \\
 73088 &:= 8 \times (8^{0!+3} + 7!). \\
 73236 &:= (6 - 3!!) \times (2 - 3!!)/7. \\
 73296 &:= 6! + 9! \times 2/(3 + 7). \\
 73597 &:= (7! + 9!)/5 + 3! + 7. \\
 73805 &:= 5^{(-0!+8)} + 3!! - 7!. \\
 74263 &:= (3 + 6! - 2)^{\sqrt{4}}/7. \\
 74348 &:= 8! + (4 + 3!!) \times 47. \\
 74366 &:= (6! \times (6! + 3) + \sqrt{4})/7. \\
 74385 &:= -5!/8 \times (3^4 - 7!). \\
 74455 &:= 5 \times ((5! + \sqrt{4})^{\sqrt{4}} + 7). \\
 74464 &:= (4 - 6!) \times (4! - \sqrt{4^7}). \\
 74468 &:= (-8 + (6! + \sqrt{4})^{\sqrt{4}})/7. \\
 74879 &:= (9! - 7 + 8! \times 4)/7. \\
 75243 &:= -3!! \times 4 - 2 + 5^7. \\
 75245 &:= -5 \times 4!^2 + 5^7.
 \end{aligned}$$

$$\begin{aligned}
 75519 &:= -(\sqrt{9})! + 15 \times (-5 + 7!). \\
 75965 &:= -5! \times 6 \times \sqrt{9} + 5^7. \\
 75989 &:= \sqrt{9} \times (8 - (\sqrt{9})!!) + 5^7. \\
 77378 &:= -8! + 7^{3!} + 7 \times 7. \\
 77405 &:= -(5 + 0!)! + (-\sqrt{4} + 7)^7. \\
 77406 &:= -6! + 0! + (-\sqrt{4} + 7)^7. \\
 77559 &:= 9!/5 - 57 + 7!. \\
 77609 &:= 9!/(-0! + 6) + 7! - 7. \\
 77946 &:= 6 \times (4!^{\sqrt{9}} + 7) - 7!. \\
 78005 &:= -5! + (-0! + (\sqrt{0! + 8})!)^7. \\
 78119 &:= -(\sqrt{9})! + (-1 + (\sqrt{1 + 8})!)^7. \\
 78125 &:= 5^{2+\sqrt{18+7}}. \\
 78132 &:= (2 + 3)^{(-1+8)} + 7. \\
 78489 &:= (9 + 8)^4 + 8 - 7!. \\
 78965 &:= 5! + 6! + (-\sqrt{9} + 8)^7. \\
 78974 &:= \sqrt{4} \times (-7!/( \sqrt{9})! + 8! + 7). \\
 79085 &:= 5! \times 8 + (-0! + (\sqrt{9})!)^7. \\
 79128 &:= 8 \times 21^{\sqrt{9}} + 7!. \\
 79823 &:= -3!! + 2 \times 8! - 97. \\
 79879 &:= ((\sqrt{9})!^7 - 8!)/\sqrt{9} + 7. \\
 79947 &:= (7!/4 + 9) \times 9 \times 7. \\
 79983 &:= (3!^8/\sqrt{9} + 9)/7. \\
 80297 &:= -7^{\sqrt{9}} + 2 \times (0 + 8!). \\
 80394 &:= \sqrt{4} \times (-\sqrt{9} - (3! - 0!)! + 8!). \\
 80582 &:= 2 \times 8! - 50 - 8. \\
 80585 &:= -5 + 8! - 50 + 8!. \\
 80614 &:= -4! + \sqrt{\sqrt{16}} \times (-0! + 8!). \\
 80752 &:= 2 \times (57 - 0! + 8!). \\
 80754 &:= \sqrt{4} \times (57 + (0 + 8!)!). \\
 80765 &:= \sqrt{5^6} + (7 + 0!)! + 8!. \\
 81542 &:= 2 \times (451 + 8!). \\
 82934 &:= 4!^3 \times (\sqrt{9})! - 2 - 8. \\
 82946 &:= 6 \times 4!^{\sqrt{9}} + \sqrt{\sqrt{2 \times 8}}. \\
 83195 &:= (5 \times ((\sqrt{9})! + 1))^3 + 8!. \\
 83349 &:= 9 \times (4! - 3)\sqrt{\sqrt{3^8}}. \\
 83523 &:= 3!!/2 \times 5! + 3 + 8!. \\
 83526 &:= 6!/2 \times 5! + 3! + 8!. \\
 83528 &:= (-8/2 + 5!) \times 3!! + 8. \\
 83664 &:= \sqrt{4!^6} \times 6 + (\sqrt{\sqrt{\sqrt{3^8}}})!. \\
 84075 &:= 5 \times (7^{0!+4} + 8). \\
 84092 &:= 290^{\sqrt{4}} - 8. \\
 84864 &:= (-4! + 6!) \times \sqrt{8^4} + 8!. \\
 85293 &:= 3^{(\sqrt{9})!+2} \times (5 + 8). \\
 85305 &:= (5! + 0!) \times (3!! - 5!/8). \\
 85655 &:= -5! + 5! \times 6! - \sqrt{5^8}. \\
 85663 &:= -3^6 + 6! \times 5! - 8. \\
 85665 &:= 5! \times (6! - 6) - 5!/8. \\
 85673 &:= -3!! - 7 + 6! \times (\sqrt{\sqrt{\sqrt{5^8}}})!. \\
 85695 &:= 5! \times ((\sqrt{9})!! - 6) + 5!/8. \\
 85698 &:= 8! + (9! + 6!/5)/8. \\
 85775 &:= 5! \times 7!/7 - \sqrt{5^8}. \\
 85944 &:= 4! + (-4 + (\sqrt{9})!!) \times (\sqrt{\sqrt{\sqrt{5^8}}})!. \\
 85945 &:= -5! \times (4 - (\sqrt{9})!!) - \sqrt{\sqrt{5^8}}. \\
 85995 &:= (5! - \sqrt{9}) \times ((\sqrt{9})!! + 5!/8). \\
 86332 &:= (2 + 3)! \times 3!! - 68.
 \end{aligned}$$

$$\begin{aligned}
86335 &:= 5! \times 3!! + 3 - 68. \\
86357 &:= -7 + 5! \times 3!! - \sqrt{\sqrt{6^8}}. \\
86365 &:= 5! \times 6! - \sqrt{3^6} - 8. \\
86436 &:= 6! \times (3 + \sqrt{4})! + \sqrt{\sqrt{6^8}}. \\
86515 &:= (5! + 1) \times \left( -5 + \left( \sqrt{\sqrt{\sqrt{6^8}}} \right)! \right). \\
86556 &:= 6! \times 5! + 5! + \sqrt{\sqrt{6^8}}. \\
86735 &:= 5! \times 3!! + \sqrt{7^6} - 8. \\
86927 &:= -7^2 + (\sqrt{9})!^6 + 8!. \\
87368 &:= 8!/6 \times (3! + 7) + 8. \\
87846 &:= 6 \times \sqrt{(4 - 8 - 7)^8}. \\
87976 &:= -6^7 + 9! + 7! - 8. \\
88416 &:= 6^{1+4} + 8! + 8!. \\
88826 &:= -6 + 2 \times (8! + \sqrt{8^8}). \\
88829 &:= -\sqrt{9} + 2 \times (8! + \sqrt{8^8}). \\
89253 &:= (-3 + 5!^2) \times 9 - 8!. \\
89264 &:= \sqrt{4} \times (62 \times (\sqrt{9})!! - 8). \\
90973 &:= 37^{\sqrt{9}} + (-0! + 9)!. \\
91125 &:= (5 \times (-2 + 11))^{\sqrt{9}}. \\
91245 &:= 5! + (4! + 21)^{\sqrt{9}}. \\
91449 &:= 9!/4 + (4 - 1)!! + 9. \\
91567 &:= (7!/6! + 5!) \times (1 + (\sqrt{9})!!). \\
91975 &:= -5 + (7! + 9!)/(1 + \sqrt{9}). \\
91978 &:= (-8 + 7! + 9!)/(1 + \sqrt{9}). \\
92096 &:= (6! + (\sqrt{9})!! - 0!) \times 2^{(\sqrt{9})!}. \\
92256 &:= (6 + 5! - 2)^2 \times (\sqrt{9})!. \\
92525 &:= 5!^2 + 5^{(-2+9)}. \\
92672 &:= 2^7 \times 6! + 2^9. \\
93352 &:= 2 \times (5!/3! + 3!^{(\sqrt{9})!}). \\
93366 &:= 6 \times (6^3/3 + 9). \\
93392 &:= 2 \times (\sqrt{9})!^{3!} + 3!!/9. \\
93456 &:= 6!/5 + \sqrt{4} \times 3!^{(\sqrt{9})!}. \\
93582 &:= (-28 + 5^{3!}) \times (\sqrt{9})!. \\
93654 &:= (4 + \sqrt{5^6}) \times (3! + (\sqrt{9})!!). \\
93745 &:= -5 + (\sqrt{4} - 7)^{3!} \times (\sqrt{9})!. \\
93784 &:= ((-4! + 8!) \times 7 - 3!!)/\sqrt{9}. \\
93792 &:= (2^9 + 7! \times 3) \times (\sqrt{9})!. \\
93795 &:= (5^{(\sqrt{9})!} + 7) \times 3! + \sqrt{9}. \\
93824 &:= \sqrt{4} \times (2^8 + 3!^{(\sqrt{9})!}). \\
93873 &:= (3! + \sqrt{7^8}) \times 39. \\
93984 &:= (\sqrt{\sqrt{4} \times 8^9} - 3!!) \times (\sqrt{9})!. \\
94078 &:= (8! \times 7 - (0! + \sqrt{4})!)/\sqrt{9}. \\
94087 &:= 7 \times (8! - 0! + 4)/\sqrt{9}. \\
94088 &:= (8! \times (8 - 0!) + 4!)/\sqrt{9}. \\
94096 &:= (\sqrt{6! + 9} - 0!)^4 - 9!. \\
94214 &:= (4! - 1) \times \sqrt{2^{4!}} + (\sqrt{9})!. \\
94478 &:= (8! + 7) \times \sqrt{4} + 4!^{\sqrt{9}}. \\
94488 &:= 8! + 8! + 4! + 4!^{\sqrt{9}}. \\
94536 &:= 6 \times (3! + 5!)^{\sqrt{4}} - (\sqrt{9})!!). \\
94584 &:= \sqrt{4} \times 8! + 5! + 4!^{\sqrt{9}}. \\
94675 &:= -5^7 + 6!^{\sqrt{4}}/\sqrt{9}. \\
94798 &:= 8!/\sqrt{9} \times 7 - \sqrt{4} + (\sqrt{9})!!). \\
94935 &:= 5 \times (3^9 + 4! - (\sqrt{9})!!). \\
95265 &:= (5^6 - (2 + 5)!) \times 9. \\
95424 &:= 4 \times (\sqrt{2^{4!}} - 5!) \times (\sqrt{9})!. \\
95744 &:= 4 \times (-4^7 + (5 + \sqrt{9})!). \\
95872 &:= 2 \times 7 \times 8^5 - 9!. \\
96336 &:= 6^{3!} + 3!! \times 69. \\
96576 &:= 6 \times (7^5 - 6! + 9). \\
97205 &:= 5 \times (0! + 27 \times (\sqrt{9})!!). \\
97336 &:= (6 + 3 + 37)^{\sqrt{9}}. \\
97483 &:= -3! - 8!/\sqrt{4} + 7^{(\sqrt{9})!}. \\
97486 &:= -(6 + 8!)/\sqrt{4} + 7^{(\sqrt{9})!}. \\
97755 &:= 5 \times 57 \times 7^{\sqrt{9}}. \\
97783 &:= -(\sqrt{\sqrt{3^8}})! + 7^7 - 9!. \\
97848 &:= -8! + 4! \times (8!/7 - \sqrt{9}). \\
97971 &:= 17 \times (\sqrt{9} + 7! + (\sqrt{9})!!). \\
98425 &:= 5 \times (2 + (4!/8)^9). \\
98643 &:= 3^4 \times 6! + 8! + \sqrt{9}. \\
98649 &:= \sqrt{9^4} \times 6! + 8! + 9. \\
99135 &:= 5 \times (3 \times 1)^9 + (\sqrt{9})!!). \\
99384 &:= (4^8 + 3!!) \times 9/(\sqrt{9})!. \\
99597 &:= (-7! - 9^5 + 9!)/\sqrt{9}. \\
99744 &:= \sqrt{4} \times (4^7 \times \sqrt{9} + (\sqrt{9})!!).
\end{aligned}$$

#### ACKNOWLEDGEMENT

The author is thankful to T.J. Eckman, Georgia, USA (email: jeek@jeek.net) in programming the script to develop these representations.

#### REFERENCES

- [1] ABRAHAMS, M, Lots of numbers, plain and almost simple, IMPROBABLE RESEACH, <http://www.improbable.com/2013/02/12/lots-of-numbers-plain-and-almost-simple>.
- [2] ABRAHAMS, M, Lots more numbers, deemed "crazy consecutive", IMPROBABLE RESEACH, <http://www.improbable.com/2013/06/08/lots-more-numbers-deemed-crazy-consecutive>.
- [3] DARLING, D., The World of David Darling, Types of Numbers, ENCYCLOPEDIA OF SCIENCE, <http://www.daviddarling.info/encyclopedia/N/numbers-types.html>
- [4] DUDENEY, H.E., Amusements in Mathematics, EBD E-Books Directory.com, 1917.
- [5] FREIDMAN, E., Problems of the Month (August 2000), <http://www2.stetson.edu/efriedma/mathmagic/0800.html>
- [6] FREIDMAN, E., Problems of the Month (April 2012), <http://www2.stetson.edu/efriedma/mathmagic/0412.html>
- [7] HARDY, G.H., A Mathematician's Apology. New York: Cambridge University Press, p. 105, 1993 - original edition 1940.
- [8] HEINZ, H. "Narcissistic Numbers." <http://www.magic-squares.net/narciss.htm>.
- [9] MADACHY, J.S., Mathematics on Vacations, Charlars Scriber's Son, New York, 1966.
- [10] NEBUS, J., Counting To 52, nebusresearch, <http://nebusresearch.wordpress.com/2013/02/17/counting-to-52/>.

- [11] NEBUS, J., Counting From 52 to 11,108, *nebusresearch*, <http://nebusresearch.wordpress.com/2013/06/10/counting-from-52-to-11108/>.
- [12] ROSE, C., "Radical Narcissistic numbers", *J. Recreational Mathematics*, vol. 33, (2004–2005), pp. 250–254.
- [13] ROSE, C., "Pretty Wild Narcissistic numbers", "The On-Line Encyclopedia of Integer Sequences.", founded by N.J.A. Sloane, <https://oeis.org/A193069>, August 08, 2011.
- [14] ROSE, C., "Pretty Wild Narcissistic numbers", <http://www.tri.org.au/numQ/pwn/>.
- [15] SLONE, N.J.A., Sequences A005188/M0488, A003321/M5403, A010344, A010346, A010348, A010350, A010353, A010354, A014576, A023052, A032799, A046074, A101337, and A114904 in "The On-Line Encyclopedia of Integer Sequences.", <https://oeis.org/>.
- [16] WEISSTEIN, E.W., "Narcissistic Number." From *MathWorld*—A Wolfram Web Resource. <http://mathworld.wolfram.com/NarcissisticNumber.html>.
- [17] TANEJA, I.J., Crazy Sequential Representation: Numbers from 0 to 11111 in terms of Increasing and Decreasing Orders of 1 to 9, <http://arxiv.org/abs/1302.1479>.
- [18] TANEJA, I.J., Selfie Numbers: Consecutive Representations in Increasing and Decreasing Orders, *RGMA Research Report Collection*, **17**(2014), Article 140, pp. 1–57. <http://rgmia.org/papers/v17/v17a140.pdf>, 2014.
- [19] TANEJA, I.J., Single Digit Representations of Natural Numbers, <http://arxiv.org/abs/1502.03501>. Also in *RGMA Research Report Collection*, **18**(2015), Article 15, pp. 1–55. <http://rgmia.org/papers/v18/v18a15.pdf>.
- [20] TANEJA, I.J., Running Expressions in Increasing and Decreasing Orders of Natural Numbers Separated by Equality Signs, *RGMA Research Report Collection*, **18**(2015), Article 27, pp. 1–54. <http://rgmia.org/papers/v18/v18a27.pdf>, 2015.
-