

Selfie Numbers – II: Six Digits Symmetrical, Unified and Patterned Representations Without Factorial

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Abstract

In previous works [11, 15, 16, 22], the construction of Selfie numbers is done in different forms, such as in order of digits, in reverse order of digits, in increasing and decreasing orders of digits. This has been done using factorial and square-root with basic operations. In this work we have obtained Selfie numbers having six digits with repetitions without use of factorial. Symmetrical consecutive and unified Selfie numbers are also presented.

1 Selfie Numbers

Numbers represented by their own digits connected by certain operations are understood as "Selfie numbers". These numbers are divided in two categories. Each category is again divided in two ways, i.e., one in order of digits appearing in the numbers and their reverse, and the second is in increasing and decreasing order of digits. Below are some examples of Selfie numbers.

1.1 Representations in Order of Digits and Reverse

- Order of Digits

$$24 = (2 \times \sqrt{4})!$$

$$936 = (\sqrt{9}!)^3 + 6!$$

$$1296 = \sqrt{(1+2)!^9/6}.$$

$$12969 = 1 \times 2 \times 9 \times 6! + 9.$$

$$24453 := \sqrt{\sqrt{24!}} + (4! + 5)^3.$$

- Reverse Order of Digits

$$24 = \sqrt{(4!)^2}.$$

$$936 = 6! + (3!)^{\sqrt{9}}.$$

$$1296 = 6^{(\sqrt{9}+2-1)}.$$

$$20167 = 7 + (6 + 1 + 0!)/2.$$

$$91125 = (5 \times (-2 + 11))^{\sqrt{9}}.$$

1.2 Representations in Increasing and Decreasing Orders of Digits

- Increasing Order of Digits

$$936 = 3!! + 6^{\sqrt{9}}.$$

$$1296 = (1+2)! \times 6^{\sqrt{9}}.$$

$$8397 = -3 - 7! + 8!/\sqrt{9}.$$

$$45576 := -4! + 5! \times 5 \times 76.$$

$$573846 = -3!! - (\sqrt{4} - (5! - 6) \times 7! - 8).$$

- Decreasing Order of Digits

$$936 = (\sqrt{9})!! + 6^3.$$

$$1296 = ((\sqrt{9})! \times 6)^2 \times 1.$$

$$20148 = (8! - 4)/2 - 10.$$

$$53783 := 8 + 75 \times (-3 + 3!!).$$

$$435609 = 9 + (6! - 5!/\sqrt{4})^{(3-0!)}.$$

Some studied on this kind of numbers appearing in sections 1.1-1.4 can be seen in Taneja [11, 15, 16].

We observe that there are number that can be represented without any order, for example,

$$34562 = 2 - (3 - 5) \times 6! \times 4!.$$

$$87369 = (3! + 7) \times 8!/6 + 9.$$

Even though these numbers are also Selfie numbers, but still are not under study.

1.3 Symmetrical Representations

In [15], author studied an interesting symmetrical consecutive representation of Selfie numbers, such as

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$$\begin{aligned}
 72590 &= 0 + 9!/5 + 2 \times 7. \\
 72591 &= 1 + 9!/5 + 2 \times 7. \\
 72592 &= 2 + 9!/5 + 2 \times 7. \\
 72593 &= 3 + 9!/5 + 2 \times 7. \\
 72594 &= 4 + 9!/5 + 2 \times 7.
 \end{aligned}$$

$$\begin{aligned}
 72595 &= 5 + 9!/5 + 2 \times 7. \\
 72596 &= 6 + 9!/5 + 2 \times 7. \\
 72597 &= 7 + 9!/5 + 2 \times 7. \\
 72598 &= 8 + 9!/5 + 2 \times 7. \\
 72599 &= 9 + 9!/5 + 2 \times 7.
 \end{aligned}$$

1.4 Unified Selfie Numbers

We observe that there are numbers that can be written in all the four ways. For simplicity, we call them as *unified Selfie numbers* [20]. According to subsections 1.1 and 1.2, the numbers 936 and 1296 are *unified Selfie numbers*. See below:

$$\begin{aligned}
 936 &= (\sqrt{9})!^3 + 6! = 6! + 3!^{\sqrt{9}} = 3!! + 6^{\sqrt{9}} = (\sqrt{9})!! + 6^3. \\
 1296 &= \sqrt{(1+2)!^9/6} = 6^{\sqrt{9}+2-1} = (1+2)! \times 6^{\sqrt{9}} = ((\sqrt{9})! \times 6)^2 \times 1.
 \end{aligned}$$

More precisely, *unified Selfie numbers* are understood as:

- Unified Selfie number = Order of digits
- = Reverse order of digits
- = Increasing order of digits
- = Decreasing order of digits.

1.5 Patterned Selfie Numbers

Madachy [4], pages 174-175 discussed the idea of different kind of number. In [21], we call it *patterned Selfie numbers*. Some examples are as follows:

$$\begin{aligned}
 36 &= 3! \times 6 & 4296 &= (-4 + (2 \times \sqrt{9})!) \times 6 & 93552 &= ((\sqrt{9})! \times 3!^5 + 5!) \times 2 \\
 360 &= 3! \times 60 & 42960 &= (-4 + (2 \times \sqrt{9})!) \times 60 & 935520 &= ((\sqrt{9})! \times 3!^5 + 5!) \times 20 \\
 3600 &= 3! \times 600 & 429600 &= (-4 + (2 \times \sqrt{9})!) \times 600 & 9355200 &= ((\sqrt{9})! \times 3!^5 + 5!) \times 200
 \end{aligned}$$

In part 1 - *Selfie Numbers -I* [20], we have worked with extensively "*Selfie numbers*" having the operations, *addition, subtraction, multiplication, potentiation, division, square-root and factorial* i.e., $[+, -, \times, ^, /, \sqrt, !]$. The work was limited only up to 5 digits. Working with six digits with *square-root* and *factorial* there are more than 60000 possibilities. Due to this, in this work we have worked without use of *factorial* for six digits.

Study on numbers in different situation can be seen in [10, 12, 13, 14, 17, 18, 19]. For some comments refer to [1, 5]. Previous work in this direction can be seen in [2, 3, 6, 7, 8, 9].

2 Unified Selfie Numbers

According to subsection 1.4, below are examples of *unified Selfie numbers*. The study is limited only up to 6 digits without factorial. It uses only square-root with other basic operations:

$$\begin{aligned}
 114688 &= (11 \times \sqrt{4} + 6) \times \sqrt{8^8} & 117643 &= 1 + 1 \times 7^6 - 4 - 3 & 117645 &= -11 + 7^6 + \sqrt{4} + 5 \\
 &= (8 + 8 \times 6) \times \sqrt{4^{11}} & &= (3 + 4)^6 - 7 + 1 \times 1 & &= (5 + \sqrt{4})^6 + 7 - 11 \\
 &= (11 \times \sqrt{4} + 6) \times \sqrt{8^8} & &= 1 \times 1 + (3 + 4)^6 - 7 & &= -11 + (\sqrt{4} + 5)^6 + 7 \\
 &= (8 + 8 \times 6) \times \sqrt{4^{11}}. & &= 7^6 + \sqrt{4} + 3 - 11. & &= 7^6 - \sqrt{\sqrt{\sqrt{5^4} + 11}}.
 \end{aligned}$$

$$\begin{aligned}
117649 &= 11 + 7^6 - \sqrt{4} - 9 \\
&= (9 + 4 - 6)^{7 \times 1 - 1} \\
&= \sqrt{(11 - 4)^{6 \times \sqrt{7+9}}} \\
&= 9 + 7^6 + \sqrt{4} - 11.
\end{aligned}$$

$$\begin{aligned}
117654 &= (1 + 1) \times (7^6 + 5) / \sqrt{4} \\
&= (\sqrt{4} + 5)^6 + 7 - 1 - 1 \\
&= -1 - 1 + (\sqrt{4} + 5)^6 + 7 \\
&= 7^6 + \sqrt{-5 + 41} - 1.
\end{aligned}$$

$$\begin{aligned}
139962 &= 1 \times 3 \times ((9 - \sqrt{9})^6 - 2) \\
&= (-2 + 6^{9-\sqrt{9}}) \times 3 \times 1 \\
&= (-1 \times 2 + 36^{\sqrt{9}}) \times \sqrt{9} \\
&= \sqrt{9} \times (-\sqrt{9} + 6^{3 \times 2} + 1).
\end{aligned}$$

$$\begin{aligned}
139964 &= 1 \times 3 \times (9 - \sqrt{9})^6 - 4 \\
&= 4 \times (6 \times (9 + 9)^3 - 1) \\
&= -1 + (3 \times \sqrt{4})^6 \times \sqrt{9} - \sqrt{9} \\
&= -\sqrt{9} + \sqrt{9} \times \sqrt{6^{4 \times 3}} - 1.
\end{aligned}$$

$$\begin{aligned}
139966 &= 1 + 3 \times (-9/9 + 6^6) \\
&= (6^6 - 9/9) \times 3 + 1 \\
&= 1 - 3 + 6^6 \times \sqrt{\sqrt{9 \times 9}} \\
&= \sqrt{\sqrt{9 \times 9}} \times 6^6 - 3 + 1.
\end{aligned}$$

$$\begin{aligned}
139968 &= (13 \times 9 - 9) \times \sqrt{6^8} \\
&= 8 \times 6^{\sqrt{9}} \times 9^{3-1} \\
&= 1 \times \sqrt{36^8} / (\sqrt{9} + 9) \\
&= (-\sqrt{9} + 9)^8 / (6 \times (3 - 1)).
\end{aligned}$$

$$\begin{aligned}
139969 &= 1 - 3 \times ((\sqrt{9} - 9) \times 6)^{\sqrt{9}} \\
&= \sqrt{9} \times 6^{(9+9)/3} + 1 \\
&= 1 + 36^{\sqrt{9}} \times \sqrt{\sqrt{9 \times 9}} \\
&= ((9 + 9) / \sqrt{9})^6 \times 3 + 1.
\end{aligned}$$

$$\begin{aligned}
139996 &= 1 + (36^{\sqrt{9}} + 9) \times \sqrt{9} \\
&= (9 + (\sqrt{9} - 9)^6) \times 3 + 1 \\
&= 1 + 3 \times (9 + (9 - \sqrt{9})^6) \\
&= (6^{9-\sqrt{9}} + 9) \times 3 + 1.
\end{aligned}$$

$$\begin{aligned}
177147 &= \sqrt{(11 - \sqrt{4})^{77/7}} \\
&= (77 - 74)^{11} \\
&= \sqrt{(17 - 7 - 1)^{4+7}} \\
&= (7 - 4)^{17-7+1}.
\end{aligned}$$

$$\begin{aligned}
186615 &= -1 - 8 + 6^6 \times (-1 + 5) \\
&= (5 - 1) \times 6^6 - 8 - 1 \\
&= -1 + (-1 + 5) \times 6^6 - 8 \\
&= -8 + 6^6 \times (5 - 1) - 1.
\end{aligned}$$

$$\begin{aligned}
186624 &= (18 \times (6 + 6))^2 \times 4 \\
&= 4 \times (2 + 6^6) - 8 \times 1 \\
&= 1 \times 24 \times 6 \times \sqrt{6^8} \\
&= 8 \times 6^6 / \sqrt{4} \times (2 - 1).
\end{aligned}$$

$$\begin{aligned}
186628 &= (1^8 + 6^6) \times \sqrt{2 \times 8} \\
&= 8/2 \times (6^{\sqrt{\sqrt{6^8}}} + 1) \\
&= (-1 + 2 + 6^6) \times \sqrt{8 + 8} \\
&= \sqrt{8 + 8} \times (6^6 + 2 - 1).
\end{aligned}$$

$$\begin{aligned}
186631 &= -1 + 8 + 6^6 \times (3 + 1) \\
&= (1 + 3) \times 6^6 + 8 - 1 \\
&= -1 + (1 + 3) \times 6^6 + 8 \\
&= 8 + 6^6 \times (3 + 1) - 1.
\end{aligned}$$

$$\begin{aligned}
186648 &= 1 \times (8 + 6^6) \times 4 - 8 \\
&= -8 + 4 \times (6^6 + 8 \times 1) \\
&= 1 \times 4 \times (6^6 + 8) - 8 \\
&= -8 + (8 + 6^6) \times 4 \times 1.
\end{aligned}$$

$$\begin{aligned}
186649 &= 1 + 8 \times (6^6 / \sqrt{4} + \sqrt{9}) \\
&= -\sqrt{9} + 4 \times (6^6 + 8 - 1) \\
&= 1 + 4 \times 6 + 6^8 / 9 \\
&= \sqrt{9} \times 8 + 6^6 \times 4 + 1.
\end{aligned}$$

$$\begin{aligned}
196608 &= (-1 + 9)^6 \times 6 / (08) \\
&= 8^{06} \times 6 / (9 - 1) \\
&= (\sqrt{\sqrt{016}} - 6)^8 \times \sqrt{9} \\
&= \sqrt{9} \times (8 - 6)^{6+10}.
\end{aligned}$$

$$\begin{aligned}
234375 &= (2 + 3)^4 \times 375 \\
&= 5^7 \times 3 \times (4 - 3)^2 \\
&= \sqrt{\sqrt{(-2 + 3) \times 3}}^4 \times 5^7 \\
&= 75 \times (\sqrt{4} + 3)^{3+2}.
\end{aligned}$$

$$\begin{aligned}
236196 &= 12 \times (3 - 6 + 6)^9 \\
&= (9 \times 6 \times (6 + 3))^2 \times 1 \\
&= 2 \times 3^{6+1} \times 9 \times 6 \\
&= (69 \times (1 + 6) + 3)^2.
\end{aligned}$$

$$\begin{aligned}
248834 &= -2 + (4 + 8)^{8-3} + 4 \\
&= (4 \times 3)^{8/8+4} + 2 \\
&= 2 + 3 \times 4 \times \sqrt{(4 + 8)^8} \\
&= (8 + 8 - 4)^{4+3} + 2.
\end{aligned}$$

$$\begin{aligned}
262143 &= 2^{6 \times (2+1)} - 4 + 3 \\
&= -3 + (-4 + 12)^6 + 2 \\
&= -1 + \sqrt{(2 \times (-2 + 34))^6} \\
&= 64^3 - 2 + 2 - 1.
\end{aligned}$$

$$\begin{aligned}
262144 &= 2^{6 \times (2+1)} - 4 + 4 \\
&= 4 \times 4^{12-6+2} \\
&= (12 - 24 + 4)^6 \\
&= (6 - 4)^{-4+22} \times 1.
\end{aligned}$$

$$\begin{aligned}
263169 &= (1 + 2^{3+6})^{6/\sqrt{9}} \\
&= (9 \times (6 - 63))^2 \times 1 \\
&= (2^{6+3} + 1)^{6/\sqrt{9}} \\
&= (9 \times 61 - 36)^2.
\end{aligned}$$

$$\begin{aligned}
279927 &= -2 - 7 + \sqrt{(9 + 9) \times 2}^7 \\
&= -7 + \sqrt{(2 \times (9 + 9))^7} - 2 \\
&= (2 \times \sqrt{(2 + 7)^7} - \sqrt{9 \times 9}) \\
&= (9 - \sqrt{9})^7 - \sqrt{(7 + 2)^2}.
\end{aligned}$$

$$\begin{aligned}
279933 &= 2^7 \times \sqrt{9} \times 9^3 - 3 \\
&= -3/3 + (-\sqrt{9} + 9)^7 - 2 \\
&= (2 \times 3)^{3 \times 7/\sqrt{9}} - \sqrt{9} \\
&= (9 - \sqrt{9})^7 - 3 \times (3 - 2).
\end{aligned}$$

$$\begin{aligned}
279934 &= -2 + (7 - 9/9)^{3+4} \\
&= (4 + 3 - 9/9)^7 - 2 \\
&= -2 + (3 \times \sqrt{4})^{7-9+9} \\
&= (\sqrt{9} \times (9 - 7))^{4+3} - 2.
\end{aligned}$$

$$\begin{aligned} 279936 &= (27 + 9)^{9/3} \times 6 \\ &= 6^{39-(9+7) \times 2} \\ &= (2 \times 3)^{\sqrt{67-9-9}} \\ &= (\sqrt{9} \times (9-7))^{6+3-2}. \end{aligned}$$

$$\begin{aligned} 279939 &= 2^7 \times \sqrt{9} \times 9^3 + \sqrt{9} \\ &= \sqrt{9} + \sqrt{(3 \times 9 + 9)^{\sqrt{72}}} \\ &= (2 \times 3)^7 - 9 + 9 + \sqrt{9} \\ &= \sqrt{9} + (-\sqrt{9} + 9)^7 \times (3-2). \end{aligned}$$

$$\begin{aligned} 279945 &= 2 + 7 + (9 - \sqrt{9})^{\sqrt{4+5}} \\ &= 5 + \sqrt{4} - (\sqrt{9} - 9)^7 + 2 \\ &= (2 + 4)^{5-7+9} + 9 \\ &= (9 - \sqrt{9})^7 + \sqrt{(5+4)^2}. \end{aligned}$$

$$\begin{aligned} 279947 &= 2 \times 7 - \sqrt{9} + \sqrt{(9 \times 4)^7} \\ &= 7 + \sqrt{4} - (\sqrt{9} - 9)^7 + 2 \\ &= (2 + 4)^7 - 7 + 9 + 9 \\ &= (9 - \sqrt{9})^7 + \sqrt{(7+4)^2}. \end{aligned}$$

$$\begin{aligned} 279966 &= (-2 + 7 + (9 - \sqrt{9})^6) \times 6 \\ &= 6 \times (6^{9-\sqrt{9}} + 7 - 2) \\ &= -2 - 5 + 6^7 + \sqrt{9} \times 9 \\ &= \sqrt{9} \times 9 - 7 + 6^{5+2}. \end{aligned}$$

$$\begin{aligned} 294874 &= -2 - 9 \times (4 - 8^{7-\sqrt{4}}) \\ &= (\sqrt{47+8} - 4) \times 9 - 2 \\ &= -2 + (-4 + \sqrt{47+8}) \times 9 \\ &= 9 \times (8^{7-\sqrt{4}} - 4) - 2. \end{aligned}$$

$$\begin{aligned} 294894 &= -2 \times (9 - 4^8 \times 9/4) \\ &= (4 \times 9 \times 8^4 - 9) \times 2 \\ &= (2 - 4 + (4 \times 8)^{\sqrt{9}}) \times 9 \\ &= (-9 + 9 \times 8^4 \times 4) \times 2. \end{aligned}$$

$$\begin{aligned} 326627 &= (3 + 2 + 6^{\sqrt{62}}) \times 7 \\ &= \sqrt{7^2} \times (6^6 + 2 + 3) \\ &= (\sqrt{2+23+6^6}) \times 7 \\ &= 7 \times (6^6 + \sqrt{3+22}). \end{aligned}$$

$$\begin{aligned} 352947 &= 3 \times (5 + 2)^{9-4} \times 7 \\ &= 7 \times \sqrt{49^{\sqrt{25}}} \times 3 \\ &= (2 + 3 + 4^5) \times 7^{\sqrt{9}} \\ &= \sqrt{9} \times 7^{\sqrt{-5+43-2}}. \end{aligned}$$

$$\begin{aligned} 354294 &= 3 \times (5 \times 4 - 2) \times 9^4 \\ &= \sqrt{4} \times 9^{2+\sqrt{4+5}} \times 3 \\ &= 2 \times 3^{44/(-5+9)} \\ &= \sqrt{9^{54-43}} \times 2. \end{aligned}$$

$$\begin{aligned} 373248 &= (3 \times (7 - 3))^{2+4} / 8 \\ &= (84 - 2 - 3 - 7)^3 \\ &= (2 \times 3)^{3-4+7} \times 8 \\ &= 8 \times (-7 + 43)^{\sqrt{3^2}}. \end{aligned}$$

$$\begin{aligned} 388999 &= (\sqrt{3^8} - 8)^{\sqrt{9}} - 9 - 9 \\ &= -9 - 9 + (9 + 8 \times 8)^3 \\ &= (\sqrt{3^8} - 8)^{\sqrt{9}} - 9 - 9 \\ &= -9 - 9 + (9 + 8 \times 8)^3. \end{aligned}$$

$$\begin{aligned} 389899 &= 3 + (8 - \sqrt{9})^8 - 9^{\sqrt{9}} \\ &= -9^{\sqrt{9}} + (8 - \sqrt{9})^8 + 3 \\ &= (-3 + 8)^8 + \sqrt{9} - 9^{\sqrt{9}} \\ &= (-9)^{\sqrt{9}} + (\sqrt{9} - 8)^8 + 3. \end{aligned}$$

$$\begin{aligned} 435456 &= (\sqrt{4} \times 3)^{\sqrt{\sqrt{5^4}}} \times 56 \\ &= 6^5 \times (4 \times 5 \times 3 - 4) \\ &= \sqrt{(34 + \sqrt{4})^5} \times 56 \\ &= 6^5 \times (5 + \sqrt{4}) \times \sqrt{4^3}. \end{aligned}$$

$$\begin{aligned} 438976 &= (\sqrt{4} \times 38)^{\sqrt{9}} \times (7 - 6) \\ &= (67 + 9)^{\sqrt{8-3+4}} \\ &= (-3 \times 4/6 + 78)^{\sqrt{9}} \\ &= (9 - 8) \times \sqrt{\sqrt{76^4 \times 3}}. \end{aligned}$$

$$\begin{aligned} 442368 &= 4 \times \sqrt{(4 \times 2 \times 3)^6} \times 8 \\ &= (8 \times 6)^3 + 24^4 \\ &= (23 + 4) \times \sqrt{46+8} \\ &= 864 \times \sqrt{4^3}. \end{aligned}$$

$$\begin{aligned} 456973 &= (4 - 5 \times 6)^{\sqrt{9+7}} - 3 \\ &= -3 + (7 \times (9 - 6) + 5)^4 \\ &= -3 + (4 \times 5 + 6)^{\sqrt{7+9}} \\ &= (\sqrt{9} - 7 + 6 \times 5)^4 - 3. \end{aligned}$$

$$\begin{aligned} 456974 &= -\sqrt{4} + (5 + (-6 + 9) \times 7)^4 \\ &= -\sqrt{4} + (7 \times (9 - 6) + 5)^4 \\ &= -\sqrt{4} + (4 \times 5 + 6)^{\sqrt{7+9}} \\ &= -\sqrt{\sqrt{9+7}} + (6 \times 5 - 4)^4. \end{aligned}$$

$$\begin{aligned} 456976 &= (4 \times 5 + 6)^{\sqrt{9+7-6}} \\ &= (6 + (7 - 9 + 6) \times 5)^4 \\ &= (4 - 5 \times 6)^{6+7-9} \\ &= (97 - 66 - 5)^4. \end{aligned}$$

$$\begin{aligned} 456979 &= (4 - 5 \times 6)^{\sqrt{9+7}} + \sqrt{9} \\ &= \sqrt{9} + (7 \times (9 - 6) + 5)^4 \\ &= (4 \times 5 + 6)^{\sqrt{7+9}} + \sqrt{9} \\ &= \sqrt{9} + (\sqrt{9} - 7 + 6 \times 5)^4. \end{aligned}$$

$$\begin{aligned} 466533 &= \sqrt{4} \times 6^6 \times 5 - 3^3 \\ &= -3^3 + 5 \times 6^6 \times \sqrt{4} \\ &= -3^3 + \sqrt{4} \times 5 \times 6^6 \\ &= 6^6 \times 5 \times \sqrt{4} - 3^3. \end{aligned}$$

$$\begin{aligned} 466572 &= \sqrt{4} \times (6^6 \times 5 + 7) - 2 \\ &= 2 \times (7 + 5 \times 6^6) - \sqrt{4} \\ &= -2 + \sqrt{4} \times (5 \times 6^6 + 7) \\ &= (7 + 6^6 \times 5) \times \sqrt{4} - 2. \end{aligned}$$

$$\begin{aligned} 466574 &= 4 \times (6^6 \times 5 + 7) / \sqrt{4} \\ &= 4 \times (7 + 5 \times 6^6) / \sqrt{4} \\ &= \sqrt{\sqrt{4} \times 4} \times (5 \times 6^6 + 7) \\ &= (7 + 6^6 \times 5) \times \sqrt{\sqrt{4} \times 4}. \end{aligned}$$

$$\begin{aligned} 466584 &= (4 + 6^6 \times 5 + 8) \times \sqrt{4} \\ &= (4 + 8 + 5 \times 6^6) \times \sqrt{4} \\ &= \sqrt{4} \times (4 + 5 \times 6^6 + 8) \\ &= (8 + 6^6 \times 5 + 4) \times \sqrt{4}. \end{aligned}$$

$$\begin{aligned} 466594 &= ((4 + 6^6) \times 5 - \sqrt{9}) \times \sqrt{4} \\ &= \sqrt{4} \times (-\sqrt{9} + 5 \times (6^6 + 4)) \\ &= 4 + \sqrt{4} \times 5 \times (6^6 + \sqrt{9}) \\ &= (\sqrt{9} + 6^6) \times 5 \times \sqrt{4} + 4. \end{aligned}$$

$$\begin{aligned}
466596 &= \sqrt{4} \times (6^6 \times 5 + \sqrt{9} \times 6) \\
&= (6 \times \sqrt{9} + 5 \times 6^6) \times \sqrt{4} \\
&= \sqrt{4} \times (5 \times 6^6 + 6 \times \sqrt{9}) \\
&= (\sqrt{9} \times 6 + 6^6 \times 5) \times \sqrt{4}.
\end{aligned}$$

$$\begin{aligned}
497664 &= 4 \times (9 + 7) \times 6 \times 6^4 \\
&= 4 \times 6 \times (6 \times (-7 + 9))^4 \\
&= 4 \times 4 \times \sqrt{(6 \times 6)^7/9} \\
&= ((9 - 7) \times 6)^6 / (\sqrt{4} + 4).
\end{aligned}$$

$$\begin{aligned}
524248 &= (-5 + (-2 + 4)^2) \times 8 \\
&= 8 \times (4^{2+4+2} - 5) \\
&= (2^{(-2+4)^4} - 5) \times 8 \\
&= 8 \times (-5 + (4 \times 4)^2).
\end{aligned}$$

$$\begin{aligned}
524284 &= -5 + (2 + 4^{2+8})/\sqrt{4} \\
&= (4^{8+2} + \sqrt{4})/2 - 5 \\
&= 2 \times (2 + 4^{4+5}) - 8 \\
&= (8^5 \times (4 + 4) - 2) \times 2.
\end{aligned}$$

$$\begin{aligned}
524288 &= (5 - 2/(4/2))^8 \times 8 \\
&= (8 + 8) \times (2 + 4 + 2)^5 \\
&= 2^{24-5+8-8} \\
&= 8^8 / (54 - 22).
\end{aligned}$$

$$\begin{aligned}
524289 &= (\sqrt{9} + 8^{2+4}) \times 2 - 5 \\
&= 5 - 2 \times (\sqrt{4} - \sqrt{(2 \times 8)^9}) \\
&= 2^{24-5} - 8 + 9 \\
&= \sqrt{9} + 8^5 \times 4^2 - 2.
\end{aligned}$$

$$\begin{aligned}
531436 &= -5 + 3^{14}/(3 + 6) \\
&= (6 - 3)^{4 \times 1 \times 3} - 5 \\
&= 1 - 3 - 3 + (4 + 5)^6 \\
&= -6 + (5 + 4)^{3+3} + 1.
\end{aligned}$$

$$\begin{aligned}
531438 &= 5 + 3^{1 \times 4 \times 3} - 8 \\
&= -8 + (3^4 \times 1)^3 + 5 \\
&= 1 \times 3^{3 \times 4} + 5 - 8 \\
&= (85 - 4)^3 - 3 \times 1.
\end{aligned}$$

$$\begin{aligned}
531439 &= -5 + 3 + (-1 + 4)^{3+9} \\
&= (9 \times 3)^4 \times 1 + 3 - 5 \\
&= 1 - 3 + 3^{\sqrt{4+5}+9} \\
&= 9^{5+4-3} - \sqrt{3+1}.
\end{aligned}$$

$$\begin{aligned}
531441 &= (5 - 3 + 1)^{4 \times (4-1)} \\
&= (1 - 4)^{4+13-5} \\
&= (1 - 1 + 3)^{4 \times \sqrt{4+5}} \\
&= (5 - 4 + \sqrt{4}) \times 3^{11}.
\end{aligned}$$

$$\begin{aligned}
531443 &= 5 + 3^{\sqrt{144}} - 3 \\
&= 3^{4 \times (4-1)} - 3 + 5 \\
&= 1 + 3^{3 \times 4} - 4 + 5 \\
&= \sqrt{(5 + 4)^{4 \times 3}} + 3 - 1.
\end{aligned}$$

$$\begin{aligned}
531446 &= 5 + (3 - \sqrt{144})^6 \\
&= (6/\sqrt{4})^{4 \times 1 \times 3} + 5 \\
&= -1 + 3^{4 \times \sqrt{4+5}} + 6 \\
&= 6 + \sqrt{(5 + 4)^{4 \times 3}} - 1.
\end{aligned}$$

$$\begin{aligned}
531449 &= 5 + 3^{\sqrt{144}} + \sqrt{9} \\
&= \sqrt{9^{4 \times (4-1)}} + 3 + 5 \\
&= -1 + 3^{4 \times \sqrt{4+5}} + 9 \\
&= 9 + \sqrt{(5 + 4)^{4 \times 3}} - 1.
\end{aligned}$$

$$\begin{aligned}
537824 &= ((5 - 3) \times 7)^{(8+2)/\sqrt{4}} \\
&= (42 \times (8 - 7)/3)^5 \\
&= (2 \times (3 + 4))^5 \times (-7 + 8) \\
&= (8 + 7 - 5 + 4)^{3+2}.
\end{aligned}$$

$$\begin{aligned}
546875 &= (-5 + 4 + 6)^8 \times 7/5 \\
&= 5^7 \times 8 \times 6/4 - 5 \\
&= (\sqrt{4} + 5) \times 5^{6-7+8} \\
&= (8 - 7 + 6) \times 5^{5+\sqrt{4}}.
\end{aligned}$$

$$\begin{aligned}
589824 &= \sqrt{(-24 + 5 \times 8)^8} \times 9 \\
&= (\sqrt{9} \times 8^{8-5}/\sqrt{4})^2 \\
&= ((-5 + 8 + 9) \times 8^2)^{\sqrt{4}} \\
&= 4^2/8 \times 9 \times 8^5.
\end{aligned}$$

$$\begin{aligned}
606476 &= (6^{06} - 4) \times (7 + 6) \\
&= -(6 + 7) \times (4 - 6^{06}) \\
&= (0 - 4 + 6^6) \times (6 + 7) \\
&= (7 + 6) \times (6^6 - 4 - 0).
\end{aligned}$$

$$\begin{aligned}
649539 &= (-6 \times \sqrt{4} + 9 \times 5) \times 3^9 \\
&= (\sqrt{9} \times 3)^5 \times (9 - 4 + 6) \\
&= (34 + 5 - 6) \times \sqrt{9^9} \\
&= \sqrt{9^9} \times (\sqrt{\sqrt{(6 \times 5)^4} + 3}).
\end{aligned}$$

$$\begin{aligned}
688128 &= 6 \times \sqrt{8^8} \times 1 \times 28 \\
&= 8 \times 21 \times 8 \times \sqrt{8^6} \\
&= 12 \times (6 + 8) \times \sqrt{8^8} \\
&= 8 \times 8 \times \sqrt{8^6} \times 21.
\end{aligned}$$

$$\begin{aligned}
746496 &= (7 + \sqrt{4}) \times (6 \times 4)^{\sqrt{9}} \times 6 \\
&= 6^9 \times 4/(6 \times (\sqrt{4} + 7)) \\
&= (4 - 4 + 6)^6 \times (7 + 9) \\
&= (9 + 7) \times 6^{\sqrt{64}-\sqrt{4}}.
\end{aligned}$$

$$\begin{aligned}
786431 &= -7 + (8^6 + \sqrt{4}) \times 3 \times 1 \\
&= -1 + 3 \times 4^{\sqrt{-6+8^7}} \\
&= -1 + 3 \times 4^{-6+7+8} \\
&= 8^7/\sqrt{64} \times 3 - 1.
\end{aligned}$$

$$\begin{aligned}
823543 &= ((8 - 2)/3 + 5)^{4+3} \\
&= (3 + 4)^{5+\sqrt{32/8}} \\
&= (-2 + 3 \times 3)^{4-5+8} \\
&= (8 - 5 + 4)^{3 \times 3-2}.
\end{aligned}$$

$$\begin{aligned}
944784 &= 9^4 \times (4 \times 7 + 8) \times 4 \\
&= (4 + 8 \times 7/4)^4 \times 9 \\
&= 4 \times 4 \times (-4 + 7)^8 \times 9 \\
&= \sqrt{9^8} \times (74 \times \sqrt{4} - 4).
\end{aligned}$$

$$\begin{aligned}
970299 &= (9 \times (7 \times 02 + 9))^{\sqrt{9}} \\
&= 99^{(20+7)/9} \\
&= 0 \times 27 + 99^{\sqrt{9}} \\
&= 99\sqrt{\sqrt{9+72}} + 0.
\end{aligned}$$

$$\begin{aligned}
995319 &= ((\sqrt{9} + 9 \times 5)^3 - 1) \times 9 \\
&= 9 \times (-1 + (3 + 5 \times 9)^{\sqrt{9}}) \\
&= (-1 + (3 + 5 \times 9)^{\sqrt{9}}) \times 9 \\
&= 9 \times ((\sqrt{9} + 9 \times 5)^3 - 1).
\end{aligned}$$

$$\begin{aligned}
995328 &= (8 + 2^3 \times 5)^{\sqrt{9}} \times 9 \\
&= (9 + \sqrt{9})^5 \times 32/8 \\
&= ((23 - 5) \times 8)^{\sqrt{9}} / \sqrt{9} \\
&= \sqrt{9} \times (9 \times 8^{5-3})^2.
\end{aligned}$$

$$\begin{aligned}
999973 &= -\sqrt{9} \times 9 + (\sqrt{9} + 97)^3 \\
&= (3 + 7)^{9-\sqrt{9}} - 9 \times \sqrt{9} \\
&= (3 + 7)^{9-\sqrt{9}} - \sqrt{9} \times 9 \\
&= -\sqrt{9} \times 9 + (\sqrt{9} + 97)^3.
\end{aligned}$$

$$\begin{aligned}
999995 &= -5 + (9/9 + 99)^{\sqrt{9}} \\
&= (99 + 9/9)^{\sqrt{9}} - 5 \\
&= -5 + (9/9 + 99)^{\sqrt{9}} \\
&= (9/9 + 99)^{\sqrt{9}} - 5.
\end{aligned}$$

3 Symmetrical Consecutive Representations in Order of Digits and Reverse

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.

3.1 Symmetrical Consecutive Representations in Both Ways - Order of Digits and Reverse Jointly

$$\begin{aligned}
466520 &:= (-4 + 6^6) \times 5 \times 2 + 0 = 0 + 2 \times 5 \times (6^6 - 4). \\
466521 &:= (-4 + 6^6) \times 5 \times 2 + 1 = 1 + 2 \times 5 \times (6^6 - 4). \\
466522 &:= (-4 + 6^6) \times 5 \times 2 + 2 = 2 + 2 \times 5 \times (6^6 - 4). \\
466523 &:= (-4 + 6^6) \times 5 \times 2 + 3 = 3 + 2 \times 5 \times (6^6 - 4). \\
466524 &:= (-4 + 6^6) \times 5 \times 2 + 4 = 4 + 2 \times 5 \times (6^6 - 4). \\
466525 &:= (-4 + 6^6) \times 5 \times 2 + 5 = 5 + 2 \times 5 \times (6^6 - 4). \\
466526 &:= (-4 + 6^6) \times 5 \times 2 + 6 = 6 + 2 \times 5 \times (6^6 - 4). \\
466527 &:= (-4 + 6^6) \times 5 \times 2 + 7 = 7 + 2 \times 5 \times (6^6 - 4). \\
466528 &:= (-4 + 6^6) \times 5 \times 2 + 8 = 8 + 2 \times 5 \times (6^6 - 4). \\
466529 &:= (-4 + 6^6) \times 5 \times 2 + 9 = 9 + 2 \times 5 \times (6^6 - 4).
\end{aligned}$$

$$\begin{aligned}
466540 &:= (-\sqrt{4} + 6^6) \times 5 \times \sqrt{4} + 0 = 0 + \sqrt{4} \times 5 \times (6^6 - \sqrt{4}). \\
466541 &:= (-\sqrt{4} + 6^6) \times 5 \times \sqrt{4} + 1 = 1 + \sqrt{4} \times 5 \times (6^6 - \sqrt{4}). \\
466542 &:= (-\sqrt{4} + 6^6) \times 5 \times \sqrt{4} + 2 = 2 + \sqrt{4} \times 5 \times (6^6 - \sqrt{4}). \\
466543 &:= (-\sqrt{4} + 6^6) \times 5 \times \sqrt{4} + 3 = 3 + \sqrt{4} \times 5 \times (6^6 - \sqrt{4}). \\
466544 &:= (-\sqrt{4} + 6^6) \times 5 \times \sqrt{4} + 4 = 4 + \sqrt{4} \times 5 \times (6^6 - \sqrt{4}). \\
466545 &:= (-\sqrt{4} + 6^6) \times 5 \times \sqrt{4} + 5 = 5 + \sqrt{4} \times 5 \times (6^6 - \sqrt{4}). \\
466546 &:= (-\sqrt{4} + 6^6) \times 5 \times \sqrt{4} + 6 = 6 + \sqrt{4} \times 5 \times (6^6 - \sqrt{4}). \\
466547 &:= (-\sqrt{4} + 6^6) \times 5 \times \sqrt{4} + 7 = 7 + \sqrt{4} \times 5 \times (6^6 - \sqrt{4}). \\
466548 &:= (-\sqrt{4} + 6^6) \times 5 \times \sqrt{4} + 8 = 8 + \sqrt{4} \times 5 \times (6^6 - \sqrt{4}). \\
466549 &:= (-\sqrt{4} + 6^6) \times 5 \times \sqrt{4} + 9 = 9 + \sqrt{4} \times 5 \times (6^6 - \sqrt{4}).
\end{aligned}$$

$$\begin{aligned}
466550 &:= \sqrt{4} \times (6^6 \times 5 - 5) + 0 = 0 + (-5 + 5 \times 6^6) \times \sqrt{4}. \\
466551 &:= \sqrt{4} \times (6^6 \times 5 - 5) + 1 = 1 + (-5 + 5 \times 6^6) \times \sqrt{4}. \\
466552 &:= \sqrt{4} \times (6^6 \times 5 - 5) + 2 = 2 + (-5 + 5 \times 6^6) \times \sqrt{4}. \\
466553 &:= \sqrt{4} \times (6^6 \times 5 - 5) + 3 = 3 + (-5 + 5 \times 6^6) \times \sqrt{4}. \\
466554 &:= \sqrt{4} \times (6^6 \times 5 - 5) + 4 = 4 + (-5 + 5 \times 6^6) \times \sqrt{4}.
\end{aligned}$$

$$\begin{aligned}
466555 &:= \sqrt{4} \times (6^6 \times 5 - 5) + 5 = 5 + (-5 + 5 \times 6^6) \times \sqrt{4}. \\
466556 &:= \sqrt{4} \times (6^6 \times 5 - 5) + 6 = 6 + (-5 + 5 \times 6^6) \times \sqrt{4}. \\
466557 &:= \sqrt{4} \times (6^6 \times 5 - 5) + 7 = 7 + (-5 + 5 \times 6^6) \times \sqrt{4}. \\
466558 &:= \sqrt{4} \times (6^6 \times 5 - 5) + 8 = 8 + (-5 + 5 \times 6^6) \times \sqrt{4}. \\
466559 &:= \sqrt{4} \times (6^6 \times 5 - 5) + 9 = 9 + (-5 + 5 \times 6^6) \times \sqrt{4}.
\end{aligned}$$

$$\begin{aligned}
466560 &:= (4 + 6) \times 6^5 \times 6 + 0 = 0 + 6^5 \times 6 \times (6 + 4). \\
466561 &:= (4 + 6) \times 6^5 \times 6 + 1 = 1 + 6^5 \times 6 \times (6 + 4). \\
466562 &:= (4 + 6) \times 6^5 \times 6 + 2 = 2 + 6^5 \times 6 \times (6 + 4). \\
466563 &:= (4 + 6) \times 6^5 \times 6 + 3 = 3 + 6^5 \times 6 \times (6 + 4). \\
466564 &:= (4 + 6) \times 6^5 \times 6 + 4 = 4 + 6^5 \times 6 \times (6 + 4). \\
466565 &:= (4 + 6) \times 6^5 \times 6 + 5 = 5 + 6^5 \times 6 \times (6 + 4). \\
466566 &:= (4 + 6) \times 6^5 \times 6 + 6 = 6 + 6^5 \times 6 \times (6 + 4). \\
466567 &:= (4 + 6) \times 6^5 \times 6 + 7 = 7 + 6^5 \times 6 \times (6 + 4). \\
466568 &:= (4 + 6) \times 6^5 \times 6 + 8 = 8 + 6^5 \times 6 \times (6 + 4). \\
466569 &:= (4 + 6) \times 6^5 \times 6 + 9 = 9 + 6^5 \times 6 \times (6 + 4).
\end{aligned}$$

$$\begin{aligned}
656250 &:= 6 \times 5^6 \times (2 + 5) + 0 = 0 + (5 + 2) \times 6 \times 5^6. \\
656251 &:= 6 \times 5^6 \times (2 + 5) + 1 = 1 + (5 + 2) \times 6 \times 5^6. \\
656252 &:= 6 \times 5^6 \times (2 + 5) + 2 = 2 + (5 + 2) \times 6 \times 5^6. \\
656253 &:= 6 \times 5^6 \times (2 + 5) + 3 = 3 + (5 + 2) \times 6 \times 5^6. \\
656254 &:= 6 \times 5^6 \times (2 + 5) + 4 = 4 + (5 + 2) \times 6 \times 5^6. \\
656255 &:= 6 \times 5^6 \times (2 + 5) + 5 = 5 + (5 + 2) \times 6 \times 5^6. \\
656256 &:= 6 \times 5^6 \times (2 + 5) + 6 = 6 + (5 + 2) \times 6 \times 5^6. \\
656257 &:= 6 \times 5^6 \times (2 + 5) + 7 = 7 + (5 + 2) \times 6 \times 5^6. \\
656258 &:= 6 \times 5^6 \times (2 + 5) + 8 = 8 + (5 + 2) \times 6 \times 5^6. \\
656259 &:= 6 \times 5^6 \times (2 + 5) + 9 = 9 + (5 + 2) \times 6 \times 5^6.
\end{aligned}$$

3.2 Symmetrical Consecutive Representations in Order of Digits

$$\begin{aligned}
137790 &:= (1 + 3^7 \times 7) \times 9 + 0. \\
137791 &:= (1 + 3^7 \times 7) \times 9 + 1. \\
137792 &:= (1 + 3^7 \times 7) \times 9 + 2. \\
137793 &:= (1 + 3^7 \times 7) \times 9 + 3. \\
137794 &:= (1 + 3^7 \times 7) \times 9 + 4.
\end{aligned}$$

$$\begin{aligned}
137795 &:= (1 + 3^7 \times 7) \times 9 + 5. \\
137796 &:= (1 + 3^7 \times 7) \times 9 + 6. \\
137797 &:= (1 + 3^7 \times 7) \times 9 + 7. \\
137798 &:= (1 + 3^7 \times 7) \times 9 + 8. \\
137799 &:= (1 + 3^7 \times 7) \times 9 + 9.
\end{aligned}$$

$$\begin{aligned}
156250 &:= 1 \times 5^6 \times 2 \times 5 + 0. \\
156251 &:= 1 \times 5^6 \times 2 \times 5 + 1. \\
156253 &:= 1 \times 5^6 \times 2 \times 5 + 3. \\
156254 &:= 1 \times 5^6 \times 2 \times 5 + 4. \\
156255 &:= 1 \times 5^6 \times 2 \times 5 + 5.
\end{aligned}$$

$$\begin{array}{lll}
156256 := 1 \times 5^6 \times 2 \times 5 + 6. & 248837 := -2 + (4 + 8)^{8-3} + 7. & 438989 := 4 + 38^{\sqrt{9}} \times 8 + 9. \\
156257 := 1 \times 5^6 \times 2 \times 5 + 7. & 248838 := -2 + (4 + 8)^{8-3} + 8. & 585640 := 5 \times 8 \times (5 + 6)^4 + 0. \\
156258 := 1 \times 5^6 \times 2 \times 5 + 8. & 248839 := -2 + (4 + 8)^{8-3} + 9. & 585641 := 5 \times 8 \times (5 + 6)^4 + 1. \\
156259 := 1 \times 5^6 \times 2 \times 5 + 9. & & 585642 := 5 \times 8 \times (5 + 6)^4 + 2. \\
194490 := (19 + \sqrt{4})^4 + 9 + 0. & 262140 := 2^{6 \times (2+1)} - 4 + 0. & 585643 := 5 \times 8 \times (5 + 6)^4 + 3. \\
194491 := (19 + \sqrt{4})^4 + 9 + 1. & 262141 := 2^{6 \times (2+1)} - 4 + 1. & 585644 := 5 \times 8 \times (5 + 6)^4 + 4. \\
194492 := (19 + \sqrt{4})^4 + 9 + 2. & 262142 := 2^{6 \times (2+1)} - 4 + 2. & 585645 := 5 \times 8 \times (5 + 6)^4 + 5. \\
194493 := (19 + \sqrt{4})^4 + 9 + 3. & 262143 := 2^{6 \times (2+1)} - 4 + 3. & 585646 := 5 \times 8 \times (5 + 6)^4 + 6. \\
194494 := (19 + \sqrt{4})^4 + 9 + 4. & 262144 := 2^{6 \times (2+1)} - 4 + 4. & 585647 := 5 \times 8 \times (5 + 6)^4 + 7. \\
194495 := (19 + \sqrt{4})^4 + 9 + 5. & 262145 := 2^{6 \times (2+1)} - 4 + 5. & 585648 := 5 \times 8 \times (5 + 6)^4 + 8. \\
194496 := (19 + \sqrt{4})^4 + 9 + 6. & 262147 := 2^{6 \times (2+1)} - 4 + 7. & 585649 := 5 \times 8 \times (5 + 6)^4 + 9. \\
194497 := (19 + \sqrt{4})^4 + 9 + 7. & 262148 := 2^{6 \times (2+1)} - 4 + 8. & 995340 := ((9 + \sqrt{9})^5 + 3) \times 4 + 0. \\
194498 := (19 + \sqrt{4})^4 + 9 + 8. & 262149 := 2^{6 \times (2+1)} - 4 + 9. & 995341 := ((9 + \sqrt{9})^5 + 3) \times 4 + 1. \\
194499 := (19 + \sqrt{4})^4 + 9 + 9. & 438980 := 4 + 38^{\sqrt{9}} \times 8 + 0. & 995342 := ((9 + \sqrt{9})^5 + 3) \times 4 + 2. \\
248830 := -2 + (4 + 8)^{8-3} + 0. & 438981 := 4 + 38^{\sqrt{9}} \times 8 + 1. & 995343 := ((9 + \sqrt{9})^5 + 3) \times 4 + 3. \\
248831 := -2 + (4 + 8)^{8-3} + 1. & 438982 := 4 + 38^{\sqrt{9}} \times 8 + 2. & 995344 := ((9 + \sqrt{9})^5 + 3) \times 4 + 4. \\
248832 := -2 + (4 + 8)^{8-3} + 2. & 438983 := 4 + 38^{\sqrt{9}} \times 8 + 3. & 995345 := ((9 + \sqrt{9})^5 + 3) \times 4 + 5. \\
248833 := -2 + (4 + 8)^{8-3} + 3. & 438984 := 4 + 38^{\sqrt{9}} \times 8 + 4. & 995346 := ((9 + \sqrt{9})^5 + 3) \times 4 + 6. \\
248834 := -2 + (4 + 8)^{8-3} + 4. & 438985 := 4 + 38^{\sqrt{9}} \times 8 + 5. & 995347 := ((9 + \sqrt{9})^5 + 3) \times 4 + 7. \\
248835 := -2 + (4 + 8)^{8-3} + 5. & 438986 := 4 + 38^{\sqrt{9}} \times 8 + 6. & 995348 := ((9 + \sqrt{9})^5 + 3) \times 4 + 8. \\
248836 := -2 + (4 + 8)^{8-3} + 6. & 438987 := 4 + 38^{\sqrt{9}} \times 8 + 7. & 995349 := ((9 + \sqrt{9})^5 + 3) \times 4 + 9. \\
& 438988 := 4 + 38^{\sqrt{9}} \times 8 + 8. &
\end{array}$$

3.3 Symmetrical Consecutive Representations in Reverse Order of Digits

$$\begin{array}{lll}
163840 := 0 + (4 \times 8)^{3 \times (6-1)}. & 279941 := 1 + \sqrt{4} - (\sqrt{9} - 9)^7 + 2. & 328512 := 2 + 1 + (5 + 8^2)^3. \\
163841 := 1 + (4 \times 8)^{3 \times (6-1)}. & 279942 := 2 + \sqrt{4} - (\sqrt{9} - 9)^7 + 2. & 328513 := 3 + 1 + (5 + 8^2)^3. \\
163842 := 2 + (4 \times 8)^{3 \times (6-1)}. & 279943 := 3 + \sqrt{4} - (\sqrt{9} - 9)^7 + 2. & 328514 := 4 + 1 + (5 + 8^2)^3. \\
163843 := 3 + (4 \times 8)^{3 \times (6-1)}. & 279944 := 4 + \sqrt{4} - (\sqrt{9} - 9)^7 + 2. & 328515 := 5 + 1 + (5 + 8^2)^3. \\
163844 := 4 + (4 \times 8)^{3 \times (6-1)}. & 279945 := 5 + \sqrt{4} - (\sqrt{9} - 9)^7 + 2. & 328516 := 6 + 1 + (5 + 8^2)^3. \\
163845 := 5 + (4 \times 8)^{3 \times (6-1)}. & 279946 := 6 + \sqrt{4} - (\sqrt{9} - 9)^7 + 2. & 328517 := 7 + 1 + (5 + 8^2)^3. \\
163846 := 6 + (4 \times 8)^{3 \times (6-1)}. & 279947 := 7 + \sqrt{4} - (\sqrt{9} - 9)^7 + 2. & 328518 := 8 + 1 + (5 + 8^2)^3. \\
163847 := 7 + (4 \times 8)^{3 \times (6-1)}. & 279948 := 8 + \sqrt{4} - (\sqrt{9} - 9)^7 + 2. & 328519 := 9 + 1 + (5 + 8^2)^3. \\
163848 := 8 + (4 \times 8)^{3 \times (6-1)}. & 279949 := 9 + \sqrt{4} - (\sqrt{9} - 9)^7 + 2. & 328510 := 01 + (5 + 8^2)^3. \\
163849 := 9 + (4 \times 8)^{3 \times (6-1)}. & 328510 := 0 + 1 + (5 + 8^2)^3. & 328521 := 12 + (5 + 8^2)^3. \\
279940 := 0 + \sqrt{4} - (\sqrt{9} - 9)^7 + 2. & 328511 := 1 + 1 + (5 + 8^2)^3. & 328532 := 23 + (5 + 8^2)^3.
\end{array}$$

$$\begin{array}{lll}
328543 := 34 + (5 + 8^2)^3. & 573443 := 3 + 4^{4+3} \times 7 \times 5. & 937502 := 2 + 0 + 5^7 \times (3 + 9). \\
328554 := 45 + (5 + 8^2)^3. & 573444 := 4 + 4^{4+3} \times 7 \times 5. & 937503 := 3 + 0 + 5^7 \times (3 + 9). \\
328565 := 56 + (5 + 8^2)^3. & 573445 := 5 + 4^{4+3} \times 7 \times 5. & 937504 := 4 + 0 + 5^7 \times (3 + 9). \\
328576 := 67 + (5 + 8^2)^3. & 573446 := 6 + 4^{4+3} \times 7 \times 5. & 937505 := 5 + 0 + 5^7 \times (3 + 9). \\
328587 := 78 + (5 + 8^2)^3. & 573447 := 7 + 4^{4+3} \times 7 \times 5. & 937506 := 6 + 0 + 5^7 \times (3 + 9). \\
328598 := 89 + (5 + 8^2)^3. & 573448 := 8 + 4^{4+3} \times 7 \times 5. & 937507 := 7 + 0 + 5^7 \times (3 + 9). \\
468750 := 0 + 5^7 \times (8 - 6 + 4). & 573449 := 9 + 4^{4+3} \times 7 \times 5. & 937508 := 8 + 0 + 5^7 \times (3 + 9). \\
468751 := 1 + 5^7 \times (8 - 6 + 4). & 589840 := 0 + \sqrt{4} \times (8 + 9 \times 8^5). & 937509 := 9 + 0 + 5^7 \times (3 + 9). \\
468752 := 2 + 5^7 \times (8 - 6 + 4). & 589841 := 1 + \sqrt{4} \times (8 + 9 \times 8^5). & 937500 := 00 + 5^7 \times (3 + 9). \\
468753 := 3 + 5^7 \times (8 - 6 + 4). & 589842 := 2 + \sqrt{4} \times (8 + 9 \times 8^5). & 937511 := 11 + 5^7 \times (3 + 9). \\
468754 := 4 + 5^7 \times (8 - 6 + 4). & 589843 := 3 + \sqrt{4} \times (8 + 9 \times 8^5). & 937522 := 22 + 5^7 \times (3 + 9). \\
468755 := 5 + 5^7 \times (8 - 6 + 4). & 589844 := 4 + \sqrt{4} \times (8 + 9 \times 8^5). & 937533 := 33 + 5^7 \times (3 + 9). \\
468756 := 6 + 5^7 \times (8 - 6 + 4). & 589845 := 5 + \sqrt{4} \times (8 + 9 \times 8^5). & 937544 := 44 + 5^7 \times (3 + 9). \\
468757 := 7 + 5^7 \times (8 - 6 + 4). & 589846 := 6 + \sqrt{4} \times (8 + 9 \times 8^5). & 937555 := 55 + 5^7 \times (3 + 9). \\
468758 := 8 + 5^7 \times (8 - 6 + 4). & 589847 := 7 + \sqrt{4} \times (8 + 9 \times 8^5). & 937566 := 66 + 5^7 \times (3 + 9). \\
468759 := 9 + 5^7 \times (8 - 6 + 4). & 589848 := 8 + \sqrt{4} \times (8 + 9 \times 8^5). & 937577 := 77 + 5^7 \times (3 + 9). \\
573440 := 0 + 4^{4+3} \times 7 \times 5. & 589849 := 9 + \sqrt{4} \times (8 + 9 \times 8^5). & 937588 := 88 + 5^7 \times (3 + 9). \\
573441 := 1 + 4^{4+3} \times 7 \times 5. & 937500 := 0 + 0 + 5^7 \times (3 + 9). & 937599 := 99 + 5^7 \times (3 + 9). \\
573442 := 2 + 4^{4+3} \times 7 \times 5. & 937501 := 1 + 0 + 5^7 \times (3 + 9). &
\end{array}$$

4 Symmetrical Representations in Increasing and Decreasing Orders of Digits

This section deals with symmetrical representations of *Selkie numbers* in increasing and decreasing order of digits. As in previous section, here in some cases we have symmetry but not necessarily consecutive.

4.1 Symmetrical Representations in Both Ways - Increasing and Decreasing Orders of Digits Jointly

$$\begin{array}{ll}
279930 := 0 + (2 \times 3)^7 - 9 + \sqrt{9} = (9 - \sqrt{9})^7 - 3 \times 2 + 0. & 466592 := 2 + \sqrt{4} \times 5 \times (6^6 + \sqrt{9}) = (\sqrt{9} + 6^6) \times 5 \times \sqrt{4} + 2. \\
279931 := 1 + (2 \times 3)^7 + 9 + \sqrt{9} = (9 - \sqrt{9})^7 - 3 \times 2 + 1. & 466593 := 3 + \sqrt{4} \times 5 \times (6^6 + \sqrt{9}) = (\sqrt{9} + 6^6) \times 5 \times \sqrt{4} + 3. \\
279932 := 2 + (2 \times 3)^7 - 9 + \sqrt{9} = (9 - \sqrt{9})^7 - 3 \times 2 + 2. & 466594 := 4 + \sqrt{4} \times 5 \times (6^6 + \sqrt{9}) = (\sqrt{9} + 6^6) \times 5 \times \sqrt{4} + 4. \\
466566 := \sqrt{4} \times 5 \times 6^{\sqrt{6 \times 6}} + 6 = 6 + 6^{\sqrt{6 \times 6}} \times 5 \times \sqrt{4}. & 531445 := -1 + 3^{4 \times \sqrt{4+5}} + 5 = 5 + \sqrt{(5+4)^{4 \times 3}} - 1. \\
466567 := \sqrt{4} \times 5 \times 6^{\sqrt{6 \times 6}} + 7 = 7 + 6^{\sqrt{6 \times 6}} \times 5 \times \sqrt{4}. & 531446 := -1 + 3^{4 \times \sqrt{4+5}} + 6 = 6 + \sqrt{(5+4)^{4 \times 3}} - 1. \\
466568 := \sqrt{4} \times 5 \times 6^{\sqrt{6 \times 6}} + 8 = 8 + 6^{\sqrt{6 \times 6}} \times 5 \times \sqrt{4}. & 531447 := -1 + 3^{4 \times \sqrt{4+5}} + 7 = 7 + \sqrt{(5+4)^{4 \times 3}} - 1. \\
466569 := \sqrt{4} \times 5 \times 6^{\sqrt{6 \times 6}} + 9 = 9 + 6^{\sqrt{6 \times 6}} \times 5 \times \sqrt{4}. & 531448 := -1 + 3^{4 \times \sqrt{4+5}} + 8 = 8 + \sqrt{(5+4)^{4 \times 3}} - 1. \\
466590 := 0 + \sqrt{4} \times 5 \times (6^6 + \sqrt{9}) = (\sqrt{9} + 6^6) \times 5 \times \sqrt{4} + 0. & 531449 := -1 + 3^{4 \times \sqrt{4+5}} + 9 = 9 + \sqrt{(5+4)^{4 \times 3}} - 1. \\
466591 := 1 + \sqrt{4} \times 5 \times (6^6 + \sqrt{9}) = (\sqrt{9} + 6^6) \times 5 \times \sqrt{4} + 1. &
\end{array}$$

4.2 Symmetrical Representations in Increasing Order of Digits

$$\begin{array}{lll}
 137790 := 0 + (1 + 3^7 \times 7) \times 9. & 468752 := 2 + \sqrt{4} \times 5^6 \times (7 + 8). & 656252 := 2 + (2 + 5) \times 5^6 \times 6. \\
 137791 := 1 + (1 + 3^7 \times 7) \times 9. & 468753 := 3 + \sqrt{4} \times 5^6 \times (7 + 8). & 656256 := (2 + 5) \times 5^6 \times 6 + 6. \\
 146416 := 11^4 \times (4 + 6) + 6. & 468754 := 4 + \sqrt{4} \times 5^6 \times (7 + 8). & 656257 := (2 + 5) \times 5^6 \times 6 + 7. \\
 146417 := 11^4 \times (4 + 6) + 7. & 524280 := 0 + 2^{24-5} - 8. & 656258 := (2 + 5) \times 5^6 \times 6 + 8. \\
 146418 := 11^4 \times (4 + 6) + 8. & 524281 := 1 + 2^{24-5} - 8. & 656259 := (2 + 5) \times 5^6 \times 6 + 9. \\
 146419 := 11^4 \times (4 + 6) + 9. & 524282 := 2 + 2^{24-5} - 8. & 656272 := 22 + 5^6 \times 6 \times 7. \\
 156250 := 0 \times 1 + 2 \times 5 \times 5^6. & 524285 := 2^{24-5} + 5 - 8. & 656273 := 23 + 5^6 \times 6 \times 7. \\
 156251 := 1 \times 1 + 2 \times 5 \times 5^6. & 524286 := 2^{24-5} + 6 - 8. & 656274 := 24 + 5^6 \times 6 \times 7. \\
 156252 := 1 \times 2 + 2 \times 5 \times 5^6. & 524287 := 2^{24-5} + 7 - 8. & 656275 := 25 + 5^6 \times 6 \times 7. \\
 156256 := 1 \times 2 \times 5 \times 5^6 + 6. & 524288 := 2^{24-5} + 8 - 8. & 681598 := 1 + \sqrt{5^6} + 88\sqrt{9}. \\
 156257 := 1 \times 2 \times 5 \times 5^6 + 7. & 524288 := 2^{24-5} - 8 + 9. & 681689 := 1 + \sqrt{6^6} + 88\sqrt{9}. \\
 156258 := 1 \times 2 \times 5 \times 5^6 + 8. & 628936 := 2 \times (36 + 68\sqrt{9}). & 889555 := (-5 + \sqrt{(5+5)^8}) \times 89. \\
 156259 := 1 \times 2 \times 5 \times 5^6 + 9. & 628954 := 2 \times (45 + 68\sqrt{9}). & 889644 := (-4 + \sqrt{(4+6)^8}) \times 89. \\
 468750 := 0 + \sqrt{4} \times 5^6 \times (7 + 8). & 656250 := 0 + (2 + 5) \times 5^6 \times 6. & 889733 := (-3 + \sqrt{(3+7)^8}) \times 89. \\
 468751 := 1 + \sqrt{4} \times 5^6 \times (7 + 8). & 656251 := 1 + (2 + 5) \times 5^6 \times 6. & 889822 := (-2 + \sqrt{(2+8)^8}) \times 89.
 \end{array}$$

4.3 Symmetrical Consecutive Representations in Decreasing Order of Digits

$$\begin{array}{lll}
 117664 := 7\sqrt{6 \times 6} + 4 + 11. & 194480 := (9 + 8 + 4)^4 + 1 - 1. & 263449 := 9 + 6^4 + 4^{3^2}. \\
 117665 := 7\sqrt{6 \times 6} + 5 + 11. & 194481 := (9 + 8 + 4)^4 + 1 - 1. & 264448 := 8^6 + (4 + 44)^2. \\
 117666 := 7\sqrt{6 \times 6} + 6 + 11. & 194482 := (9 + 8 + 4)^4 + 2 - 1. & 265865 := 8^6 + (6 + 55)^2. \\
 117667 := 7 + 7\sqrt{6 \times 6} + 11. & 194483 := (9 + 8 + 4)^4 + 3 - 1. & 349191 := 9 \times 9 \times 4311. \\
 117668 := 8 + 7\sqrt{6 \times 6} + 11. & 209728 := (\sqrt{9^8} - 7) \times \sqrt{\sqrt{2^{20}}}. & 349920 := 9 \times 9 \times 4320. \\
 117669 := 9 + 7\sqrt{6 \times 6} + 11. & 209824 := (\sqrt{9^8} - 4) \times \sqrt{\sqrt{2^{20}}}. & 373250 := (75 - 3)^3 + 2 + 0. \\
 177138 := -8 - 7/7 + 3^{11}. & 263440 := 6^4 + 4^{3^2} + 0. & 373251 := (75 - 3)^3 + 2 + 1. \\
 177139 := -9 + 7/7 + 3^{11}. & 263441 := 6^4 + 4^{3^2} + 1. & 373252 := (75 - 3)^3 + 2 + 2. \\
 177140 := -7 + (7 - 4)^{11} + 0. & 263442 := 6^4 + 4^{3^2} + 2. & 373253 := (75 - 3)^3 + 3 + 2. \\
 177141 := -7 + (7 - 4)^{11} + 1. & 263444 := 6^4 + 4 + 4^{3^2}. & 373257 := 7 + (75 - 3)^3 + 2. \\
 177147 := 7 - 7 + (7 - 4)^{11}. & 263446 := 6 + 6^4 + 4^{3^2}. & 373258 := 8 + (75 - 3)^3 + 2. \\
 177148 := 8 - 7 + (7 - 4)^{11}. & 263447 := 7 + 6^4 + 4^{3^2}. & 373259 := 9 + (75 - 3)^3 + 2. \\
 177149 := 9 - 7 + (7 - 4)^{11}. & 263448 := 8 + 6^4 + 4^{3^2}. & 459270 := \sqrt{9^7} \times 5 \times 42 + 0. \\
 & & 459271 := \sqrt{9^7} \times 5 \times 42 + 1.
 \end{array}$$

$459272 := \sqrt{9^7} \times 5 \times 42 + 2.$	$524342 := +54 + \sqrt{4^{-3+22}}.$	$573441 := 7 \times 5 \times 4^{4+3} + 1.$
$468790 := (-\sqrt{9} + 8)^7 \times 6 + 40.$	$537704 := (7 + 7)^5 - 4 \times 30.$	$573442 := 7 \times 5 \times 4^{4+3} + 2.$
$468791 := (-\sqrt{9} + 8)^7 \times 6 + 41.$	$537731 := (7 + 7)^5 - 3 \times 31.$	$573443 := 7 \times 5 \times 4^{4+3} + 3.$
$468792 := (-\sqrt{9} + 8)^7 \times 6 + 42.$	$537774 := -7 + (7 + 7)^5 - 43.$	$573447 := 7 + 7 \times 5 \times 4^{4+3}.$
$468793 := (-\sqrt{9} + 8)^7 \times 6 + 43.$	$537783 := -8 + (7 + 7)^5 - 33.$	$573448 := 8 + 7 \times 5 \times 4^{4+3}.$
$468794 := (-\sqrt{9} + 8)^7 \times 6 + 44.$		$573449 := 9 + 7 \times 5 \times 4^{4+3}.$
$470604 := (7^6 + \sqrt{4}) \times 4 + 00.$	$537920 := (\sqrt{9} + 7^5) \times 32 + 0.$	$755919 := 9 \times ((-9 + 7^5) \times 5 + 1).$
$470614 := (7^6 + \sqrt{4}) \times 4 + 10.$	$537921 := (\sqrt{9} + 7^5) \times 32 + 1.$	$755973 := 9 \times ((-7 + 7^5) \times 5 - 3).$
$470624 := (7^6 + \sqrt{4}) \times 4 + 20.$	$537922 := (\sqrt{9} + 7^5) \times 32 + 2.$	$852926 := (\sqrt{9^8} \times 65 - 2) \times 2.$
$470634 := (7^6 + \sqrt{4}) \times 4 + 30.$	$559539 := 9 \times (9^5 + 5^5 - 3).$	$852936 := (\sqrt{9^8} \times 65 + 3) \times 2.$
$470644 := (7^6 + \sqrt{4}) \times 4 + 40.$	$559593 := 9 \times (9^5 + 5^5 + 3).$	$912671 := 97^{6/2} - 1 - 1.$
$524234 := -54 + \sqrt{4^{-3+22}}.$	$573440 := 7 \times 5 \times 4^{4+3} + 0.$	$912672 := 97^{6/2} - 2 + 1.$

5 Selfie Representations in Both Ways - 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

$116424 := 11 \times 6 \times \sqrt{42^4}$	$= \sqrt{42^4} \times 6 \times 11.$	$147494 := 1 \times (4^7 + 4) \times 9 + \sqrt{4}$	$= \sqrt{4} + 9 \times (4^7 + 4) \times 1.$
$116565 := (-1 + 16) \times (-5 + 6^5)$	$= 5 \times (3 \times 6^{6-1} - 1).$	$149769 := (1 - (4 \times 97))^{6/\sqrt{9}}$	$= (9 \times 6 \times 7 + 9)^{\sqrt{4}} \times 1.$
$116645 := (1 \times 1 + 6^6/\sqrt{4}) \times 5$	$= 5 \times (\sqrt{4} + 6^6)/(1 + 1).$	$156252 := 1 \times 5^6 \times 2 \times 5 + 2$	$= 2 \times (5^{2 \times 6-5} + 1).$
$117647 := 1 + 1 \times 7^6 + 4 - 7$	$= \sqrt{7^{4+6}} \times 7 - 1 - 1.$	$157464 := (1 + 57 - 4)^{6/\sqrt{4}}$	$= 4 \times 6 \times (\sqrt{4} + 7)^{5-1}.$
$117652 := 1 \times 1 \times 7^6 + 5 - 2$	$= (2 + 5)^6 + \sqrt{7+1+1}.$	$157469 := 1 \times 5 + ((7 + \sqrt{4}) \times 6)^{\sqrt{9}}$	$= (9 \times 6)^{-4+7} + 5 \times 1.$
$117667 := 11 + 7^{\sqrt{6 \times 6}} + 7$	$= 7^{\sqrt{6 \times 6}} + 7 + 11.$	$163296 := (1 + 6) \times 32 \times \sqrt{9^6}$	$= 6^{\sqrt{9+2}} \times 3 \times (6 + 1).$
$124416 := 12^4 \times (4 + \sqrt{\sqrt{16}})$	$= 6 \times 144^2 \times 1.$	$163875 := (16^3 \times 8 + 7) \times 5$	$= 5 \times (7 + 8^{\sqrt{36-1}}).$
$131072 := (1 + 3)^{1+0+7} \times 2$	$= 2^{(7+0-1) \times 3-1}.$	$170471 := 1 \times 7^{04} \times 71$	$= 1 \times 7^4 \times (0 + 71).$
$137799 := (1 + 3^7 \times 7) \times 9 + 9$	$= (\sqrt{9^9} + 7) \times 7 - 31.$	$177674 := 1 \times 7 \times \sqrt{7^6} \times 74$	$= (-\sqrt{4} + 76) \times \sqrt{7^{7+1}}.$
$137979 := (1 + (3^7 + \sqrt{9}) \times 7) \times 9$	$= 9 \times (7 \times (\sqrt{9^7} + 3) + 1).$	$184877 := (-1 + 8)^{-4+8} \times 77$	$= 7 \times \sqrt{7^8} \times (4 + 8 - 1).$
$143749 := 1 + 4 \times (37 - 4)^{\sqrt{9}}$	$= (\sqrt{9} \times (4 + 7))^3 \times 4 + 1.$	$185193 := 1 \times ((8 - 5) \times 19)^3$	$= (3 + 9 \times (1 + 5))^{\sqrt{81}}.$
$147419 := -1 + (4^7 - 4) \times 1 \times 9$	$= 9 \times (1 \times 4^7 - 4) - 1.$	$186622 := 1 \times 8 \times 6^6/2 - 2$	$= 2 \times 2 \times 6^{\sqrt{\sqrt{6^8}}} - 1.$
$147429 := 1 + (4^7 - 4/2) \times 9$	$= 9 \times (2 + 4^7 - 4 - 1).$	$186642 := (1 + 8) \times ((6 + 6)^4 + 2)$	$= 2 \times \sqrt{4} \times 6^6 + \sqrt{81}.$
$147439 := 1 + (4^7 - \sqrt{4}) \times 3 \times \sqrt{9}$	$= \sqrt{9} \times 3 \times (4^7 - \sqrt{4}) + 1.$	$186644 := (1 + 8 + 6^6 - 4) \times 4$	$= 4 \times (-4 + 6^6) - \sqrt{81}.$
$147447 := (-1 + 4^7) \times (4 \times 4 - 7)$	$= (7 + \sqrt{4}) \times (4^7 - \sqrt{4} + 1).$	$186646 := (-1 + 8 + 6^6) \times 4 - 6$	$= -6 + 4 \times (6^6 + 8 - 1).$
$147454 := 1 \times 4^7 \times (4 + 5) - \sqrt{4}$	$= (4 + 5) \times 4^7 - \sqrt{4} \times 1.$	$186684 := (-1 + 8 + 6^6 + 8) \times 4$	$= 4 \times (8 + 6^6 + 8 - 1).$
$147456 := 1 \times 4^7 \times (\sqrt{4+5} + 6)$	$= (6 + 54 \times 7)^{\sqrt{4}} \times 1.$	$194479 := (19 + \sqrt{4})^4 + 7 - 9$	$= (\sqrt{9} \times 7)^{\sqrt{4 \times 4}} - \sqrt{9} + 1.$
$147474 := (1 \times 4^7 + \sqrt{4}) \times (7 + \sqrt{4})$	$= (\sqrt{4} + 7) \times (4^7 + \sqrt{4}) \times 1.$	$194497 := (19 + \sqrt{4})^4 + 9 + 7$	$= (7 \times \sqrt{9})^4 + \sqrt{4} \times (9 - 1).$
$147491 := 1 \times (4^7 + 4) \times 9 - 1$	$= 1 \times 9 \times (4^7 + 4) - 1.$	$194481 := (1 \times 9 - \sqrt{4})^4 \times 81$	$= 1 \times (84/4)^{\sqrt{9+1}}.$
$147493 := 1 + (4^7 + 4) \times \sqrt{9} \times 3$	$= 3 \times \sqrt{9} \times (4^7 + 4) + 1.$		

$194672 := (-1 + \sqrt{9}) \times 46^{\sqrt{7+2}}$	$= 2 \times (7 \times 6 + 4)^{\sqrt{9}} \times 1.$	$295235 := (-2 + 9^5) \times (-2 + 3) \times 5$	$= 5 \times (3 \times (-2 + 5)^9 - 2).$
$195113 := 1 + (\sqrt{9} + 5 \times 11)^3$	$= (3 + 11 \times 5)^{\sqrt{9}} + 1.$	$295243 := -2 + 9^5 \times (2 \times 4 - 3)$	$= 3^{4 \times 2} \times 5 \times 9 - 2.$
$199955 := (1 + 9) \times \sqrt{9^9} + 5^5$	$= 5^5 + \sqrt{9^9} \times (9 + 1).$	$295245 := (2 + 9^5 + 2 - 4) \times 5$	$= 5 \times ((\sqrt{4} + 25) \times 9)^2.$
$209952 := (2 \times (0 - 9))^{9-5} \times 2$	$= 2^5 \times (-9 + 90)^2.$	$296344 := (((-2 + 9) \times 6)^3 - \sqrt{4}) \times 4$	$= 4 \times (((4 + 3) \times 6)^{\sqrt{9}} - 2).$
$215995 := -2 + (1 + 59)^{\sqrt{9}} - 5$	$= -5 + ((9 + \sqrt{9}) \times 5)^{1+2}.$	$311469 := 3 \times (1 + 1 \times 46)^{\sqrt{9}}$	$= \sqrt{9} \times (6 + 41 \times 1)^3.$
$225792 := 2 \times (2 + 5 - 7^{\sqrt{9}})^2$	$= 2^9 \times (7 \times (5 - 2))^2.$	$314431 := ((3 + 14) \times 4)^3 - 1$	$= -1 + (34 \times \sqrt{4})^{1 \times 3}.$
$227529 := (22 \times 7 + 5)^2 \times 9$	$= (9^2 \times 5 + 72)^2.$	$314432 := (23 + 4 + 41)^3$	$= ((3 + 14) \times 4)^{\sqrt{3^2}}.$
$228484 := ((2 - 28)^4 - 8)/\sqrt{4}$	$= (4 - 8 + 482)^2.$	$314434 := ((3 + 14) \times 4)^3 + \sqrt{4}$	$= \sqrt{4} + (34 \times \sqrt{4})^{1 \times 3}.$
$229374 := 2^{2 \times 9-3} \times 7 - \sqrt{4}$	$= 4^7 \times (3 + 9 + 2) - 2.$	$314928 := \sqrt{3^{14}} \times 9 \times 2 \times 8$	$= 8 \times 2 \times (9^4 \times 1 \times 3).$
$232324 := (2 - 3^{2+3})^2 \times 4$	$= 4 \times (2 - 3^{2+3})^2.$	$314931 := (((1 - 3) \times 9)^4 + 1) \times 3$	$= 3 \times (1 + (\sqrt{4} \times 9)^{3+1}).$
$233255 := ((2 \times 3)^{3 \times 2} - 5) \times 5$	$= 5 \times (-5 + (2 \times 3)^{3 \times 2}).$	$314946 := (6 + (\sqrt{4} \times 9)^4) \times 1 \times 3$	$= 3 \times 1 \times ((\sqrt{4} \times 9)^4 + 6).$
$233295 := ((2 \times 3)^{3 \times 2} + \sqrt{9}) \times 5$	$= 5 \times (\sqrt{9} + (2 \times 3)^{3 \times 2}).$	$326557 := (3 \times 2 \times 6^5 - 5) \times 7$	$= 7 \times (-\sqrt{5 \times 5} + 6^{2 \times 3}).$
$234365 := (-2 + 3 \times (\sqrt{4} + 3)^6) \times 5$	$= (5^6 \times 3 - \sqrt{4}) \times (3 + 2).$	$326634 := (3 \times 2 + 6^6) \times (3 + 4)$	$= (4 + 3) \times (6 + (6^{2 \times 3})).$
$235292 := 2 \times (-3 + (5 + 2)^{\sqrt{9 \times 2}})$	$= 2 \times (-\sqrt{9} + (2 + 5)^{3 \times 2}).$	$326697 := ((3 \times 2)^6 + 6 + 9) \times 7$	$= 7 \times (9 + 6 + 6^{2 \times 3}).$
$235298 := 2 \times (-3 + 52)\sqrt{\sqrt{\sqrt{9^8}}}$	$= (8 + 9 + 2^5)^3 \times 2.$	$331773 := -3 + (31 - 7)^{7-3}$	$= 3 \times (7 \times 7 - 1)^3 - 3.$
$236194 := -2 + 36 \times 1 \times 9^4$	$= 4 \times 9^{\sqrt{\sqrt{16+3}}} - 2.$	$331779 := 3 + (31 - 7)^{\sqrt{7+9}}$	$= \sqrt{9} + (7 \times 7 - 1)^3 \times 3.$
$238328 := (23 + 8)^{\sqrt{3^2}} \times 8$	$= 8 \times (23 + 8)^{\sqrt{3^2}}.$	$342995 := (3^4 - 2 - 9)^{\sqrt{9}} - 5$	$= -5 + (-9 + 9^2 - \sqrt{4})^3.$
$239432 := 2 \times (3 + (9 - \sqrt{4})^3)^2$	$= 2 \times (349 - 3)^2.$	$352964 := 3 \times (5 + (2 - 9)^6) + \sqrt{4}$	$= (4 + 7^{\sqrt{9 \times 2}} + 5) \times 3.$
$242064 := ((2 + 4 \times 20) \times 6)^{\sqrt{4}}$	$= 4^6 \times (61 - 4/2).$	$354276 := (-3 + (5 + 4)^{-2+7}) \times 6$	$= 6 \times ((7 - 2 + 4)^5 - 3).$
$255894 := -2 \times 5^5 + 8^{\sqrt{9 \times 4}}$	$= (\sqrt{4}^{9+8} - 5^5) \times 2.$	$354375 := (3 \times 5)^4 \times (\sqrt{-3+7} + 5)$	$= 5 \times 7 \times 3^4 \times 5^3.$
$258064 := (-2 + (5 + 80) \times 6)^{\sqrt{4}}$	$= (\sqrt{4} + 6 \times (0 - 85))^2.$	$389344 := (3 + 89)^3 \times \sqrt{4}/4$	$= 4 \times (\sqrt{4} \times 3 \times 9 - 8)^3.$
$262136 := -2 - 6 + 2^{1 \times 3 \times 6}$	$= -6 + ((3 + 1) \times 2)^6 - 2.$	$393645 := (-3 + (\sqrt{9^{3+6}} \times 4)) \times 5$	$= 5 \times (4 \times (6 - 3)^9 - 3).$
$262137 := (2 + 62)^{1 \times 3} - 7$	$= -7 + ((3 + 1) \times 2)^{\sqrt{6^2}}.$	$411772 := (\sqrt{4} - 1) \times (1 + 7^7)/2$	$= 2 \times (7^7 + 1)/(1 \times 4).$
$262139 := -2 - 6/2 + (1 + 3)^9$	$= -\sqrt{9} + ((3 + 1) \times 2)^6 - 2.$	$411774 := \sqrt{4} \times (1 + (1 + 7^7)/4)$	$= (4 + 7^7 + 1 \times 1)/\sqrt{4}.$
$262141 := -1 + (-4 + 12)^6 - 2$	$= 2^{6 \times (2+1)} - 4 + 1.$	$419904 := 4 \times 1 \times (9 + 9)^{0+4}$	$= (4 + 0) \times (9 + 9)^{1 \times 4}.$
$262142 := 2^{6 \times (2+1)} - 4 + 2$	$= (2 \times 4)^{12-6} - 2.$	$425984 := (4 \times 2)^5 \times (9 + 8 - 4)$	$= 4 \times 8^{\sqrt{9}} \times 52 \times 4.$
$262146 := 2^{6 \times (2+1)} - 4 + 6$	$= \sqrt{64^{12-6}} + 2.$	$432964 := 4 \times 329^{6-4}$	$= (4 + (6^{\sqrt{9}} + 2) \times 3)^{\sqrt{4}}.$
$262148 := 2^{6 \times (2+1)} - 4 + 8$	$= 8^{(4-1) \times 2} + 6 - 2.$	$437656 := 4 \times (-3 + 7 \times (6 + 5^6))$	$= ((6 + 5^6) \times 7 - 3) \times 4.$
$262149 := 2^{6 \times (2+1)} - 4 + 9$	$= \sqrt{9} + (4 \times 1 \times 2)^6 + 2.$	$438244 := 4 \times (3 + 82 \times 4)^{\sqrt{4}}$	$= (\sqrt{4} - 4 \times 2 \times 83)^{\sqrt{4}}.$
$268322 := -2 + (6 + 8^3)^{\sqrt{2^2}}$	$= -2 + (2 \times 3 + \sqrt{8^6})^2.$	$438983 := 4 + 38^{\sqrt{9}} \times 8 + 3$	$= 38^{\sqrt{9}} \times 8 + 3 + 4.$
$268324 := (2 \times (6 + 8^3))^2/4$	$= (\sqrt{4} + 2 \times 3 \times 86)^2.$	$451584 := (4 - 51 - \sqrt{5^8})^{\sqrt{4}}$	$= ((4 + 8) \times (51 + 5))^{\sqrt{4}}.$
$272484 := 2 \times (7 - 2 + \sqrt{4^8})^{\sqrt{4}}$	$= (\sqrt{4} + 8 + 4 \times 2^7)^2.$	$455625 := \sqrt{(45 \times 5)^6/25}$	$= (5 \times (2 \times 65 + 5))^{\sqrt{4}}.$
$279666 := ((2 - 7) \times 9 + 6^6) \times 6$	$= 6 \times (6^6 - 9 \times (7 - 2)).$	$458748 := -\sqrt{4^5}/8 + 7 \times 4^8$	$= 8/4 \times 7 \times 8^5 - 4.$
$279928 := -8 + (\sqrt{2 \times (9 + 9)})^{\sqrt{7^2}}$	$= \sqrt{(27 + 9)^{9-2}} - 8.$	$466495 := (\sqrt{4} \times 6^6 - 4 - 9) \times 5$	$= 5 \times (-9 - 4 + 6^6 \times \sqrt{4}).$
$279997 := -2 + 7 \times 9 + (9 - \sqrt{9})^7$	$= 7 \times 9 + (9 - \sqrt{9})^7 - 2.$	$466515 := (\sqrt{4} \times (6^6 - 5) + 1) \times 5$	$= 5 \times (1 + (-5 + 6^6) \times \sqrt{4}).$
$287496 := ((2 + 8) \times 7 - 4)^{9-6}$	$= (6 \times (9 + \sqrt{4}))^{7-8/2}.$	$466534 := ((-\sqrt{4} + 6^6) \times 5 - 3) \times \sqrt{4}$	$= \sqrt{4} \times (-3 + 5 \times (6^6 - \sqrt{4})).$
$289444 := ((2^8 + 9 + 4)^{\sqrt{4}}) \times 4$	$= (\sqrt{4} \times (4^4 + 9) + 8)^2.$	$466538 := \sqrt{4} \times (6^6 \times 5 - 3 - 8)$	$= (-8 - 3 + 5 \times 6^6) \times \sqrt{4}.$
$293764 := (2 + 9 \times (3 + 7) \times 6)^{\sqrt{4}}$	$= (\sqrt{4} + 6 \times (7 + 3) \times 9)^2.$	$466575 := (\sqrt{4} \times (6^6 + 5) - 7) \times 5$	$= 5 \times (-7 + (5 + 6^6) \times \sqrt{4}).$
$294847 := -2 + 9 \times (4^8/\sqrt{4} - 7)$	$= (-7 + 4^8/\sqrt{4}) \times 9 - 2.$	$466585 := (\sqrt{4} \times 6^6 + \sqrt{\sqrt{5^8}}) \times 5$	$= \sqrt{\sqrt{5^8}} + (5 \times 6^6) \times \sqrt{4}.$
$294849 := (2 - 9 + 4^8/\sqrt{4}) \times 9$	$= 9 \times (4^8/\sqrt{4} - 9 + 2).$	$466595 := (\sqrt{4} \times (6^6 + 5) - \sqrt{9}) \times 5$	$= 5 \times (-\sqrt{9} + (5 + 6^6) \times \sqrt{4}).$
$294892 := -2 + 9 \times ((4 \times 8)^{\sqrt{9}} - 2)$	$= -2 + 9 \times (8^{-4+9} - 2).$	$466615 := (\sqrt{4} \times (6 + 6^6) - 1) \times 5$	$= 5 \times (-1 + (6 + 6^6) \times \sqrt{4}).$
$294912 := 2 \times 9 \times 4^{9-1 \times 2}$	$= (2 \times (-1 + 9))^4 \times 9/2.$	$466635 := (\sqrt{4} \times (6 + 6^6) + 3) \times 5$	$= 5 \times (3 + (6 + 6^6) \times \sqrt{4}).$
$294914 := 2 + 9 \times 4^{9-1}/\sqrt{4}$	$= \sqrt{4^{19-4}} \times 9 + 2.$	$472386 := (\sqrt{4} + 7)^{2+3} \times 8 - 6$	$= -6 + 8 \times 3^{2 \times 7-4}.$
$294928 := 2 \times (9 \times 4^{9-2} + 8)$	$= 8 \times ((2^{\sqrt{9}})^4 \times 9 + 2).$	$472389 := (\sqrt{4} + 7)^{2+3} \times 8 - \sqrt{9}$	$= -\sqrt{9} + 8 \times 3^{2 \times 7-4}.$
$294965 := -5 \times ((6 - 9^4) \times 9 + 2)$	$= -(29 \times \sqrt{4} - 9^5) \times 5.$	$472392 := (4 + 7 \times 2)^3 \times 9^2$	$= 2 \times 9^{\sqrt{32-7}} \times 4.$

$473344 := (4 + 7^3 - 3)^{\sqrt{4}} \times 4$	$= (4 \times 43 \times (3 - 7))^{\sqrt{4}}$	$728995 := (\sqrt{\sqrt{(7+2)^8} + 9})^{\sqrt{9}} - 5$	$= (5 \times 9)^{\sqrt{9}} \times 8 + 2 - 7.$
$493832 := \sqrt{4} + 9 \times (38^3 - 2)$	$= (-2 + 38^3) \times 9 + \sqrt{4}.$	$729009 := 7 + 2 + 90^{\sqrt{09}}$	$= 90^{\sqrt{09}} + 2 + 7.$
$493834 := 4 + 9 \times (38^3 - \sqrt{4})$	$= (-\sqrt{4} + 38^3) \times 9 + 4.$	$746489 := -7 + \sqrt{4} \times (64 + 8)^{\sqrt{9}}$	$= 9 \times \sqrt{8^4} \times 6^4 - 7.$
$493837 := -4 + 9 \times 38^3 - 7$	$= -7 + 38^3 \times 9 - 4.$	$751599 := (7 + (5 - 1)^5) \times 9^{\sqrt{9}}$	$= (9^{\sqrt{9}}) \times ((5 - 1)^5 + 7).$
$493838 := -\sqrt{4} + 9 \times 38^3 - 8$	$= (-8 + 38^3 \times 9) - \sqrt{4}.$	$759359 := -7 + (5 \times 9/3)^5 - 9$	$= -9 + (5 \times \sqrt{3 \times \sqrt{9}})^5 - 7.$
$493839 := (-4 + \sqrt{9} + 38^3) \times 9$	$= 9 \times (38^3 - \sqrt{9} + \sqrt{4}).$	$759368 := -7 + (5 \times \sqrt{9})^{3-6+8}$	$= ((8 - 6) \times 3 + 9)^5 - 7.$
$493852 := 4 + 9 \times 38^{5-2}$	$= (-2 + 5 \times 8)^3 \times 9 + 4.$	$759375 := (-7 + 59 - 37)^5$	$= (5 + 7 + 3)^{\sqrt{9}-5+7}.$
$497662 := (-4 + 9 + 7)^6/6 - 2$	$= 2^6 \times \sqrt{6^{7+\sqrt{9}}} - \sqrt{4}.$	$759381 := 7 + (5 \times \sqrt{9})^{-3+8} - 1$	$= -1 + (8 \times 3 - 9)^5 + 7.$
$524278 := -5 \times 2 + \sqrt{4^{27-8}}$	$= 8^7/\sqrt{2^4} - 2 \times 5.$	$759382 := 7 + (5 \times \sqrt{9})^{3+\sqrt{8/2}}$	$= \sqrt{((28 - 3) \times 9)^5} + 7.$
$524282 := 2 \times (8^{2+4} + 2 - 5)$	$= -5 + (-2 + 4^{2+8})/2.$	$759384 := 7 + (5 \times \sqrt{9})^{-3+8} + \sqrt{4}$	$= \sqrt{4} + (8 \times 3 - 9)^5 + 7.$
$524294 := (5 - 2 + \sqrt{4^{2 \times 9}}) \times \sqrt{4}$	$= 4^9 \times 2 - 4 + 2 \times 5.$	$765625 := \sqrt{7^6} \times 5^6/(2 + 5)$	$= \sqrt{5^{2 \times 6}} \times (56 - 7).$
$524298 := 5 \times 2 + 4 \times 2^{9+8}$	$= 8^{9-2}/4 + 2 \times 5.$	$765667 := 7 \times (6 + (5^{\sqrt{6 \times 6}}) \times 7)$	$= 7 \times (\sqrt{6 \times 6} + 5^6 \times 7).$
$524488 := (5^{-2+4} + 4^8) \times 8$	$= 8 \times ((8 \times \sqrt{4})^4 + 25).$	$776887 := 7^7 - 6^{-8/8+7}$	$= -(7 - 8/8)^6 + 7^7.$
$529984 := (52 \times (9 - \sqrt{9} + 8))^{\sqrt{4}}$	$= (4 + 8^3) \times (8/2)^5.$	$786429 := (7 + 8^6 - 4 \times 2) \times \sqrt{9}$	$= \sqrt{9} \times ((2 \times 4)^6 - 8 + 7).$
$531433 := -5 + 3^{1 \times 4 \times 3} - 3$	$= 3^{3 \times 4} - 13 + 5.$	$786439 := 7 + (8 \times 6 \times 4)^3/9$	$= (9 + 3) \times (\sqrt{4} - 6)^8 + 7.$
$531434 := -5 + 3^{1 \times 4 \times 3} - \sqrt{4}$	$= -\sqrt{4} + 3^{4 \times 1 \times 3} - 5.$	$786449 := -7 + (8^6 + 4 + 4) \times \sqrt{9}$	$= \sqrt{9} \times ((4 + 4)^6 + 8) - 7.$
$583443 := (3 + 4)^4 \times \sqrt{\sqrt{\sqrt{38 \times 5}}}$	$= (5 + 8 - 34)^4 \times 3.$	$786463 := 3 \times (\sqrt{64^6} + 8) + 7$	$= 7 + (8^6 + \sqrt{4} + 6) \times 3.$
$588245 := (5 + \sqrt{\sqrt{8+8}})^{2+4} \times 5$	$= (5 + \sqrt{4})^{\sqrt{28+8}} \times 5.$	$823477 := -(8/2)^3 - \sqrt{4} + 7^7$	$= 7^7 - 4^3 - \sqrt{2 \times 8}.$
$589829 := 5 + 8^{-\sqrt{9+8}} \times 2 \times 9$	$= 9 \times 2^{8 \times \sqrt{9}-8} + 5.$	$823527 := -8 - 2^3 + (5 + 2)^7$	$= 7^{2+5} - \sqrt{32 \times 8}.$
$589864 := 5 \times 8 + 9 \times 8^6/4$	$= (\sqrt{4} - 6)^8 \times 9 + 8 \times 5.$	$823547 := 7^{\sqrt{4+5}} + 32/8$	$= \sqrt{8 + 2^3} + (5 + \sqrt{4})^7.$
$592699 := -5 + (9^2 - 6 + 9)^{\sqrt{9}}$	$= (9 \times 9 + 6/2)^{\sqrt{9}} - 5.$	$839784 := -(\sqrt{4} - 8)^7 \times \sqrt{9} - 3 \times 8$	$= 8 \times (-3 + (\sqrt{9} + 7 + 8)^4).$
$597878 := 5 + (9^7 + 8 + 7)/8$	$= (8 + \sqrt{25}) \times 6^{06}.$	$839816 := (8 + (3 - 9)^8)/\sqrt{\sqrt{16}}$	$= 6^{1+8}/(9 + 3) + 8.$
$614648 := ((6 + 1) \times 4)^{6-\sqrt{4}} - 8$	$= -8 + (4 \times 6 + 4)^{\sqrt{16}}.$	$851942 := (-2 + 4^{9-1}) \times (5 + 8)$	$= (8^5 - 1) \times (9 + 4) \times 2.$
$629984 := (6 - 2 + \sqrt{9^9}) \times 8 \times 4$	$= 4 \times 8 \times (\sqrt{9^9} - 2 + 6).$	$851968 := (8 + 5) \times (1 + 9 - 6)^8$	$= 8^6 \times \sqrt{9} + (-1 + 5)^8.$
$640024 := (6 + 400^2) \times 4$	$= 4 \times (20^{0+4} + 6).$	$884736 := 8 \times 8^4 \times (7 \times 3 + 6)$	$= (-6 + 3 \times 74) \times \sqrt{8^8}.$
$649545 := 6 + (\sqrt{4} + 9) \times (5 + 4)^5$	$= (5 + 4)^5 \times (9 + \sqrt{4}) + 6.$	$917494 := -9 - 1 + 7 \times 4^9/\sqrt{4}$	$= 4^9/\sqrt{4} \times 7 - 1 - 9.$
$655354 := -6 + 5 \times (5 + 3)^5 \times 4$	$= 4^{5+3} \times (5 + 5) - 6.$	$937577 := (9 + 3) \times (7 + 5^7) - 7$	$= 77 + 5^7 \times (3 + 9).$
$656187 := (6 \times 5^6 - 1 - 8) \times 7$	$= 7 \times (-\sqrt{81} + 6 \times 5^6).$	$944847 := 9 \times ((\sqrt{4} + (\sqrt{4} \times 8))^4 + 7)$	$= (7 + (\sqrt{4} + 8 \times \sqrt{4})^4) \times 9.$
$656376 := (6 + 5^6 - 3) \times 7 \times 6$	$= 6 \times 7 \times (-3 + 6 + 5^6).$	$958464 := 9 \times (5 + 8) \times 4^6 \times \sqrt{4}$	$= 4^6 \times \sqrt{4} \times (8 + 5) \times 9.$
$663552 := 6 \times (6 \times (3 + 5))^{5-2}$	$= 2^{5+5} \times 3 \times \sqrt{6^6}.$	$979766 := -\sqrt{9} - 7 + \sqrt{9} \times 7 \times 6^6$	$= 6^6 \times 7 \times \sqrt{9} - 7 - \sqrt{9}.$
$684288 := \sqrt{6^8} \times (4 + 2) \times 88$	$= 88 \times \sqrt{(2 + 4)^8} \times 6.$	$995364 := ((9 + \sqrt{9})^5 + 3 + 6) \times 4$	$= (4 + (6 \times (3 + 5))^{\sqrt{9}}) \times 9.$
$685464 := 6 \times (8 + 5)^4 \times (6 - \sqrt{4})$	$= 4 \times \sqrt{(\sqrt{64} + 5)^8} \times 6.$	$999919 := -9 \times 9 + (9 + 91)^{\sqrt{9}}$	$= (91 + 9)^{\sqrt{9}} - 9 \times 9.$
$699735 := (6^9 - \sqrt{9} - 7) \times 3 \times 5$	$= 5 \times 3 \times (-7 + (9 - \sqrt{9})^6).$		

5.2 Selfie Representations in Order of Digits

$102487 := \sqrt{(10 + 2/\sqrt{4})^8} \times 7.$	$117128 := 11^{7-1-2} \times 8.$	$117625 := 1 + 1 \times 7^6 - 25.$
$103823 := (-1 + 03 \times 8 \times 2)^3.$	$117396 := (-117 + 3^9) \times 6.$	$117626 := -11 + 7^6 - 2 \times 6.$
$104964 := -10 - \sqrt{4} + (\sqrt{9} \times 6)^4.$	$117476 := 1 - 174 + 7^6.$	$117628 := -11 + 7^6 - 2 - 8.$
$104976 := (10 - \sqrt{4}) \times \sqrt{9^7} \times 6.$	$117571 := (-11 + 7^5) \times 7 - 1.$	$117629 := -11 - 1 + 7^6 - 2 \times 9.$
$106929 := (106 + \sqrt{9})^2 \times 9.$	$117572 := -(11 - 7^5) \times \sqrt{7^2}.$	$117630 := 11 + 7^6 - 30.$
$114244 := ((-1 + 14) \times 2)^4/4.$	$117574 := (-11 + 7^5) \times 7 + \sqrt{4}.$	$117632 := -11 + 7^6 - 3 \times 2.$
$114677 := -11 - (\sqrt{4} - 6)^7 \times 7.$	$117576 := 1 + 1 - 75 + 7^6.$	$117633 := 11 + 7^6 - 3^3.$
$114687 := -1 \times 1 + \sqrt{4^{6+8}} \times 7.$	$117587 := 1 + (-1 + 7^5 - 8) \times 7.$	$117635 := 1 + 1 \times 7^6 - 3 \times 5.$
$114950 := \sqrt{11^4} \times 950.$	$117597 := 11 + (7^5 - 9) \times 7.$	$117637 := -1 - 1 + 7^6 - 3 - 7.$
$116964 := (116 \times \sqrt{9} - 6)^{\sqrt{4}}.$	$117619 := -11 + 7^6 - 19.$	$117638 := 1 \times 1 \times 7^6 - 3 - 8.$
	$117624 := -1 + 1 \times 7^6 - 24.$	$117639 := 1 + 1 + 7^6 - 3 - 9.$

$$\begin{aligned}
117640 &:= -11 + 7^6 + \sqrt{4} + 0. & 132519 &:= -132 + 51^{\sqrt{9}}. & 161999 &:= -1 + 6 \times ((1 + 9) \times \sqrt{9})^{\sqrt{9}}. \\
117641 &:= -11 + 7^6 + 4 - 1. & 134456 &:= 1 \times (3 + 4)^4 \times 56. & 163297 &:= 1 + 6^{3+2} \times \sqrt{9} \times 7. \\
117642 &:= 1 + 1 \times 7^6 - 4 \times 2. & 136162 &:= 1 + (3 + 61 \times 6)^2. & 163825 &:= (-1 + 6) \times (-3 + 8^{\sqrt{25}}). \\
117644 &:= 11 + 7^6 - 4 \times 4. & 136462 &:= (\sqrt{13^6} + 4) \times 62. & 163835 &:= (-1 + (-6 + 38)^3) \times 5. \\
117646 &:= 1 + 1 \times 7^6 + \sqrt{4} - 6. & 136857 &:= \sqrt{(13 - 6)^8} \times 57. & 163840 &:= \sqrt{\sqrt{(1 + 63)^8}} \times 40. \\
117648 &:= 11 + 7^6 - 4 - 8. & 137718 &:= (-1 + 3^7) \times (71 - 8). & 163855 &:= 1 \times (6 - 3 + 8^5) \times 5. \\
117650 &:= 1 + 1 \times 7^6 + 5 \times 0. & 137772 &:= (-1 + 3^7 \times 7) \times (7 + 2). & 163885 &:= (-1 + 6) \times (\sqrt{\sqrt{3^8}} + 8^5). \\
117651 &:= -1 - 1 + 7^6 + 5 - 1. & 137781 &:= 1 \times 3^7 \times 7 \times \sqrt{81}. & 164592 &:= 1 \times 6^4 \times (5^{\sqrt{9}} + 2). \\
117653 &:= 1 + 1 + 7^6 + 5 - 3. & 137839 &:= -1 + 3 + 7 \times (8 + 3^9). & 165884 &:= \sqrt{(1 + 6 + 5)^8} \times 8 - 4. \\
117655 &:= (1 + (1 + 7^6)/5) \times 5. & 137948 &:= -1 + 3 \times 7 \times (9^4 + 8). & 165888 &:= \sqrt{\sqrt{16} \times (5 - 8)^8} \times 8. \\
117659 &:= 1 + 1 + 7^6 + 5 + \sqrt{9}. & 138915 &:= (13 + 8)^{\sqrt{9}} \times 15. & 165889 &:= 1 + 6^5 \times 8 \times 8/\sqrt{9}. \\
117660 &:= 11 + 7^6 + 6 \times 0. & 139953 &:= (((1 + 3) \times 9)^{\sqrt{9}} - 5) \times 3. & 166464 &:= ((\sqrt{16} + 64) \times 6)^{\sqrt{4}}. \\
117661 &:= 11 + 7^{\sqrt{6 \times 6}} + 1. & 139965 &:= -1 \times 3 + (9 + 9) \times 6^5. & 166698 &:= \sqrt{(1 + 6)^6} \times 6 \times \sqrt{\sqrt{9^8}}. \\
117662 &:= 1 + 1 \times 7^6 + 6 \times 2. & 139972 &:= 1 + 3 + (9 - \sqrt{9})^2/2. & 167286 &:= (167^2 - 8) \times 6. \\
117663 &:= 11 + 7^6 + 6 - 3. & 146410 &:= (1 + 4 + 6)^4 \times 10. & 167961 &:= (-1 + 6^7) \times \sqrt{9}/(6 - 1). \\
117664 &:= 11 + 7^6 + 6 - \sqrt{4}. & 146411 &:= 11^4 \times (6 + 4) + 1. & 168070 &:= \sqrt{(1 + 6)^8} \times (0 + 70). \\
117665 &:= 11 + 7^{\sqrt{6 \times 6}} + 5. & 146461 &:= (1^4 + 6)^4 \times 61. & 169744 &:= 1 \times ((6 + 97) \times 4)^{\sqrt{4}}. \\
117666 &:= 11 + 7^6 + \sqrt{6} \times 6. & 147249 &:= (1 + 4^7 - 24) \times 9. & 172872 &:= 1 \times 7^{\sqrt{2 \times 8}} \times 72. \\
117668 &:= 11 + 7^{\sqrt{6 \times 6}} + 8. & 147349 &:= 1 + (4^7 - 3 \times 4) \times 9. & 175232 &:= (-1 + 75)^2 \times 32. \\
117669 &:= 11 + 7^6 + 6 + \sqrt{9}. & 147438 &:= 1 \times (4^7 - \sqrt{4}) \times \sqrt{\sqrt{3^8}}. & 175274 &:= 1 + (75 - 2) \times 7^4. \\
117674 &:= 11 + 7^6 + 7 \times \sqrt{4}. & 147453 &:= 1 \times 4^7 \times (4 + 5) - 3. & 175446 &:= \sqrt{(175 - 4)^4} \times 6. \\
117676 &:= \sqrt{\sqrt{(1 + 1 + 7)^6}} + 7^6. & 147455 &:= -1 + 4^7 \times 45/5. & 175609 &:= -1 \times 7 + 56^{\sqrt{09}}. \\
117686 &:= -11 + 7^6 + 8 \times 6. & 147459 &:= 1 \times 4^7 \times (4 + 5) + \sqrt{9}. & 175623 &:= 1 \times 7 + \sqrt{56^{2 \times 3}}. \\
117695 &:= 1 + 1 \times 7^6 + 9 \times 5. & 147465 &:= (1 + 4^7) \times (-\sqrt{4} + 6 + 5). & 175633 &:= 17 + 56^{\sqrt{3 \times 3}}. \\
117726 &:= 11 \times 7 + \sqrt{7^{2 \times 6}}. & 147492 &:= 1 \times (4^7 + 4) \times \sqrt{9^2}. & 176129 &:= 1 + (\sqrt{7^6} + 1) \times 2^9. \\
117763 &:= 117 + 7^6 - 3. & 147519 &:= (1 + 4^7 + 5 + 1) \times 9. & 176466 &:= (-1 + 7^6)/4 \times 6 - 6. \\
117764 &:= 117 + 7^6 - \sqrt{4}. & 148862 &:= \sqrt{\sqrt{(1 + 48)^8}} \times 62. & 176469 &:= (-1 + 7^6)/4 \times 6 - \sqrt{9}. \\
117766 &:= 117 + 7^{\sqrt{6 \times 6}}. & 148945 &:= ((-1 + 4 \times 8)^{\sqrt{9}} + \sqrt{4}) \times 5. & 176472 &:= (-1 + 7^6) \times (-4 + 7)/2. \\
117769 &:= 117 + 7^6 + \sqrt{9}. & 148955 &:= (-1 + 4 \times 8)^{\sqrt{9}} \times \sqrt{5 \times 5}. & 176474 &:= (1 + 7^6 \times (-4 + 7))/\sqrt{4}. \\
117777 &:= (1 + 1)^7 + 7^7/7. & 149797 &:= 1 \times (4^{\sqrt{9}+7} + \sqrt{9})/7. & 176499 &:= ((-1 + 7^6)/\sqrt{4} - 9) \times \sqrt{9}. \\
117996 &:= 1 \times (-17 + \sqrt{9^9}) \times 6. & 151875 &:= 15\sqrt{(18+7)^5}. & 176868 &:= \sqrt{17\sqrt{\sqrt{6^8}}} \times \sqrt{\sqrt{6^8}}. \\
118098 &:= 1 \times 18 \times \sqrt{0 + 9^8}. & 155520 &:= (1^5 + 5)^5 \times 20. & 179469 &:= (17 \times \sqrt{9})^{\sqrt{4}} \times 69. \\
118328 &:= (1 + (-1 + 8)^3)^2 - 8. & 155850 &:= 1 \times (5^5 - 8) \times 50. & 181447 &:= (1 - 81 \times \sqrt{4})^{\sqrt{4}} \times 7. \\
124386 &:= (12^4 + 3 - 8) \times 6. & 156225 &:= (-1 + (5^6 - 2) \times 2) \times 5. & 182476 &:= (1 + 8 - 2)^4 \times 76. \\
124413 &:= (12^4 \times \sqrt{4} - 1) \times 3. & 156235 &:= 1 \times (5^6 \times 2 - 3) \times 5. & 184275 &:= (-1 + 8^4) \times (2 + 7) \times 5. \\
124419 &:= (12^4 \times \sqrt{4} + 1) \times \sqrt{9}. & 156245 &:= (-1 + 5^6 \times (-2 + 4)) \times 5. & 184325 &:= (1 + 8^4 \times 3^2) \times 5. \\
124428 &:= (12^4 + \sqrt{4}) \times (-2 + 8). & 156249 &:= -1 + 5^6 \times 2 \times (-4 + 9). & 184329 &:= (1 + 8^4 \times (3 + 2)) \times 9. \\
124852 &:= \sqrt{(1 - 2 \times 4)^8} \times 52. & 156275 &:= ((-1 + 5^6) \times 2 + 7) \times 5. & 184335 &:= (1 + 8^4 \times 3) \times 3 \times 5. \\
124856 &:= -\sqrt{12^4} + 8 \times 5^6. & 156285 &:= (-1 + 5^6 \times 2 + 8) \times 5. & 184365 &:= (1 + 8^4) \times (3 + 6) \times 5. \\
124995 &:= (1^2 + 49)^{\sqrt{9}} - 5. & 156295 &:= (1 \times 5^6 \times 2 + 9) \times 5. & 184495 &:= (-1 + (8^4 + 4) \times 9) \times 5. \\
124999 &:= -1 + (-2 + 49 + \sqrt{9})^{\sqrt{9}}. & 157459 &:= -1 \times 5 + (\sqrt{7^4} + 5)^{\sqrt{9}}. & 184545 &:= 1 \times (8^4 + 5) \times 45. \\
125003 &:= 1 + 2 + 50^{0+3}. & 157463 &:= -1 + ((5 + 7) \times 4 + 6)^3. & 186599 &:= -1 + 8 \times (6^5 \times \sqrt{9} - \sqrt{9}). \\
125012 &:= 12 + 50^{1+2}. & 157479 &:= 15 + (7 + 47)^{\sqrt{9}}. & 186616 &:= -1 \times 8 + 6^6 \times \sqrt{16}. \\
128500 &:= (1 + 2^8) \times 500. & 158466 &:= (15 - 8)^4 \times 66. & 186641 &:= 18 + 6^6 \times 4 - 1. \\
129283 &:= (-1 + 2^9) \times (2^8 - 3). & 158499 &:= (1 + \sqrt{(5 \times 8)^4}) \times 99. & 186687 &:= (1 + 8) \times (\sqrt{(6 + 6)^8} + 7). \\
129375 &:= (12^{\sqrt{9}} - 3) \times 75. & 159744 &:= (-1 + 5^{\sqrt{9+7}}) \times 4^4. & 187278 &:= ((-1 + 8) \times 7)^2 \times 78. \\
131071 &:= (-1 + 3)^{10+7} - 1. & 161051 &:= (1^6 + 10)^5 \times 1. & 188415 &:= -1 + \sqrt{8^8} \times (41 + 5). \\
131074 &:= (-1 + 3)^{10+7} + \sqrt{4}. & & & 188461 &:= (1 + \sqrt{8^8}) \times 46 - 1. \\
& & & & 188462 &:= (1 + \sqrt{8^8}) \times \sqrt{46^2}. \\
& & & & 188464 &:= (1 + \sqrt{8^8}) \times 46 + \sqrt{4}.
\end{aligned}$$

$$\begin{aligned}
188646 &:= (-1 + \sqrt{8^8} + 6) \times 46. \\
194463 &:= (19 + \sqrt{4})^4 - 6 \times 3. \\
194472 &:= (19 + \sqrt{4})^4 - 7 - 2. \\
194474 &:= (19 + \sqrt{4})^4 - \sqrt{\sqrt{7^4}}. \\
194634 &:= (-19 + 46^3) \times \sqrt{4}. \\
194692 &:= (1 + 9 + 46\sqrt{9}) \times 2. \\
195776 &:= -1 + \sqrt{9} + 5^7 + 7^6. \\
196830 &:= 1 \times (9 - 6)^8 \times 30. \\
209944 &:= 2 \times (0 + (9 + 9)^4 - 4). \\
209946 &:= 2 \times (0 + (9 + 9)^4) - 6. \\
209949 &:= 2 \times (0 + (9 + 9)^4) - \sqrt{9}. \\
210125 &:= (2^10 + 1)^2/5. \\
215994 &:= -2 + (1 + 59)\sqrt{9} - 4. \\
215996 &:= -2 + (1 + 59)\sqrt{9} - 6. \\
215998 &:= -2 + (1 + 59)\sqrt{\sqrt{\sqrt{9^8}}}. \\
215999 &:= 2 + (1 + 59)\sqrt{9} - \sqrt{9}. \\
216003 &:= 2 + 1 + 60^{0+3}. \\
216021 &:= 21 + 60^{2+1}. \\
218491 &:= (-2 + 1 + 8)^4 \times 91. \\
218568 &:= 21 \times 8 \times (5 + \sqrt{6^8}). \\
218756 &:= 2 \times (\sqrt{1+8} + 7 \times 5^6). \\
226979 &:= -2 + (-2 + (6 + \sqrt{9}) \times 7)\sqrt{9}. \\
226981 &:= (2 \times 26 + 9)\sqrt{\sqrt{81}}. \\
226983 &:= \sqrt{2^2} + (69 - 8)^3. \\
228488 &:= \sqrt{((-2 + 28)/\sqrt{4})^8} \times 8. \\
229373 &:= 2^{2 \times 9 - 3} \times 7 - 3. \\
229378 &:= 2 + 2^{9+3} \times 7 \times 8. \\
229379 &:= 2^{2 \times 9 - 3} \times 7 + \sqrt{9}. \\
229397 &:= (2^{2 \times 9 - 3} + \sqrt{9}) \times 7. \\
232897 &:= \sqrt{(2 - 3^2)^8} \times 97. \\
233280 &:= (2 \times 3^3)^2 \times 80. \\
234224 &:= 2 - 34 + 22^4. \\
234248 &:= (23 - \sqrt{4}/2)^4 - 8. \\
234254 &:= -2 + (34/2 + 5)^4. \\
234264 &:= 2^3 + (-4 + 26)^4. \\
234357 &:= -2 \times \sqrt{3^4} + 3 \times 5^7. \\
234373 &:= -2 + (-3 + \sqrt{4^3})^7 \times 3. \\
234377 &:= 2 + 3 \times (4 \times 3 - 7)^7. \\
234579 &:= (2 \times 34 + 5^7) \times \sqrt{9}. \\
234757 &:= -2 + 3 \times (\sqrt{4^7} + 5^7). \\
235224 &:= 2 \times 3^5 \times \sqrt{22^4}. \\
235294 &:= 2 \times (-3 + 52)\sqrt{9} - 4. \\
235296 &:= -2 + (-3 + 5) \times (-2 + 9)^6. \\
235768 &:= 2 \times (3^5 + 7^6 - 8). \\
235784 &:= 2 \times (3^5 + 7^{8-\sqrt{4}}). \\
236198 &:= 2 + 36 \times 1 \times \sqrt{9^8}. \\
236268 &:= (2 + 3^{6+2}) \times \sqrt{\sqrt{6^8}}. \\
236665 &:= -\sqrt{23^6} + (6 + 6)^5. \\
236764 &:= 2 \times (3^6 + 7^6 + 4). \\
238144 &:= (2 \times 3 \times 81 + \sqrt{4})\sqrt{4}. \\
238519 &:= -2 + 3 \times (-8 + 51)\sqrt{9}. \\
238648 &:= 23 \times (8 + 6^4 \times 8). \\
245760 &:= (2 - 4)^{5+7} \times 60. \\
247167 &:= -2 \times 4^7 - 1 + 6^7. \\
249318 &:= (2 + (4 \times 9)) \times (3^{1 \times 8}). \\
249856 &:= 2^4 \times (-\sqrt{\sqrt{\sqrt{9^8}} + 5^6}). \\
250002 &:= 2 + 500^{02}. \\
252928 &:= 2^{5 \times 2} \times (-9 + 2^8). \\
253135 &:= (2 + (5 \times 3)^{1+3}) \times 5. \\
255886 &:= -2 \times 5^5 - 8 + 8^6. \\
257049 &:= (2^5 + 7)^{0+4}/9. \\
259549 &:= -2595 + 4^9. \\
261883 &:= -261 + (8 \times 8)^3. \\
261949 &:= -(2^6 + 1) \times \sqrt{9} + 4^9. \\
261982 &:= \sqrt{(2 \times 8)^9} - 162. \\
262118 &:= -26 + 2^{1 \times 18}. \\
262122 &:= 2^{6 \times (2+1)} - 22. \\
262128 &:= 2^{6 \times (2+1)} - 2 \times 8. \\
262154 &:= 2^{6 \times (2+1)} + 5 \times \sqrt{4}. \\
262156 &:= 2 \times 6 + (2 \times (1 - 5))^6. \\
262159 &:= 2^{6 \times (2+1)} + 5 \times \sqrt{9}. \\
262176 &:= 2^6/2 + (1 + 7)^6. \\
262186 &:= \sqrt{-2 + 6} \times 21 + 8^6. \\
262196 &:= 26 \times 2 + (-1 + 9)^6. \\
262286 &:= (2 \times 6)^2 - 2 + 8^6. \\
262438 &:= -2 + (6^2 + 4) \times 3^8. \\
263866 &:= (2 \times 6)^3 + 8^6 - 6. \\
263869 &:= (2 \times 6)^3 + 8^6 - \sqrt{9}. \\
265617 &:= -2 - 6 + 5^6 \times 17. \\
265689 &:= 2^6 + 5^6 \times (8 + 9). \\
266565 &:= (2^{6+6} + 5) \times 65. \\
268321 &:= -2 + (6 + 8^3)^2 - 1. \\
268323 &:= 2 + (6 + 8^3)^2 - 3. \\
268326 &:= 2 + (6 + 8^3)\sqrt{-2+6}. \\
268329 &:= 2 + (6 + 8^3)^2 + \sqrt{9}. \\
269568 &:= 26 \times (\sqrt{9} + 5) \times \sqrt{6^8}. \\
272976 &:= (-2 + 7)^{2\sqrt{9}} - 7^6. \\
273375 &:= (2 + 7)^3 \times 375. \\
274623 &:= -2 + (7 - 4 + 62)^3. \\
274639 &:= 2 \times 7 + (\sqrt{4} + 63)\sqrt{9}. \\
274653 &:= 2 \times 7 \times \sqrt{4} + 65^3. \\
275686 &:= (2 \times 7)^5 + 6 - 8^6. \\
278868 &:= (-2 + 7 + \sqrt{8^8}) \times 68. \\
278949 &:= -2 + 7^{8-\sqrt{9}} + 4^9. \\
279675 &:= -\sqrt{27+9} + 6^7 - 5. \\
279814 &:= -27 + (\sqrt{9} \times 8 - 1)^4. \\
279841 &:= (2 \times 7 + 9)^{8-4} \times 1. \\
279844 &:= \sqrt{2+7} + (9 - 8 \times 4)^4. \\
279867 &:= 2 - 79 + 8 + 6^7. \\
279937 &:= (2 + 7)/9 + (9 - 3)^7. \\
279962 &:= 26 + (-\sqrt{9} + 9)\sqrt{7^2}. \\
279967 &:= 279/9 + 6^7. \\
282240 &:= (2 + 82)^2 \times 40. \\
286497 &:= (2^8 + 6)/\sqrt{4} \times \sqrt{9^7}. \\
287492 &:= -(2 + (8 - 74)\sqrt{9}) - 2. \\
287493 &:= ((2 + 8) \times 7 - 4)\sqrt{9} - 3. \\
287494 &:= 2 - (8 - 74)\sqrt{9} - 4. \\
287498 &:= 2 + (-8 + 74)\sqrt{\sqrt{\sqrt{9^8}}}. \\
287499 &:= ((2 + 8) \times 7 - 4)\sqrt{9} + \sqrt{9}. \\
289536 &:= 2^8 \times (9 \times 5^3 + 6). \\
291602 &:= 2 + (9 \times 1 \times 60)^2. \\
292820 &:= (2 + 9)\sqrt{2 \times 8} \times 20. \\
292864 &:= 2^9 \times 286 \times \sqrt{4}. \\
294350 &:= \sqrt{29^4} \times 350. \\
294698 &:= 2 + 9 \times (4^6 - \sqrt{9}) \times 8. \\
294778 &:= 2 \times 9 \times (4^7 - 7) - 8. \\
294782 &:= -2 + 94 \times (7 \times 8)^2. \\
294784 &:= 2 \times (9 \times 4^7 - \sqrt{8^4}). \\
294829 &:= -2 - (9 - 4^8/2) \times 9. \\
294838 &:= -2 + 9 \times ((4 \times 8)^3 - 8). \\
294856 &:= -2 + \sqrt{\sqrt{9^4}} \times (8^5 - 6). \\
294895 &:= (2 + (9^4 - 8) \times 9) \times 5. \\
294939 &:= (2^{9+\sqrt{4 \times 9}} + 3) \times 9. \\
295195 &:= (-2 + 9^5 + 1 - 9) \times 5. \\
295198 &:= -2 - 9 \times 5 \times (1 - \sqrt{9^8}). \\
295225 &:= (-2 + 9^5 - 2) \times \sqrt{2^5}. \\
295247 &:= 2 + 9^5 \times (2 - 4 + 7). \\
295255 &:= (2 + 9^5) \times 25/5. \\
295265 &:= -2 + (9\sqrt{5^2} + 6) \times 5. \\
295285 &:= 2 + (9^5 - 2 + 8) \times 5. \\
295295 &:= (2 + 9^5 + 2\sqrt{9}) \times 5. \\
295465 &:= (-2 + 9^5 + 46) \times 5. \\
295505 &:= (2 + 9^5 + 50) \times 5. \\
296346 &:= ((-2 + 9) \times 6)^3 \times 4 - 6. \\
296349 &:= ((-2 + 9) \times 6)^3 \times 4 - \sqrt{9}. \\
296384 &:= (((-2 + 9) \times 6)^3 + 8) \times 4. \\
297434 &:= 2 + \sqrt{9^7} \times 4 \times 34. \\
299575 &:= (2^9 + 9) \times 575. \\
299617 &:= -2 + \sqrt{9^9} + 6^{1 \times 7}. \\
299975 &:= 2 + \sqrt{9} \times (-9 + (\sqrt{9} + 7)^5). \\
300763 &:= (3 - 6 + 70)^{0+3}. \\
311364 &:= (31 \times 1 \times 3 \times 6)\sqrt{4}. \\
312325 &:= 31^2 \times 325. \\
314463 &:= 31 + (4 + \sqrt{4^6})^3. \\
319488 &:= (-3 + 1 \times \sqrt{(1 \times 9)^4}) \times \sqrt{8^8}.
\end{aligned}$$

$$\begin{aligned}
325125 &:= ((3 + 2) \times 51)^2 \times 5. \\
326586 &:= 3 \times (-2 + 6^5 \times (8 + 6)). \\
326592 &:= (3 \times 2)^6 \times (5 + 9)/2. \\
326617 &:= 32 + (6^6 - 1) \times 7. \\
327485 &:= (-2 - 7 + 4^8) \times 5. \\
327680 &:= \sqrt{(3^2 + 7)^6} \times 80. \\
327695 &:= (3 + 2^{7+6+\sqrt{9}}) \times 5. \\
328050 &:= \sqrt{3^{2 \times 8}} \times (0 + 50). \\
328509 &:= (3 + 2 \times 8 + 50)^{\sqrt{9}}. \\
331683 &:= 3 \times (-31 + (6 \times 8)^3). \\
331869 &:= 3 \times (31 + (8 \times 6)^{\sqrt{9}}). \\
333234 &:= (3 \times 33)^2 \times 34. \\
334365 &:= -\sqrt{3 \times 3} + 43 \times 6^5. \\
334368 &:= (3 + 3) \times 43 \times \sqrt{6^8}. \\
334611 &:= 3^{\sqrt{3^4}} \times (6 + 11). \\
338724 &:= (3 + 3 + 8 \times 72)^{\sqrt{4}}. \\
342950 &:= (3 + 4^2)^{\sqrt{9}} \times 50. \\
344250 &:= 3^4 \times 4250. \\
344450 &:= (3^4 + \sqrt{4})^{\sqrt{4}} \times 50. \\
345744 &:= ((3 - 45) \times 7)^{\sqrt{4}} \times 4. \\
347736 &:= 3 + 477 \times 3^6. \\
348145 &:= \sqrt{(3 + 4)^8} \times 145. \\
349920 &:= (3 \times (\sqrt{4} \times 9)^{\sqrt{9}}) \times 20. \\
349965 &:= (3 + \sqrt{4}) \times (9 + 9 \times 6^5). \\
351232 &:= (3 + 51 + 2)^3 \times 2. \\
352926 &:= 3 \times (-5 - 2 + (9 - 2)^6). \\
352932 &:= 3 \times (-5 + (2 - 9)^{3 \times 2}). \\
352961 &:= 3 \times (5 + (2 - 9)^6) - 1. \\
352962 &:= 3 \times (5 + (2 - 9)^{\sqrt{6^2}}). \\
354186 &:= (3^{5 \times \sqrt{4}} - 18) \times 6. \\
354246 &:= (3^{5 \times \sqrt{4}} - 2 \times 4) \times 6. \\
354273 &:= (3^{5 \times \sqrt{4}} \times 2 - 7) \times 3. \\
354277 &:= ((3 \times 5)^4 - 2 \times 7) \times 7. \\
354282 &:= (3^{5 \times \sqrt{4}} - 2) \times (8 - 2). \\
354287 &:= 3^{5 \times \sqrt{4}} \times (-2 + 8) - 7. \\
354292 &:= 3^{5+4} \times 2 \times 9 - 2. \\
354329 &:= 35 + \sqrt{4} \times 3^{2+9}. \\
354354 &:= ((3 \times 5)^4 - 3) \times (5 + \sqrt{4}). \\
354486 &:= (3^{5 \times \sqrt{4}} + 4 \times 8) \times 6. \\
354487 &:= ((3 \times 5)^4 + \sqrt{4} \times 8) \times 7. \\
354627 &:= ((3 \times 5)^4 + 6^2) \times 7. \\
354726 &:= (3^{5 \times \sqrt{4}} + 72) \times 6. \\
356445 &:= (3^5 + 6 \times 4)^{\sqrt{4}} \times 5. \\
357210 &:= 3^5 \times 7 \times 210. \\
360855 &:= (3 - 6)^{0+8} \times 55. \\
364500 &:= 3\sqrt{\sqrt{6^4}} \times 500. \\
365471 &:= \sqrt{36^5} \times 47 - 1. \\
365472 &:= \sqrt{36^5} \times \sqrt{47^2}. \\
365474 &:= \sqrt{36^5} \times 47 + \sqrt{4}. \\
366052 &:= \sqrt{3^6} + 605^2. \\
366795 &:= (-3^6 + (6 \times 7)^{\sqrt{9}}) \times 5. \\
367272 &:= (3^6 \times 7 + 2) \times 72. \\
368500 &:= (3^6 + 8) \times 500. \\
368640 &:= 3 \times 6 \times \sqrt{8^6} \times 40. \\
371314 &:= 3 \times 7 + 13^{1+4}. \\
372573 &:= 3^7 + 2 \times 57^3. \\
373239 &:= (-3 + 73 + 2)^3 - 9. \\
374439 &:= (-3 + 7^4 \times 4) \times 39. \\
374452 &:= (3 \times 7^4 - \sqrt{4}) \times 52. \\
374529 &:= 3 \times (7^4 \times 52 - 9). \\
374544 &:= ((37 \times 4 + 5) \times 4)^{\sqrt{4}}. \\
374845 &:= (37^4 + \sqrt{8^4})/5. \\
374850 &:= \sqrt{(3 \times 7)^4} \times 850. \\
375021 &:= 3 \times (7 + 50^{2+1}). \\
375168 &:= 3 \times (7 + 5^{1 \times 6}) \times 8. \\
379793 &:= (-3 + 7)^9 + 7^{9-3}. \\
384750 &:= \sqrt{3^8} \times 4750. \\
386758 &:= -3867 + 5^8. \\
388560 &:= (3^8 - 85) \times 60. \\
388993 &:= -3 \times 8 + (-8 + 9 \times 9)^3. \\
389342 &:= ((3 + 89)^3 - 4)/2. \\
389893 &:= (-3 + (8 - \sqrt{9})^8) - 9^3. \\
390358 &:= 3 - 90 \times 3 + 5^8. \\
390583 &:= -39 + 0 + 5^8 - 3. \\
390584 &:= -39 + 0 + 5^8 - \sqrt{4}. \\
390589 &:= -3 \times 9 + 0 + 5^8 - 9. \\
390628 &:= 3 + (9 + 0 - 6 + 2)^8. \\
390658 &:= 39 + 0 - 6 + 5^8. \\
391864 &:= (-3^9 + (-1 + 8)^6) \times 4. \\
393189 &:= -3 \times (9 - (3 - 1)^{8+9}). \\
393198 &:= (-3 + 9) \times (-3 + (1 + \sqrt{9})^8). \\
393216 &:= \sqrt{39 - 3} \times 2^{16}. \\
393217 &:= 3/\sqrt{9} + 3 \times 2^{17}. \\
393420 &:= (3^9 - 3 \times 4) \times 20. \\
393660 &:= 3 \times \sqrt{9} \times 3^6 \times 60. \\
393720 &:= (3 + 9 \times 3^7) \times 20. \\
393820 &:= ((3 \times 9)^3 + 8) \times 20. \\
394384 &:= (3 + \sqrt{(\sqrt{9} - \sqrt{4^3})^8})^{\sqrt{4}}. \\
397535 &:= (3 \times (9 + 7) - 5)^3 \times 5. \\
411845 &:= (41 \times (-1 + 8))^{\sqrt{4}} \times 5. \\
413357 &:= (\sqrt{4} + 1 \times (3 \times 3)^5) \times 7. \\
413466 &:= (41^3 - 4 - 6) \times 6. \\
413496 &:= (41^3 + 4 - 9) \times 6. \\
413499 &:= (41^3 \times \sqrt{4} - 9) \times \sqrt{9}. \\
413518 &:= 41^3 \times (5 + 1) - 8. \\
413526 &:= 41\sqrt{3 \times (5-2)} \times 6. \\
413556 &:= (41^3 + \sqrt{5 \times 5}) \times 6. \\
417595 &:= (-\sqrt{4} + 17^{-5+9}) \times 5. \\
417625 &:= (4 + 17^{6-2}) \times 5. \\
419888 &:= (-\sqrt{4} + 1 \times \sqrt{9^8} \times 8) \times 8. \\
419944 &:= 4 \times (1 + 9 + (9 \times \sqrt{4})^4). \\
420175 &:= (4 + 20 + 1) \times 7^5. \\
425958 &:= (-\sqrt{4} + 2^{5 \times \sqrt{9}}) \times (5 + 8). \\
437456 &:= 4 \times (3 + 7 \times (-\sqrt{4} + 5^6)). \\
437512 &:= 4 \times (3 + 7 \times \sqrt{5^{12}}). \\
437564 &:= 4^3 + 7 \times 5^6 \times 4. \\
437750 &:= (4 \times 3^7 + 7) \times 50. \\
438928 &:= (-4 + 38^{\sqrt{9}} - 2) \times 8. \\
438938 &:= (\sqrt{4} \times 38)^{\sqrt{9}} - 38. \\
438944 &:= \sqrt{4} \times (38^{\sqrt{9}} - 4) \times 4. \\
438948 &:= 4 + (38^{\sqrt{9}} - 4) \times 8. \\
438964 &:= (4 \times 38^{\sqrt{9}} - 6) \times \sqrt{4}. \\
438965 &:= (\sqrt{4} \times 38)^{\sqrt{9}} - 6 - 5. \\
438968 &:= (\sqrt{4} \times 38)^{9-6} - 8. \\
438977 &:= (\sqrt{4} \times 38)^{\sqrt{9}} + 7/7. \\
438994 &:= (4 \times 38^{\sqrt{9}} + 9) \times \sqrt{4}. \\
438997 &:= (\sqrt{4} \times 38)^{\sqrt{9}} + \sqrt{9} \times 7. \\
438998 &:= -\sqrt{4} + (38^{\sqrt{9}} + \sqrt{9}) \times 8. \\
441344 &:= 4 \times 431 \times 4^4. \\
446148 &:= (4 + \sqrt{4^6}) \times (-1 + 4)^8. \\
453789 &:= (4 + 5) \times 3 \times 7^{8-\sqrt{9}}. \\
455147 &:= (-4 + (5 \times 51)^{\sqrt{4}}) \times 7. \\
455593 &:= -\sqrt{4^5} + 5 \times (5 \times 9)^3. \\
456533 &:= (4 + 5 + 65 + 3)^3. \\
459270 &:= ((4 + 5) \times 9)^2 \times 70. \\
459450 &:= (4^5 - \sqrt{9}) \times 450. \\
466375 &:= (\sqrt{4} \times 6^6 - 37) \times 5. \\
466530 &:= \sqrt{4} \times 6^6 \times 5 - 30. \\
466536 &:= (-4 + 6^6 \times 5/3) \times 6. \\
466652 &:= (46 + 6^6 \times 5) \times 2. \\
466880 &:= (4 + 6^6/8) \times 80. \\
466944 &:= 4^6 \times 6 \times (\sqrt{9} + 4 \times 4). \\
469264 &:= 4^6 \times \sqrt{9} + 26^4. \\
469732 &:= 4 \times (-6^{\sqrt{9}} + 7^{3 \times 2}). \\
470576 &:= 4 \times (7 \times 0 - 5 + 7^6). \\
470596 &:= 4 \times 7^{0 \times 59+6}. \\
470604 &:= (\sqrt{4} + 7^{0+6}) \times (0 + 4). \\
470616 &:= 4 \times (7^{0+6} - 1 + 6). \\
470628 &:= 4 \times (7\sqrt{0+6^2} + 8). \\
470632 &:= 4 \times (7^{0+6} + 3^2). \\
471576 &:= (471 + 5^7) \times 6. \\
472364 &:= 4 \times (-7 + 2 \times 3^{6+4}). \\
472384 &:= -4 + 72 \times 3^8 - 4. \\
472385 &:= -\sqrt{4} + 72 \times 3^8 - 5. \\
472387 &:= \sqrt{4} + 72 \times 3^8 - 7. \\
472388 &:= 4 + 72 \times 3^8 - 8.
\end{aligned}$$

$$\begin{aligned}
472394 &:= \sqrt{4} + 72 \times (3 \times \sqrt{9})^4. \\
472395 &:= -4 + 7 + 2^3 \times 9^5. \\
472398 &:= (-4 + 7) \times (2 + 3^9 \times 8). \\
472439 &:= 47 + 24 \times 3^9. \\
474546 &:= (4 + 74)^{\sqrt{5+4}} - 6. \\
474549 &:= (4 + 74)^{\sqrt{5+4}} - \sqrt{9}. \\
474552 &:= (4 + 74)^{5/5+2}. \\
475136 &:= 4^7 \times (5 + (1 + 3) \times 6). \\
475281 &:= (4^7 + 5) \times (28 + 1). \\
476254 &:= 4 + 762 \times 5^4. \\
483149 &:= -4 + (8 + 3)^{1+4} \times \sqrt{9}. \\
483153 &:= (\sqrt{48} \times 3 - 1)^5 \times 3. \\
483159 &:= (\sqrt{4} + (8 + 3)^{1 \times 5}) \times \sqrt{9}. \\
484128 &:= (48 \times 41)^2/8. \\
491775 &:= (-4 + \sqrt{9^{1+7}}) \times 75. \\
492205 &:= 49^2 \times 205. \\
492375 &:= (4 + \sqrt{9^{2^3}}) \times 75. \\
492802 &:= -\sqrt{4} + (9 \times (2 - 80))^2. \\
493039 &:= (49 + 30)^{\sqrt{3 \times \sqrt{9}}}. \\
493895 &:= \sqrt{4} + 9 \times (38^{\sqrt{9}} + 5). \\
495616 &:= (4^{\sqrt{9}} \times (5 + 6))^{\sqrt{\sqrt{16}}}. \\
497442 &:= 4^9 + 7^{4+\sqrt{4}} \times 2. \\
497657 &:= 4 \times (9 + 7) \times 6^5 - 7. \\
497666 &:= \sqrt{4} + ((9 - 7) \times 6)^6/6. \\
499280 &:= (\sqrt{4} - 9 \times 9)^2 \times 80. \\
499755 &:= (-49 + (\sqrt{9} + 7)^5) \times 5. \\
508276 &:= 5^{0+8} + 2 + 7^6. \\
511949 &:= -51 + (-1 + \sqrt{9^4})^{\sqrt{9}}. \\
515816 &:= -5^{1+5} + \sqrt{81^6}. \\
518400 &:= \sqrt{(5 + 1)^8} \times 400. \\
523665 &:= ((5 - 2) \times 3)^6 - 6^5. \\
524088 &:= (-5^2 + 4^{0+8}) \times 8. \\
524184 &:= (-52 + \sqrt{4^{18}}) \times \sqrt{4}. \\
524236 &:= -52 + \sqrt{4} \times 2^{3 \times 6}. \\
524263 &:= -5^2 + \sqrt{4} \times 2^{6 \times 3}. \\
524274 &:= (-5 - 2 + 4^{2+7}) \times \sqrt{4}. \\
524283 &:= -5 + (-2 + 4)^{2 \times 8+3}. \\
524285 &:= -5 + 2 + 4^2 \times 8^5. \\
524286 &:= -\sqrt{5 - 2/\sqrt{4}} + 2 \times 8^6. \\
524291 &:= 5 + 2 \times (\sqrt{4^{2 \times 9}} - 1). \\
524293 &:= 5 + 2^{4^2+9/3}. \\
524297 &:= -5 + 2 \times (\sqrt{4^{2 \times 9}} + 7). \\
524299 &:= 5 + 2 \times (\sqrt{4^{2 \times 9}} + \sqrt{9}). \\
524328 &:= (5 + 2^{\sqrt{4^3 \times 2}}) \times 8. \\
524392 &:= (52 + 4^{3 \times \sqrt{9}}) \times 2. \\
524880 &:= (5 - 2 \times 4)^8 \times 80. \\
524979 &:= 5 + 2 \times (4^9 + 7^{\sqrt{9}}). \\
526833 &:= (-5 + (2^6 - 8)^3) \times 3. \\
528220 &:= \sqrt{(5 + 2)^8} \times 220. \\
531296 &:= -5 \times (31 - 2) + 9^6. \\
531389 &:= -53 + 1 + \sqrt{(3^8 \times \sqrt{9})}. \\
531396 &:= -5 \times 3 \times 1 \times 3 + 9^6. \\
531426 &:= -5 \times 3 + (-1 + 4)^{2 \times 6}. \\
531428 &:= -5 + 3^{14-2} - 8. \\
531444 &:= 5 + 3^{\sqrt{144}} - \sqrt{4}. \\
531456 &:= 5 \times 3 + (14 - 5)^6. \\
531494 &:= 53 + ((-1 + 4) \times 9)^4. \\
531496 &:= 53 + 1 \times \sqrt{4} + 9^6. \\
531566 &:= 5^3 + (15 - 6)^6. \\
531966 &:= 531 + 9^6 - 6. \\
531969 &:= 531 + 9^6 - \sqrt{9}. \\
538412 &:= (5 + 3^8) \times 41 \times 2. \\
548937 &:= (-5 + \sqrt{4^8}) \times (9/3)^7. \\
549365 &:= 5 \times (49^3 - 6^5). \\
551343 &:= -5 \times 5 + (1 + 3^4)^3. \\
559539 &:= (5^5 + 9^5 - 3) \times 9. \\
559867 &:= -5 + \sqrt{5 - 9 + 8} \times 6^7. \\
559872 &:= (\sqrt{5 \times 5} + 9 - 8)^7 \times 2. \\
562419 &:= ((5^6 - 2) \times 4 - 1) \times 9. \\
562428 &:= (5^6 - 2) \times \sqrt{\sqrt{(4 + 2)^8}}. \\
562464 &:= (5^6 - 2/\sqrt{4}) \times \sqrt{6^4}. \\
562495 &:= 5^{\sqrt{6^2}} \times 4 \times 9 - 5. \\
563868 &:= (5^6 + 38) \times \sqrt{\sqrt{6^8}}. \\
563922 &:= ((56 + 3) \times 9)^2 \times 2. \\
566440 &:= (\sqrt{5^6} - 6)^{\sqrt{4}} \times 40. \\
566937 &:= \left(\sqrt{(5 \times 6)^6} - \sqrt{9} \right) \times 3 \times 7. \\
574644 &:= (5^7 + 4^{\sqrt{6^4}}) \times 4. \\
574992 &:= ((-5 + 74 - \sqrt{9})^{\sqrt{9}}) \times 2. \\
575995 &:= (5 + 7 \times 5)^{\sqrt{9}} \times 9 - 5. \\
577602 &:= -5 + 7 + 760^2. \\
583889 &:= -5 \times 8 + 3^8 \times 89. \\
584199 &:= (-\sqrt{5^8} + 4^{-1+9}) \times 9. \\
584647 &:= (5 + 8/4 \times 6)^4 \times 7. \\
585925 &:= (5^8 - 5) \times \sqrt{9}/2 - 5. \\
585944 &:= ((5^8 + 5) \times \sqrt{9} - \sqrt{4})/\sqrt{4}. \\
587615 &:= -\sqrt{5^8} + (7^6 - 1) \times 5. \\
587635 &:= -\sqrt{5^8} + (7^6 + 3) \times 5. \\
588765 &:= ((5 + 8) \times 8 + 7^6) \times 5. \\
589748 &:= -5 - 8 + 9 \times (-7 + 4^8). \\
590945 &:= 5 + 90 \times (9^4 + 5). \\
592697 &:= (5 \times 9 \times 2 - 6)^{\sqrt{9}} - 7. \\
592763 &:= 59 + (2 \times 7 \times 6)^3. \\
592829 &:= 5^{\sqrt{9}} + (2 + 82)^{\sqrt{9}}. \\
606528 &:= 6^{0+6} \times (\sqrt{5^2} + 8). \\
614125 &:= (6 \times 14 + 1)^{-2+5}. \\
624978 &:= -6 + (-2 + (-4 + 9)^7) \times 8. \\
627264 &:= (6 \times 2 \times (72 - 6))^{\sqrt{4}}. \\
629784 &:= 6^2 \times (\sqrt{9^7} \times 8 - \sqrt{4}). \\
629844 &:= 6 \times (-2 + (9 \times 8/4)^4). \\
629848 &:= (6/2)^9 \times 8 \times 4 - 8. \\
629868 &:= 6 \times (2 + \sqrt{\sqrt{9^8}} \times \sqrt{6^8}). \\
629964 &:= 6 \times (2 \times 9 + (\sqrt{9} \times 6)^4). \\
645500 &:= (6^4 - 5) \times 500. \\
649495 &:= (6 - 4 + 9) \times (-4 + 9^5). \\
649500 &:= (6^4 + \sqrt{9}) \times 500. \\
649511 &:= -6 + (-\sqrt{4} + 9^5) \times 11. \\
649529 &:= -6 - 4 + 9^5 \times (2 + 9). \\
649547 &:= \sqrt{64} + 9^5 \times (4 + 7). \\
649549 &:= 6 + 4 + 9^5 \times (\sqrt{4} + 9). \\
649583 &:= (6 - \sqrt{4} + 9^5) \times (8 + 3). \\
649589 &:= 6 + (4 + 9^5) \times (8 + \sqrt{9}). \\
653184 &:= 6^5 \times (3 + 18) \times 4. \\
655284 &:= (6^5 + 5^2) \times 84. \\
655935 &:= (6 \times 5^5 - 9) \times 35. \\
656244 &:= -6 + 5^6 \times (-2 + 44). \\
656274 &:= 6 \times (5^{\sqrt{6^2}} \times 7 + 4). \\
656298 &:= 6 \times (5^6 \times (-2 + 9) + 8). \\
656373 &:= 6 \times (5^6 + 3) \times 7 - 3. \\
656374 &:= 6 \times ((5^6 + 3) \times 7 - \sqrt{4}). \\
656379 &:= 6 \times (5^6 + 3) \times 7 + \sqrt{9}. \\
656397 &:= (6 \times (5^6 + 3) + \sqrt{9}) \times 7. \\
656418 &:= 6 \times (5^6 + 4) \times (-1 + 8). \\
656790 &:= 6 \times (5^6 \times 7 + 90). \\
656817 &:= (6 \times 5^6 + 81) \times 7. \\
657874 &:= (-6 + 5 \times 7 \times 8) \times 7^4. \\
658845 &:= (6 + 5)^{\sqrt{8+8}} \times 45. \\
659344 &:= (6 \times 5 \times 9 \times 3 + \sqrt{4})^{\sqrt{4}}. \\
659685 &:= (6^5 - 9 - 6) \times 85. \\
668174 &:= \sqrt{6 \times 6} + 8 \times 17^4. \\
675684 &:= (6 + (7 + 5) \times 68)^{\sqrt{4}}. \\
677328 &:= 6 \times ((7 - 7^3)^2 - 8). \\
685984 &:= (((6 + 8) \times 5)^{\sqrt{9}} - 8) \times \sqrt{4}. \\
685994 &:= (((6 + 8) \times 5)^{\sqrt{9}} - \sqrt{9}) \times \sqrt{4}. \\
690768 &:= (6 \times 90 - 7) \times \sqrt{6^8}. \\
691488 &:= 6 \times \sqrt{9} \times 14^{\sqrt{8+8}}. \\
699840 &:= 6^{\sqrt{9}} \times \sqrt{\sqrt{9^8}} \times 40. \\
699875 &:= (6^9/(9 \times 8) + 7) \times 5. \\
704899 &:= -\sqrt{\sqrt{70^4}} + 89^{\sqrt{9}}. \\
704969 &:= (70 + 4 + 9 + 6)^{\sqrt{9}}. \\
705642 &:= (7^{0+5} - 6) \times 42. \\
708295 &:= \sqrt{7^{0+8}} \times 295. \\
715821 &:= 71^{-5+8} \times 2 - 1. \\
715822 &:= 71^{\sqrt{5+8}/2} \times 2. \\
715824 &:= 71^{-5+8} \times 2 + \sqrt{4}. \\
726880 &:= 7 \times (2 + \sqrt{6^8}) \times 80.
\end{aligned}$$

$$\begin{aligned}
728993 &:= -7 + ((2 + 8) \times 9)^{9/3}. \\
729003 &:= \sqrt{7+2} + 90^{0+3}. \\
729014 &:= 7 \times 2 + 90^{-1+4}. \\
729049 &:= 7^2 + (\sqrt{\sqrt{90^4}})^{\sqrt{9}}. \\
729072 &:= 72 + 90^{\sqrt{7+2}}. \\
741321 &:= (7 \times 41 \times 3)^2 \times 1. \\
742572 &:= ((7 + 4 + 2)^5 - 7) \times 2. \\
742586 &:= (7 + 4 + 2)^5 \times (8 - 6). \\
742592 &:= ((7 + 4 + 2)^5 + \sqrt{9}) \times 2. \\
744310 &:= 7^{\sqrt{4 \times 4}} \times 310. \\
744385 &:= (\sqrt{7^4} + 4)^{\sqrt{\sqrt{3^8}}} \times 5. \\
746503 &:= 7 + (\sqrt{4} \times 6)^5 \times (0 + 3). \\
746523 &:= (7 + (\sqrt{4} \times 6)^5 + 2) \times 3. \\
753424 &:= (7 \times (5^3 - \sqrt{4}/2))^{\sqrt{4}}. \\
756045 &:= (7^5 - 6) \times (0 + 45). \\
756315 &:= 7^5 \times (6 - 3) \times 15. \\
756325 &:= (7^5 \times (6 + 3) + 2) \times 5. \\
756495 &:= (7^5 + 6 - \sqrt{4}) \times 9 \times 5. \\
756549 &:= ((7^5 + 6) \times 5 - 4) \times 9. \\
756585 &:= (7^5 + 6) \times (5 + 8 \times 5). \\
765674 &:= (7 - 6 + 5^6) \times \sqrt{7^4}. \\
766927 &:= (7 + 6 \times 6 \times 9)^2 \times 7. \\
774137 &:= 7 \times (7 + 41)^3 - 7. \\
774198 &:= (77 + 41) \times \sqrt{9^8}. \\
777922 &:= ((7 + 7) \times 7 \times 9)^2 - 2. \\
777924 &:= 7 \times 7 \times (7 \times 9)^2 \times 4. \\
778034 &:= (-\sqrt{7} \times 7 + 80)^3 \times \sqrt{4}. \\
780325 &:= \sqrt{7^8} \times (0 + 325). \\
781257 &:= 7 + (8 + 1 \times 2) \times 5^7. \\
781258 &:= \sqrt{\sqrt{\sqrt{7^8}}} + 1 + 2 \times 5^8. \\
786329 &:= -7 + (8^6 - 32) \times \sqrt{9}. \\
786385 &:= -7 + 8^6 \times 3 - 8 \times 5. \\
786393 &:= (-7 + 8^6 + 3 - 9) \times 3. \\
786396 &:= (-7 + 8^6) \times 3 - 9 - 6. \\
786399 &:= (-7 + 8^6) \times 3 - 9 - \sqrt{9}. \\
786411 &:= (-7 + 8^6) \times (4 - 1 \times 1). \\
786413 &:= -7 + (8^6 - 4) \times 1 \times 3. \\
786417 &:= -7 - 8 + 6 \times \sqrt{4^7}. \\
786419 &:= -7 + (8^6 - \sqrt{4}) \times 1 \times \sqrt{9}. \\
786423 &:= (-7 + 8^6 + \sqrt{4^2}) \times 3. \\
786425 &:= -7 - 8^6 + 4^{2 \times 5}. \\
786427 &:= 7 + (8^6 - 4) \times \sqrt{2+7}. \\
786432 &:= \sqrt{7+8-6} \times 4^{3^2}. \\
786433 &:= -7 + 8 + 64^3 \times 3. \\
786441 &:= (7 + 8^6 - 4) \times (4 - 1). \\
786443 &:= -7 + (8^6 + 4 + \sqrt{4}) \times 3. \\
786445 &:= 7 + (8^6 + \sqrt{4}) \times \sqrt{4+5}. \\
786447 &:= (7 + 8^6 - \sqrt{4}) \times (-4 + 7). \\
786453 &:= (7 + 8^6) \times (4 + 5)/3. \\
786467 &:= (7 + 8^6/\sqrt{4}) \times 6 - 7. \\
786469 &:= 7 + (8^6 + 4 + 6) \times \sqrt{9}. \\
786483 &:= (7 + 8^6 + \sqrt{4} + 8) \times 3. \\
786489 &:= (7 + 8^6 + 4 + 8) \times \sqrt{9}. \\
786493 &:= 7 + (8^6 + \sqrt{4} \times 9) \times 3. \\
786499 &:= \sqrt{\sqrt{7^8}} + (6 + 4^9) \times \sqrt{9}. \\
788544 &:= (7 + 885 - 4)^{\sqrt{4}}. \\
788833 &:= \sqrt{7^8} + (8 \times 8)^3 \times 3. \\
789264 &:= 7 \times (89 - 2) \times 6^4. \\
789647 &:= (7^{8-\sqrt{9}})^{-6} \times 47. \\
796488 &:= 7 \times (-\sqrt{9} + 6^4) \times 88. \\
798848 &:= (79 \times \sqrt{8+8})^{\sqrt{4}} \times 8. \\
805255 &:= (8 + 05 - 2)^5 \times 5. \\
805655 &:= (80 + (5 + 6)^5) \times 5. \\
806752 &:= 8 \times (06 \times 7^5 + 2). \\
819200 &:= 8^{1+\sqrt{9}} \times 200. \\
823297 &:= -82 \times 3 + (-2 + 9)^7. \\
823461 &:= -82 + (3 + 4)^{6+1}. \\
823727 &:= 8 \times 23 + \sqrt{7^{2 \times 7}}. \\
824577 &:= 8 + 2 + 4^5 + 7^7. \\
829440 &:= \sqrt{(8 \times 2 \times 9)^4} \times 40. \\
839424 &:= 8 \times (-3 + 9^4) \times 2^4. \\
839673 &:= ((-8 + 3) \times 9 + 6^7) \times 3. \\
839779 &:= -8 + ((-3 + 9)^7 - 7) \times \sqrt{9}. \\
839793 &:= (-8 + (-3 + 9)^7 + \sqrt{9}) \times 3. \\
839795 &:= -8 + (-3 + 9)^7 \times \sqrt{9} - 5. \\
839804 &:= (-8 + (3 - 9)^8 + 0)/\sqrt{4}. \\
839812 &:= (8 + (3 - 9)^8 \times 1)/2. \\
839827 &:= -8 + 3 \times (9 + (8 - 2)^7). \\
839867 &:= 8 + 3 \times (9 + 8 + 6^7). \\
844277 &:= (8 + 4)^4 - 2 + 7^7. \\
851964 &:= 8^5 \times (-1 + \sqrt{\sqrt{9^6}}) - 4. \\
851969 &:= -8^5 + 1 + 96^{\sqrt{9}}. \\
851981 &:= (8 + 5) \times ((1 + \sqrt{9})^8 + 1). \\
856192 &:= (8^5 + 6^{-1+9})/2. \\
857383 &:= 8 + (57 + 38)^3. \\
859775 &:= 85^{\sqrt{9}} \times \sqrt{7 \times 7}/5. \\
864557 &:= 8^6 \times \sqrt{4+5} + 5^7. \\
875336 &:= 8 \times 7 \times (5^{3+3} + 6). \\
875448 &:= 8 \times 7 \times (5^{\sqrt{4+4}} + 8). \\
879795 &:= ((8 \times 7)^{\sqrt{9}} + 7^{\sqrt{9}}) \times 5. \\
884728 &:= (8 \times (8 + 4))^{\sqrt{7+2}} - 8. \\
884733 &:= ((8 \times 84)/7)^3 - 3. \\
884734 &:= ((8 \times 84)/7)^3 - \sqrt{4}. \\
884739 &:= (8 \times 84/7)^3 + \sqrt{9}. \\
886464 &:= (8 \times 86 - 4) \times 6^4. \\
898779 &:= (8 - 9 + 8^7)/7 \times \sqrt{9}. \\
907569 &:= 9 \times 07^5 \times 6 - 9. \\
907596 &:= (9 \times (07)^5 + \sqrt{9}) \times 6. \\
911493 &:= (9 \times 11)^{\sqrt{4}} \times 93. \\
912247 &:= (9 + 12 - 2)^4 \times 7. \\
912673 &:= ((\sqrt{9} + 1) \times 26 - 7)^3. \\
917448 &:= (\sqrt{9} - 1) \times 7 \times (-4 + 4^8). \\
917484 &:= (-9 - 1 + 7 \times 4^8) \times \sqrt{4}. \\
917488 &:= (\sqrt{9} - 1) \times (7 \times 4^8 - 8). \\
923314 &:= -9 \times 23 + 31^4. \\
923524 &:= \sqrt{9} + (2 \times 3 + 5^2)^4. \\
924385 &:= (9 - 2)^4 \times 385. \\
938492 &:= (93 + 8)^{\sqrt{4}} \times 92. \\
941168 &:= (\sqrt{9} + (-4 + 11)^6) \times 8. \\
943299 &:= \sqrt{9} + \sqrt{9} \times (2 \times 34)^{\sqrt{9}}. \\
944559 &:= ((9 \times \sqrt{4})^4 - 5 \times 5) \times 9. \\
946176 &:= \sqrt{9} \times 4^6 \times (1 + 76). \\
948395 &:= \sqrt{(9 - \sqrt{4})^8} \times 395. \\
968244 &:= (-\sqrt{9} + (6 \times 82)^{\sqrt{4}}) \times 4. \\
972405 &:= (\sqrt{9} \times 7)^{\sqrt{2^4}} \times 05. \\
973944 &:= ((9 \times 7)^3 - 9^4) \times 4. \\
984150 &:= 9^{8-4} \times 150. \\
984375 &:= (\sqrt{9^8} \times \sqrt{4} + 3) \times 75. \\
989497 &:= (98 + \sqrt{9})^{\sqrt{4}} \times 97. \\
994842 &:= \sqrt{9 \times 9^4} \times (8^4 - 2). \\
995316 &:= ((9 + \sqrt{9})^5 - 3) \times \sqrt{16}. \\
995324 &:= ((9 + \sqrt{9})^5 - 3 + 2) \times 4. \\
995453 &:= (9 + \sqrt{9})^5 \times 4 + 5^3. \\
995544 &:= ((9 + \sqrt{9})^5 + 54) \times 4. \\
999916 &:= -9 \times 9 - \sqrt{9} + (9 + 1)^6. \\
999976 &:= -\sqrt{9} \times 9 + \sqrt{9} + (\sqrt{9} + 7)^6.
\end{aligned}$$

5.3 Selfie Representations in Reverse Order of Digits

$$\begin{aligned}
 102912 &:= 2^{1 \times 9} \times 201. & 172773 &:= 3^7 \times (72 + 7) \times 1. & 235282 &:= 2 \times (-8 + (2 + 5)^{3 \times 2}). \\
 104968 &:= -8 + (6 \times \sqrt{9})^4 \times 01. & 177139 &:= \sqrt{9^{3+1+7}} - 7 - 1. & 235445 &:= 5 \times (44 \times 5 - 3)^2. \\
 104975 &:= ((-5 + 7) \times 9)^4 + 0 - 1. & 177153 &:= 3^{5-1+7} + 7 - 1. & 235956 &:= 6 \times (5 + 9) \times 53^2. \\
 112536 &:= 6^3 \times 521 \times 1. & 179275 &:= 5 \times (-7 + 2^9) \times 71. & 237169 &:= ((9 + 61) \times 7 - 3)^2. \\
 116675 &:= 5 \times (7 + 6^6 / (1 + 1)). & 183704 &:= 4 \times (0 + 7 \times 3^8 - 1). & 238326 &:= (62^3 - 8) + 3 \times 2. \\
 117567 &:= 7^6 - 5 - 7 \times 11. & 183744 &:= 4 \times (\sqrt{4} + 7 \times (3^8 + 1)). & 238464 &:= \sqrt{(2 \times 3)^8} \times 46 \times 4. \\
 117577 &:= 7 \times 7^5 - 71 - 1. & 186623 &:= 32 \times 6^6 / 8 - 1. & 245025 &:= (520 - \sqrt{5^4})^2. \\
 117729 &:= 9^2 + 7^{7-1} - 1. & 186633 &:= 3 \times 3 \times (\sqrt{(6 + 6)^8} + 1). & 247301 &:= 103 \times 7^4 - 2. \\
 118336 &:= (6 + 338)^{1+1}. & 187029 &:= 9 \times 20781. & 248368 &:= 86 \times \sqrt{38^4} \times 2. \\
 126737 &:= (7^3 + 7 + 6)^2 + 1. & 187277 &:= (7 \times 7)^2 \times 78 - 1. & 249696 &:= 6 \times ((\sqrt{9} - 6 \times 9) \times 4)^2. \\
 127985 &:= ((5 \times 8)^{\sqrt{9}} - 7) \times 2 - 1. & 189035 &:= (5 + 30^{\sqrt{9}}) \times (8 - 1). & 249952 &:= (25^{\sqrt{9}} - \sqrt{9}) \times 4^2. \\
 131584 &:= \sqrt{4^8} \times (513 + 1). & 189567 &:= 7 \times ((6 \times 5)^{\sqrt{9}} + 81). & 249998 &:= (8^{\sqrt{9}} - 9 - \sqrt{9})^{\sqrt{4}} - 2. \\
 132651 &:= (15 + 6^2)^3 \times 1. & 194471 &:= (17 + 4)^4 - 9 - 1. & 253984 &:= 4 \times (-8 + (9 + 3^5)^2). \\
 134375 &:= \sqrt{5^{7+3}} \times 43 \times 1. & 194473 &:= (3 \times 7)^4 - \sqrt{49} - 1. & 254368 &:= 8^6 - (3 \times \sqrt{4})^{\sqrt{5^2}}. \\
 134457 &:= 7^5 \times (-4 + 4 \times 3) + 1. & 194477 &:= (7 - 7 \times 4)^4 - \sqrt{9} - 1. & 254448 &:= (-8 + 4^4) \times (4^5 + 2). \\
 135685 &:= 5 \times (\sqrt{8^6} \times 53 + 1). & 194485 &:= (5 + 8 \times \sqrt{4})^4 + \sqrt{9} + 1. & 255025 &:= (5 + 20 \times 5 \times 5)^2. \\
 136079 &:= 9 \times 70 \times 6^3 - 1. & 194489 &:= (9 + 8 + 4)^4 + 9 - 1. & 255367 &:= 7 \times (6^3 - 5 \times 5)^2. \\
 136296 &:= 6^{\sqrt{\sqrt{9^2}}} \times 631. & 194489 &:= (9 + 8 + 4)^4 + 9 - 1. & 255879 &:= \sqrt{9^7} \times (-8 + 5 \times 5^2). \\
 136945 &:= (5^4 + 9) \times 6^3 + 1. & 194674 &:= \sqrt{4} \times ((7 \times 6 + 4)^{\sqrt{9}} + 1). & 260846 &:= (-6^4 + 8^{0+6}) - 2. \\
 137544 &:= 44 \times (\sqrt{5^{7+3}} + 1). & 195364 &:= 4 \times (6^3 + 5)^{\sqrt{9}-1}. & 261568 &:= 8^6 - ((5 - 1) \times 6)^2. \\
 137842 &:= 2 \times (48 - 7)^3 \times 1. & 196517 &:= (7 + 1)^5 \times 6 - 91. & 262138 &:= -8 + ((3 + 1) \times 2)^6 + 2. \\
 137844 &:= \sqrt{4} \times ((48 - 7)^3 + 1). & 196584 &:= (-4 + 8^5) \times \sqrt{6^{\sqrt{9}-1}}. & 262158 &:= 8^{5+1} + 2 \times 6 + 2. \\
 139264 &:= 4^6 \times ((2 + 9) \times 3 + 1). & 196589 &:= -9 + 8^5 \times 6 - 9 - 1. & 262168 &:= 8^6 \times 1 + 26 - 2. \\
 139947 &:= (-7 + (4 \times 9)^{\sqrt{9}}) \times 3 \times 1. & 196618 &:= 8^{-1+6} \times 6 + 9 + 1. & 262178 &:= 8^{7-1} - 2 + 6^2. \\
 139994 &:= ((4 \times 9)^{\sqrt{9}} + 9) \times 3 - 1. & 196682 &:= 2 \times (3^8 \times (6 + 9) + 1). & 262194 &:= 4^9 - 12 + 62. \\
 140608 &:= (-8 + 060)^{4-1}. & 196832 &:= 2 \times (3^8 \times (6 + 9) + 1). & 262268 &:= 8^6 + 2 \times (2^6 - 2). \\
 140822 &:= 22 \times (\sqrt{80^4} + 1). & 196882 &:= \sqrt{(1^9 + 6)^8} \times 82. & 262288 &:= 8^{8-2} + (2 \times 6)^2. \\
 145232 &:= 232 \times (5^4 + 1). & 199472 &:= 274 \times (9^{\sqrt{9}} - 1). & 262394 &:= 4^9 + \sqrt{(3 + 2)^6} \times 2. \\
 147469 &:= 9 \times (6 + 4^7) - 41. & 199927 &:= (7 + 2 \times \sqrt{9})^{\sqrt{9}} \times 91. & 263424 &:= (4 + 24)^3 \times 6 \times 2. \\
 147483 &:= \sqrt{\sqrt{3^8}} \times (4^7 + 4 - 1). & 207936 &:= (6 \times (-3 + 9 + 70))^2. & 264386 &:= \sqrt{6^8} \times 34 \times 6 + 2. \\
 148176 &:= (6 \times 7)^{\sqrt{1+8}} \times \sqrt{4} \times 1. & 209764 &:= (467 - 9)^{0+2}. & 265225 &:= (5 \times (22 - \sqrt{5^6}))^2. \\
 148877 &:= (7 \times 7 + \sqrt{8 + 8})^{4-1}. & 211595 &:= -5 + (9 \times 51 + 1)^2. & 265625 &:= \sqrt{5^{2 \times 6}} \times (5 + 6 \times 2). \\
 149783 &:= 3 \times 8 \times \sqrt{79^4} - 1. & 214375 &:= (5 \times 7)^3 \times (4 + 1^2). & 265695 &:= (5 + 9^6 - 56) / 2. \\
 153097 &:= 7 \times (90 \times 3^5 + 1). & 219488 &:= (-8 + 84)^{\sqrt{9}} \times 1/2. & 265721 &:= (1 + (2 \times 7 - 5)^6) / 2. \\
 153728 &:= 8^2 \times (\sqrt{7^{3+5}} + 1). & 221184 &:= 48^{\sqrt{11-2}} \times 2. & 266248 &:= -8 + (4 + \sqrt{(2 + 6)^6})^2. \\
 154275 &:= \sqrt{(57 - 2)^4} \times 51. & 223524 &:= 42 \times 5322. & 267034 &:= 4307 \times 62. \\
 154884 &:= 4 \times (\sqrt{88^4} \times 5 + 1). & 224674 &:= (476 - \sqrt{4})^2 - 2. & 267126 &:= 6 \times (217 - 6)^2. \\
 155684 &:= 4 \times ((8 + 6^5) \times 5 + 1). & 224676 &:= (6 \times (7 + (\sqrt{6^4} \times 2)))^2. & 267289 &:= ((9 + 8^2) \times 7 + 6)^2. \\
 157437 &:= 7^3 \times (\sqrt{4} + 7) \times 51. & 225625 &:= ((5^2 - 6) \times 5^2)^2. & 268667 &:= \sqrt{7^6} + (6 + \sqrt{8^6})^2. \\
 157457 &:= -7 + 54^{7-5+1}. & 233265 &:= 5 \times (6^{2 \times 3} - \sqrt{3^2}). & 268868 &:= 8^6 + (88 - 6)^2. \\
 157546 &:= 6^4 + 5^7 \times \sqrt{5 - 1}. & 233289 &:= (-9 + 82 \times (3 + 3))^2. & 269361 &:= (1 + (6/3)^9 + 6)^2. \\
 157752 &:= 2 \times (5^7 + 751). & 234222 &:= -2 + 22^4 - 32. & 273125 &:= 5^{2+1} \times (3^7 - 2). \\
 159375 &:= 5^{-7+3+9} \times 51. & 234247 &:= ((7 + 4) \times 2)^4 - 3^2. & 273455 &:= (5 + 5^{4+3}) \times 7/2. \\
 160867 &:= \sqrt{(1 + 6)^{0+8}} \times 67. & 234253 &:= (-3 + 5^2)^4 - \sqrt{3^2}. & 273625 &:= \sqrt{\sqrt{5^{2 \times 6}}} \times (3^7 + 2). \\
 164944 &:= \sqrt{(4 \times (4 + 9))^4} \times 61. & 234256 &:= ((6 + 5) \times 2)^4 \times (3 - 2). & 274625 &:= (5 \times 26 / \sqrt{4})^{\sqrt{7+2}}. \\
 166957 &:= (-7 + \sqrt{(5 + 9)^6}) \times 61. & 234259 &:= (-\sqrt{9} + 5^2)^4 + \sqrt{3^2}. & 275625 &:= ((5 \times 2 + 65) \times 7)^2. \\
 & & 234265 &:= ((5 + 6) \times 2)^4 + 3^2. & 276576 &:= 6^7 - 5 \times 672. \\
 & & 234759 &:= \sqrt{9} \times (5^7 + 4 \times 32). & 279568 &:= 8^6 + (5^{\sqrt{9}} + 7)^2. \\
 & & & & 279742 &:= (2 + 4)^7 - 97 \times 2. \\
 & & & & 279876 &:= 6^7 - 8 - \sqrt{9} - 7^2.
 \end{aligned}$$

$$\begin{aligned}
279926 &:= -6 - 2 + (9 - \sqrt{9})^7 - 2. \\
279929 &:= -9 + \sqrt{(2 \times (9 + 9))^7} + 2. \\
279931 &:= -1 \times 3 + (9 - \sqrt{9})^7 - 2. \\
279932 &:= -2 \times 3 - (\sqrt{9} - 9)^7 + 2. \\
279938 &:= (8 \times 3 - 9 - 9)^7 + 2. \\
279951 &:= 15 - (\sqrt{9} - 9)^{\sqrt{72}}. \\
279953 &:= 3 \times 5 - (\sqrt{9} - 9)^7 + 2. \\
279954 &:= 4 \times 5 - (\sqrt{9} - 9)^7 - 2. \\
279963 &:= \sqrt{36} - (\sqrt{9} - 9)^{\sqrt{72}}. \\
279973 &:= 37 - (\sqrt{9} - 9)^{\sqrt{72}}. \\
279976 &:= 6 \times 7 - (\sqrt{9} - 9)^7 - 2. \\
279984 &:= 48 - (\sqrt{9} - 9)^{\sqrt{72}}. \\
279986 &:= 6 \times 8 - (\sqrt{9} - 9)^7 + 2. \\
279987 &:= \sqrt{\sqrt{78}} + (9 - \sqrt{9})^7 + 2. \\
279995 &:= 59 - (\sqrt{9} - 9)^{\sqrt{72}}. \\
283215 &:= 5 \times (-1 + 238^2). \\
283235 &:= 5 \times (3 + 238^2). \\
283392 &:= 2 \times (9 + 3)^3 \times 82. \\
285374 &:= (4 \times 7)^3 \times (5 + 8) - 2. \\
287296 &:= (6 \times (9^2 + 7) + 8)^2. \\
288369 &:= (9 + 6 \times (3 + 8) \times 8)^2. \\
289737 &:= 73 \times \sqrt{(7 \times 9)^{8/2}}. \\
291595 &:= -5 + (9 \times (51 + 9))^2. \\
292681 &:= 1 \times (\sqrt{8^6} + 29)^2. \\
294858 &:= (8^5 - 8 + \sqrt{4}) \times \sqrt{9^2}. \\
294864 &:= 4 \times 6 \times (8^4 \times \sqrt{9} - 2). \\
294883 &:= (-3 + 8 \times 8^4) \times 9 - 2. \\
294888 &:= -8 + 8 \times (8^4 \times 9 - 2). \\
294948 &:= (8 + 4^9/4) \times 9/2. \\
294984 &:= (4 + \sqrt{8^9 \times \sqrt{4}}) \times 9 \times 2. \\
295159 &:= (9^5 - 1) \times 5 - 9^2. \\
295239 &:= 9^{3+2} \times 5 - \sqrt{9} \times 2. \\
295275 &:= 5 \times ((7 + 2)^5 + \sqrt{9} \times 2). \\
295335 &:= 5 \times ((3 \times 3)^5 + 9 \times 2). \\
296595 &:= 5 \times ((9 + 5 \times 6)^{\sqrt{9^2}}). \\
297747 &:= -7 + (4 + 7 \times 7)^{\sqrt{9}} \times 2. \\
297992 &:= 2 \times (9^{\sqrt{9}} - 7^{\sqrt{9}})^2. \\
298116 &:= (6 \times (1 + 1 + 89))^2. \\
314922 &:= (-2 + (2 \times 9)^4) \times 1 \times 3. \\
314924 &:= -4 + (2 \times 9)^4 \times 1 \times 3. \\
314929 &:= \sqrt{9} \times (2 \times 9)^4 + 1^3. \\
316227 &:= 72^2 \times 61 + 3. \\
318864 &:= (4^6 - 8) \times (81 - 3). \\
321489 &:= \sqrt{9^8} \times (41 + 2^3). \\
324555 &:= -5^5 + 5 \times 4^{2^3}. \\
324723 &:= (327 + \sqrt{4})^2 \times 3. \\
326424 &:= 42 \times (-4 + 6^{2+3}). \\
328509 &:= (((9 + 058) + 2)^3). \\
331749 &:= (-9 + (47 + 1)^3) \times 3. \\
331764 &:= (-4 + (6 \times (7 + 1))^3) \times 3. \\
331768 &:= -8 + (6 \times (7 + 1))^3 \times 3. \\
331774 &:= -\sqrt{4} + (7 \times 7 - 1)^3 \times 3. \\
331776 &:= (6 + 7 \times (7 - 1))^3 \times 3. \\
331782 &:= (2 + (8 \times (7 - 1))^3) \times 3. \\
332367 &:= \sqrt{7^6} \times 323 \times 3. \\
342744 &:= -4^4 + (72 - \sqrt{4})^3. \\
343007 &:= 70^{0+3} + 4 + 3. \\
343656 &:= (6^5 + 6^3) \times 43. \\
344148 &:= 84 \times (1 + (4 \times 4)^3). \\
345747 &:= 7^4 \times \sqrt{(7 + 5)^4} + 3. \\
346794 &:= (-\sqrt{4} + (\sqrt{9} - \sqrt{7^6})^{\sqrt{4}}) \times 3. \\
346795 &:= -5 + (\sqrt{9} - \sqrt{7^6})^{\sqrt{4}} \times 3. \\
348758 &:= 85 \times (7 + 8^4) + 3. \\
349524 &:= (4^{2+5+\sqrt{9}} - 4)/3. \\
352977 &:= ((7 \times 7)^{\sqrt{9}} + 2 \times 5) \times 3. \\
353673 &:= 3 \times (7^6 + 3^5) - 3. \\
353674 &:= -\sqrt{4} + (7^6 + 3^5) \times 3. \\
353679 &:= \sqrt{9} + (7^6 + 3^5) \times 3. \\
354279 &:= (9^{7-2} \times \sqrt{4} - 5) \times 3. \\
354571 &:= 1 \times 7 \times (5 + \sqrt{4^5})^3. \\
357696 &:= \sqrt{6^9 \times 6} \times (-7 + 53). \\
357911 &:= 1 \times (-1 - \sqrt{9} + 75)^3. \\
357917 &:= 71^{\sqrt{9}} + (7 - 5) \times 3. \\
365835 &:= 5 \times \sqrt{(3 \times 8 + 5)^6} \times 3. \\
368549 &:= (9 + 4)^5 - (8 + 6)^3. \\
369757 &:= 7^5 \times (7 + 9 + 6) + 3. \\
373227 &:= \sqrt{72^{2 \times 3}} - 7 \times 3. \\
373238 &:= (8 \times 3^2)^3 - 7 - 3. \\
373244 &:= -4 + 4 \times (2 \times 3)^7/3. \\
373246 &:= (-6 + 4 \times (2 \times 3)^7)/3. \\
373249 &:= (\sqrt{9} + 4 \times (2 \times 3)^7)/3. \\
373269 &:= (9 \times (6 + 2))^3 + 7 \times 3. \\
374979 &:= \sqrt{9} \times (-7 + (\sqrt{9} + 47)^3). \\
374995 &:= -5 + \sqrt{9} \times (\sqrt{9} + 47)^3. \\
379453 &:= -3 + (5^4 - 9)^{\sqrt{7-3}}. \\
379454 &:= -\sqrt{4} + (5^4 - 9)^{\sqrt{7-3}}. \\
379456 &:= (6 - 5^4 + \sqrt{9})^{\sqrt{7-3}}. \\
379459 &:= (-9 + 5^4)^{9-7} + 3. \\
383856 &:= 6 \times ((5 \times 8)^3 - 8 \times 3). \\
387577 &:= -7 + 757 \times 8^3. \\
389017 &:= (-7 + (1 + 0 + 9) \times 8)^3. \\
390224 &:= 4^2 \times (20 + 9)^3. \\
390625 &:= 5^{2+6} + 0 \times 93. \\
390685 &:= 5^8 + 60 \times \sqrt{9}/3. \\
391355 &:= 5^{5+3} + 1 + 9^3. \\
391385 &:= 5^8 + 31 + 9^3. \\
391625 &:= 5^{2+6} + (1 + 9)^3. \\
392784 &:= (4^8 - 72) \times (9 - 3). \\
393222 &:= (2 + 2^{2+9}) \times 3. \\
393545 &:= -5 \times (4 \times (5 - 3^9) + 3). \\
394385 &:= (\sqrt{5^8} + 3)^{\sqrt{4}} + \sqrt{9}/3. \\
394752 &:= 257 \times \sqrt{4^9} \times 3. \\
396568 &:= -8 + 6^5 \times (6 \times 9 - 3). \\
397953 &:= (35 + 9 + 7)^{\sqrt{9}} \times 3. \\
399492 &:= (2^9 + 4 \times 9) \times 9^3. \\
404968 &:= 8 \times ((6 + 9)^4 - 04). \\
408321 &:= (1 - 2^3 \times 80)^{\sqrt{4}}. \\
410881 &:= 1 \times (8 \times 80 + 1)^{\sqrt{4}}. \\
411771 &:= (-1 + 7^7) \times (1 + 1)/4. \\
411773 &:= (3 + 7^7) \times (1 + 1)/4. \\
411775 &:= (5 + 7^7 + 1 + 1)/\sqrt{4}. \\
411777 &:= (7 + 7^7)/(1 + 1) + \sqrt{4}. \\
413343 &:= (3 + 4) \times (3 \times 3)^{1+4}. \\
419796 &:= 69 \times \sqrt{(79 - 1)^4}. \\
419886 &:= (6^8 - 8 \times 9)/(1 \times 4). \\
419897 &:= -7 + \sqrt{9^8} \times \sqrt{(9 - 1)^4}. \\
419949 &:= 9 \times (4 \times 9)^{\sqrt{9}} + 1 + 4. \\
421873 &:= (-3 + 78)^{1+2} - \sqrt{4}. \\
421875 &:= (5 \times (7 + 8))^{12/4}. \\
421879 &:= (-\sqrt{9} + 78)^{1+2} + 4. \\
422498 &:= (8 \times \sqrt{9^4} + 2)^2 - \sqrt{4}. \\
425944 &:= 44^{\sqrt{9}} \times 5 + 24. \\
428738 &:= (8^3 - \sqrt{\sqrt{7^8}})^2 \times \sqrt{4}. \\
436875 &:= 5 \times ((-7 + 8^6)/3 - 4). \\
438967 &:= 76^{\sqrt{9}} - 8 + 3 - 4. \\
438972 &:= (2 - 7 + \sqrt{\sqrt{9^8}})^3 - 4. \\
438974 &:= (4 \times 7 \times \sqrt{9} - 8)^3 - \sqrt{4}. \\
438978 &:= (87 - \sqrt{9} - 8)^3 + \sqrt{4}. \\
439569 &:= ((9 + 65) \times 9 - 3)^{\sqrt{4}}. \\
440898 &:= (8 \times (\sqrt{9} + 80))^{\sqrt{4}} + \sqrt{4}. \\
442369 &:= (96^3 \times 2 + 4)/4. \\
442384 &:= (48^3 + \sqrt{2^4}) \times 4. \\
443556 &:= (6 \times 55 + 3)^{\sqrt{4}} \times 4. \\
444885 &:= (-5 + 8 \times 84)^{\sqrt{4}} - 4. \\
444889 &:= (-9 + 8 \times 84 + 4)^{\sqrt{4}}. \\
446168 &:= 86 \times (1 + 6^4) \times 4. \\
446224 &:= (4 \times 2 - \sqrt{26^4})^{\sqrt{4}}. \\
452893 &:= (3^9 + 8) \times (25 - \sqrt{4}). \\
453952 &:= ((2 + 59)^3 - 5) \times \sqrt{4}. \\
453972 &:= ((-2 + 7 \times 9)^3 + 5) \times \sqrt{4}. \\
456529 &:= -4 + ((5 + 6) \times (5 + 2))^{\sqrt{9}}. \\
456968 &:= -8 + (6 + 9 + 6 + 5)^4. \\
457885 &:= 5^8 + (8 + 7^5) \times 4. \\
458329 &:= ((9^2 + 3) \times 8 + 5)^{\sqrt{4}}. \\
458444 &:= (-44 + 4^8) \times (5 + \sqrt{4}). \\
458668 &:= (8 + 6) \times (-6 + 8\sqrt{\sqrt{5^4}}).
\end{aligned}$$

$$\begin{aligned}
458672 &:= (2 + 7 \times (-6 + 8^5)) \times \sqrt{4}. \\
458688 &:= -8 + (8 + 6) \times (8^5 - 4). \\
458722 &:= -2 + 2 \times 7 \times (8^5 - \sqrt{4}). \\
458724 &:= 4/2 \times 7 \times (8^5 - \sqrt{4}). \\
458738 &:= -8 + (-3 + 7 \times 8^5) \times \sqrt{4}. \\
458742 &:= -2 + (-4 + 7 \times 8^5) \times \sqrt{4}. \\
458743 &:= -\sqrt{3^4} + 7 \times 8^5 \times \sqrt{4}. \\
458744 &:= 4/\sqrt{4} \times (7 \times 8^5 - 4). \\
458745 &:= -5 + \sqrt{4} \times 7 \times 8^5 - \sqrt{4}. \\
458746 &:= -6 + 4^7 \times (8 + 5 \times 4). \\
458747 &:= -7 + \sqrt{4} \times 7 \times 8^5 + \sqrt{4}. \\
458749 &:= -\sqrt{9} + 4^7 \times (8 + 5 \times 4). \\
458751 &:= -1^5 + 7 \times 8^5 \times \sqrt{4}. \\
458752 &:= (2 \times (-5 + 7))^8 \times (5 + \sqrt{4}). \\
458754 &:= \sqrt{4} \times (5 + 7 \times 8^5 - 4). \\
458756 &:= -6 + (5 + 7 \times 8^5) \times \sqrt{4}. \\
458758 &:= (8^5 \times 7 + 8 - 5) \times \sqrt{4}. \\
458759 &:= -\sqrt{9} + (5 + 7 \times 8^5) \times \sqrt{4}. \\
458762 &:= 2 \times (6 + 7 \times 8^5) - \sqrt{4}. \\
458764 &:= 4 \times (6 + 7 \times 8^5)/\sqrt{4}. \\
458773 &:= 3 \times 7 + (7 \times 8^5) \times \sqrt{4}. \\
458774 &:= (4 + 7 + 7 \times 8^5) \times \sqrt{4}. \\
458775 &:= -5 + (7 + 7) \times (8^5 + \sqrt{4}). \\
458784 &:= 4 \times (8 + (7 \times 8^5)/\sqrt{4}). \\
458847 &:= 7 \times (4^8 + 8 + 5) + 4. \\
458868 &:= (8 + 6) \times (8 + 8^5) + 4. \\
458872 &:= 2 \times (7 \times (8 + 8^5) + 4). \\
458876 &:= (6 + 7 \times (8 + 8^5)) \times \sqrt{4}. \\
459999 &:= 9^{\sqrt{9}} \times (9 - \sqrt{9} + 5^4). \\
466345 &:= 5 \times (-43 + 6^6 \times \sqrt{4}). \\
466695 &:= 5 \times (\sqrt{\sqrt{9^6}} + 6^6 \times \sqrt{4}). \\
467455 &:= -5^5 + (-4 + 7^6) \times 4. \\
467856 &:= ((6 - 5 + 8) \times 76)^{\sqrt{4}}. \\
468494 &:= \sqrt{4} \times (-9 + (\sqrt{4} \times 8 + 6)^4). \\
468512 &:= 2 \times (\sqrt{\sqrt{(1-5)^8}} + 6)^4. \\
468794 &:= ((-4 + 9)^7 + 8) \times 6 - 4. \\
468798 &:= ((8 - \sqrt{9})^7 + 8) \times \sqrt{\sqrt{6^4}}. \\
471969 &:= (\sqrt{9} + 691 - 7)^{\sqrt{4}}. \\
472396 &:= (6 \times 9)^3 \times \sqrt{2+7} + 4. \\
473256 &:= 6^{5-2} \times (3^7 + 4). \\
478864 &:= (\sqrt{4} - 6 + 8 \times 87)^{\sqrt{4}}. \\
479979 &:= \sqrt{9} \times (-7 + (9 \times \sqrt{9} - 7)^4). \\
479995 &:= -5 + \sqrt{9} \times (9 \times \sqrt{9} - 7)^4. \\
484384 &:= 4 \times (-8 + 348^{\sqrt{4}}). \\
484416 &:= ((6 + (1 - 4)^4) \times 8)^{\sqrt{4}}. \\
485809 &:= (9 \times 08 + \sqrt{5^8})^{\sqrt{4}}. \\
489636 &:= 63 \times (6^{-\sqrt{9}-8} - 4). \\
492075 &:= (5 + \sqrt{70^2}) \times 9^4. \\
492125 &:= 5^2 \times ((1 + 2)^9 + \sqrt{4}). \\
492804 &:= ((4 + 0 - 82) \times 9)^{\sqrt{4}}. \\
493846 &:= (6 + 4 \times 8)^3 \times 9 - \sqrt{4}. \\
494648 &:= (-8 + 4^6) \times (\sqrt{4} + 9)^{\sqrt{4}}. \\
496125 &:= 5 \times (21 \times (6 + 9))^{\sqrt{4}}. \\
497648 &:= 8 \times (\sqrt{4} \times 6^7/9 - \sqrt{4}). \\
498436 &:= (634 + 8 \times 9)^{\sqrt{4}}. \\
499447 &:= ((7 \times \sqrt{4})^4 + \sqrt{9}) \times (9 + 4). \\
499849 &:= (-94 + 89 \times 9)^{\sqrt{4}}. \\
499964 &:= ((-4 + 6 \times 9)^{\sqrt{9}} - 9) \times 4. \\
517536 &:= 6^3 \times (-5 + 7^{-1+5}). \\
518395 &:= (5 \times \sqrt{(9+3)^8} - 1) \times 5. \\
521017 &:= \sqrt{7^{10}} \times (-1 + 2^5). \\
521645 &:= (54 \times 6 - 1)^2 \times 5. \\
524181 &:= (181 \times 4)^2 + 5. \\
524268 &:= 8^6 \times 2 - \sqrt{4} \times 2 \times 5. \\
524281 &:= (-1 + 8^{2+4}) \times 2 - 5. \\
524384 &:= 4 \times 8 \times (3 + 4^{2+5}). \\
528369 &:= 9^6 - 3 \times (8/2)^5. \\
529979 &:= ((\sqrt{9^7} - \sqrt{9})/\sqrt{9})^2 - 5. \\
529989 &:= ((\sqrt{9^8} - 9)/9)^2 + 5. \\
530469 &:= 9^6 - 4 \times (03)^5. \\
531459 &:= (9^5 + \sqrt{4}) \times (1 + 3 + 5). \\
531469 &:= 9^6 - 4 \times (1 - 3 - 5). \\
531683 &:= \sqrt{\sqrt{3^{8 \times 6}}} - 1 + 3^5. \\
534375 &:= 57 \times 3 \times (\sqrt{4} + 3)^5. \\
537574 &:= (\sqrt{4} \times 7)^5 - 7 - 3^5. \\
537743 &:= -3^4 + (-7 + 7 \times 3)^5. \\
537817 &:= -7 + (18 - 7 + 3)^5. \\
537822 &:= -2 - ((2 - 8) \times 7/3)^5. \\
544639 &:= (9 + 3^6)^{4-\sqrt{4}} - 5. \\
544768 &:= (8 \times 67 - 4) \times 4^5. \\
546750 &:= \sqrt{(5+4)^6} \times 750. \\
549948 &:= 84 \times (-9 + 9^4 - 5). \\
552771 &:= 177 \times (-2 + 5^5). \\
556574 &:= (\sqrt{4} \times 7)^5 + 6 \times 5^5. \\
559817 &:= (7 - 1)^8/\sqrt{9} - 55. \\
559861 &:= -1 + 6^8/\sqrt{9} - 5 - 5. \\
559862 &:= 2 \times (6^{-8+\sqrt{9} \times 5} - 5). \\
559863 &:= (3 + 6^8)/\sqrt{9} - 5 - 5. \\
559864 &:= \sqrt{4} + 6^8/\sqrt{9} - 5 - 5. \\
559866 &:= -6 + 6^8/\sqrt{9} + 5 - 5. \\
559869 &:= \sqrt{9} \times (6^8/9 - 5/5). \\
559871 &:= (1 - 7)^8/\sqrt{9} - 5/5. \\
559882 &:= (2 - 8)^8/\sqrt{9} + 5 + 5. \\
567137 &:= 73 \times 1 \times (-7 + 6^5). \\
567644 &:= -4 + \sqrt{4} \times 6^7 + 6^5. \\
567648 &:= (8 \times (4 + 6) - 7) \times 6^5. \\
571434 &:= -4 + 34 \times 1 \times 7^5. \\
571574 &:= (4 + 7^5) \times (-1 + 7 \times 5). \\
581358 &:= 85^3 + 1 - 8^5. \\
589662 &:= (2 \times 6 + 6) \times (-9 + 8^5). \\
589672 &:= 2 \times (-76 + 9 \times 8^5). \\
589754 &:= \sqrt{4} \times (-5 \times 7 + 9 \times 8^5). \\
589779 &:= 9 \times ((7/7 + \sqrt{9})^8 - 5). \\
589782 &:= (-2 + 8) \times (-7 + \sqrt{9} \times 8^5). \\
589792 &:= 2 \times (-9 - 7 + 9 \times 8^5). \\
589817 &:= -7 + (1 + 8 + 9) \times 8^5. \\
589819 &:= 9 \times (1^8 + \sqrt{9})^8 - 5. \\
589822 &:= -2 + (-2 + 8) \times \sqrt{9} \times 8^5. \\
589834 &:= \sqrt{4} \times (-3 + 8 + 9 \times 8^5). \\
589837 &:= (7 - 3)^8 \times 9 + 8 + 5. \\
589866 &:= -6 + 6 \times (8 + \sqrt{9} \times 8^5). \\
589869 &:= -\sqrt{9} + 6 \times (8 + \sqrt{9} \times 8^5). \\
589935 &:= 5 \times (3^9 + \sqrt{9} \times 8^5). \\
589956 &:= 6 \times (-5 + \sqrt{9} \times (9 + 8^5)). \\
589962 &:= 2 \times (69 + 9 \times 8^5). \\
589972 &:= 2 \times (-7 + 9 \times (9 + 8^5)). \\
589986 &:= (-6 + 8) \times 9 \times (9 + 8^5). \\
589992 &:= 2 \times (\sqrt{9} + 9 \times (9 + 8^5)). \\
590485 &:= -5 + (8 + \sqrt{4}) \times (0 + 9^5). \\
614652 &:= (2 - 5 \times 6)^4 - \sqrt{16}. \\
614653 &:= -3 + 56^4/16. \\
614654 &:= -\sqrt{4} + 56^4/16. \\
614656 &:= (6 - 5 \times 6 - 4)^{\sqrt{16}}. \\
614659 &:= \sqrt{9} + 56^4/16. \\
624683 &:= ((38 + 6)^4 + 2)/6. \\
625687 &:= (786 + 5)^2 + 6. \\
629856 &:= 6^5 \times (89 - 2 - 6). \\
632684 &:= (4 + 8 \times 6) \times \sqrt{23^6}. \\
635993 &:= -63 + (5 + 9 \times 9)^3. \\
642972 &:= 2 \times (7 \times 9^2)^{\sqrt{4}} - 6. \\
644198 &:= (8 + \sqrt{9})^{1+4} \times 4 - 6. \\
649533 &:= (3 \times 3)^5 \times (9 + \sqrt{4}) - 6. \\
649594 &:= (\sqrt{4} + 9) \times (5 + \sqrt{9^{4+6}}). \\
652808 &:= 808^2 - 56. \\
655384 &:= (4^8 + 3) \times (5 + 5) - 6. \\
655584 &:= 4 \times (8^5 \times 5 + 56). \\
656196 &:= 6 \times (-9 + (1 + 6) \times 5^6). \\
658378 &:= 87\sqrt{\sqrt{\sqrt{3^8}}} - \sqrt{5^6}. \\
658497 &:= (-7 + 94)^{8-5} - 6. \\
663546 &:= 6^4 \times \sqrt{(5+3)^6} - 6. \\
663549 &:= -\sqrt{9} + 4^5 \times 3 \times \sqrt{6^6}. \\
663588 &:= ((8 + 8 \times 5)^3 + 6) \times 6. \\
663759 &:= 9 \times (5^7 - 3^6 \times 6). \\
666791 &:= -1 + 9 \times \sqrt{7^6} \times \sqrt{6^6}. \\
666792 &:= 2 \times \sqrt{(\sqrt{9} \times 7)^6} \times 6 \times 6. \\
666794 &:= \sqrt{4} + 9 \times \sqrt{7^6} \times \sqrt{6^6}.
\end{aligned}$$

$$\begin{array}{lll}
668736 := 6^{-3+7} \times 86 \times 6. & 823778 := -8 + 7^7 + \sqrt{3^{2+8}}. & 937524 := (4 - 2 + 5^7) \times (3 + 9). \\
671742 := -2 + 4^7 \times (-1 + 7 \times 6). & 827992 := (2 + 9) \times 97^2 \times 8. & 937525 := 5^2 + 5^7 \times (3 + 9). \\
671744 := \sqrt{(4 \times 4)^7} \times (-1 + 7 \times 6). & 828092 := (2 + 908)^2 - 8. & 937534 := -\sqrt{4} + (3 + 5^7) \times (3 + 9). \\
681478 := (8 \times (7 + 4))^{\sqrt{1+8}} \times 6. & 830536 := (-6 + (-3 + 50)^3) \times 8. & 937536 := (6 - 3 + 5^7) \times (3 + 9). \\
695478 := 87 \times ((4 \times 5)^{\sqrt{9}} - 6). & 830592 := (2 \times (-\sqrt{9} + 50))^3 + 8. & 937539 := (9 + 3) \times 5^7 + 39. \\
733824 := 42 \times 8 \times (-3 + 3^7). & 831875 := 5 \times (7 \times 8 - 1)\sqrt{\sqrt{3^8}}. & 937542 := (2 + 4 \times (5^7 + 3)) \times \sqrt{9}. \\
734811 := 1 \times (18^4 - 3) \times 7. & 838784 := \sqrt{(-4 + 8)^7} \times (-8 + 3^8). & 937548 := (8 - 4 + 5^7) \times (3 + 9). \\
734824 := 4 \times (-2 + 84 \times 3^7). & 839763 := 3 \times 6^7 + 9 \times (3 - 8). & 937564 := \sqrt{4^6} + 5^7 \times (3 + 9). \\
734832 := 2 \times 3^8 \times \sqrt{4^3} \times 7. & 839764 := (-\sqrt{4} + 6^7) \times \sqrt{9} - 38. & 937569 := -\sqrt{9} + (6 + 5^7) \times (3 + 9). \\
742558 := (8 + 5)^5 \times 2 - 4 \times 7. & 839765 := -5 + 6^7 \times \sqrt{9} - 38. & 937584 := 4 \times ((8 + 5^7) \times 3 - \sqrt{9}). \\
746493 := -3 + \sqrt{(9 \times \sqrt{4})^6} \times \sqrt{4^7}. & 839766 := (-6 + 6^7) \times \sqrt{9} - 3 \times 8. & 940785 := -5 + (8 \times 70)^{\sqrt{4}} \times \sqrt{9}. \\
746494 := -\sqrt{4} + \sqrt{(9 \times \sqrt{4})^6} \times \sqrt{4^7}. & 839776 := (6^7 - 7) \times \sqrt{9} - 3 - 8. & 941186 := -6 + ((8 - 1) \times 14)^{\sqrt{9}}. \\
746499 := \sqrt{9} + \sqrt{9} \times (\sqrt{4} \times 6)^{-\sqrt{4+7}}. & 839799 := (9 - \sqrt{9})^7 \times \sqrt{9} - \sqrt{\sqrt{3^8}}. & 941189 := 98^{-1 \times 1 + 4} - \sqrt{9}. \\
746624 := 4^2 \times 6^6 + \sqrt{4^7}. & 843648 := (8 \times 4 - 6)^3 \times 48. & 941192 := (2 + 91 + 1 + 4)^{\sqrt{9}}. \\
747392 := ((2 \times 9)^3 + 7) \times \sqrt{4^7}. & 845649 := (-9 + (46 + 5^4))/8. & 943284 := ((4 + 8^2)^3 - 4) \times \sqrt{9}. \\
753569 := (96 - 5)^3 + 5 - 7. & 852384 := (4^8 + 32) \times (5 + 8). & 943293 := -3 + \sqrt{9} \times (2 \times 34)^{\sqrt{9}}. \\
753664 := 46 \times (6 + 3 - 5)^7. & 854375 := (-5 + 7^3 \times 4) \times \sqrt{5^8}. & 943294 := -\sqrt{4} + \sqrt{9} \times (2 \times 34)^{\sqrt{9}}. \\
754279 := 97 \times (2 + 4)^5 + 7. & 857157 := (7^5 \times 17) \times (-5 + 8). & 943296 := (6 + 9 \times 2) \times 34^{\sqrt{9}}. \\
759364 := -4 + \sqrt{(6^3 + 9)^5} - 7. & 857359 := 95^3 - (7 - 5) \times 8. & 944777 := -7 + (7 + 7 + 4)^4 \times 9. \\
759597 := (-7 + 95)^{\sqrt{9}} + 5^7. & 857565 := (56 - 5) \times (7^5 + 8). & 944781 := 18^{7-\sqrt{4}}/\sqrt{4} - \sqrt{9}. \\
765276 := -6 + 7^2 \times (5^6 - 7). & 859265 := (5^6 - 2) \times (-\sqrt{9} + 58). & 944782 := -2 + (8 \times 7 - \sqrt{4})^4/9. \\
765279 := -\sqrt{9} + 7^2 \times (5^6 - 7). & 859375 := 5^7 \times (-3 + 9) + 5^8. & 944793 := 3^{\sqrt{9+7}} \times 4 \times 4 + 9. \\
765392 := 7^6 \times 5 + 3^{9+2}. & 885369 := 96^3 + \sqrt{5^8} + 8. & 944811 := (-1 + 18^4 + 4) \times 9. \\
765429 := (9 - 2) \times (-4 + 5^6) \times 7. & 885695 := 5 \times (9^6/(-5 + 8) - 8). & 944815 := -5 + (18^4 + 4) \times 9. \\
765527 := 7^2 \times (5 + 5^6 - 7). & 885735 := 5 \times 3^{75-8 \times 8}. & 944928 := 8 \times (2 \times 9^4 + \sqrt{4}) \times 9. \\
765597 := 7 \times (-9 + 5 + 5^6 \times 7). & 885743 := 3^{4+7} \times 5 + \sqrt{8 \times 8}. & 944973 := (3 \times 7 + (9 \times \sqrt{4})^4) \times 9. \\
773879 := -97 \times 8^3 + 7^7. & 885816 := 6^{\sqrt{1+8}} \times (5 + \sqrt{8^8}). & 946239 := 9^3 \times (2 + 6^4) - \sqrt{9}. \\
781264 := \sqrt{4} \times ((6 - 2 + 1)^8 + 7). & 892296 := (69 \times 2 - 2) \times \sqrt{9^8}. & 957996 := (6 \times 9 + \sqrt{9}) \times 7^5 - \sqrt{9}. \\
786434 := \sqrt{4} + 3 \times 4^{\sqrt{-6+87}}. & 907924 := \sqrt{4} \times 2 \times (-9 + 70)^{\sqrt{9}}. & 979767 := 7 \times 6^7/(9 - 7) - 9. \\
786583 := 3 \times (8^5 + 6) \times 8 + 7. & 917495 := (5 + 9) \times 4^{7+1} - 9. & 994599 := (9 + \sqrt{9})^5 \times 4 - 9^{\sqrt{9}}. \\
792098 := 890^2 - 9 + 7. & 923521 := (-1 + 2^5)^{-3-2+9}. & 996625 := (5 \times 2)^6 - (6 + 9)^{\sqrt{9}}. \\
794624 := \sqrt{4} \times (2 + 6)^4 \times 97. & 925965 := 5 \times (6 \times 9 + 5 - 2)^{\sqrt{9}}. & 997568 := -8^6 + ((5 + 7) \times 9)^{\sqrt{9}}. \\
805295 := 5 \times ((9 + 2)^5 + 0 + 8). & 927369 := 963^{7-2-\sqrt{9}}. & 999744 := -4^4 + (7 + \sqrt{9})^{9-\sqrt{9}}. \\
822657 := (7 + (5 \times 6)^2)^2 + 8. & 928557 := 7 \times (55 - 8/2)^{\sqrt{9}}. & 999901 := (10^{9-\sqrt{9}}) - 99. \\
823287 := 7^{8+2-3} - 2^8. & 934407 := (\sqrt{70^4} - \sqrt{4})^3 \times 9. & 999982 := (2 + 8)^{9-\sqrt{9}} - 9 - 9. \\
823487 := 7 \times (-8 + (4 + 3)^{-2+8}). & 937495 := -5 + (9 - 4)^7 \times (3 + 9). & 999991 := (1^9 + 99)^{\sqrt{9}} - 9. \\
823677 := 7^7 + 63 \times 2 + 8. & 937512 := (2 - 1 + 5^7) \times (3 + 9). & 999997 := (7 + \sqrt{9})^{9-\sqrt{9}} - 9/\sqrt{9}. \\
& 937514 := \sqrt{4} + (1 + 5^7) \times (3 + 9). &
\end{array}$$

6 Selfie Representations in Increasing and Decreasing Order of Digits

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

6.1 Selfie Representations in Increasing and Decreasing Orders of Digits

$$\begin{array}{lll}
117641 := -1 + ((11 - 4)^6 - 7) & = 7^6 + 4 - 11 - 1. & 117648 := (11 - 4)^6 + 7 - 8 & = -8 + 7^6 - 4 + 11. \\
117642 := (-1 + 12 - 4)^6 - 7 & = 7^6 + \sqrt{4} + 2 - 11. & 117655 := -1 + (\sqrt{-1 + 5} + 5)^6 + 7 & = 7^6 + \sqrt{5 \times 5} + 11.
\end{array}$$

$117656 := \sqrt{(11 \times 5 - 6)^6} + 7$	$= 7^6 + \sqrt{65-1} - 1.$	$279848 := (2 + 4)^7 - 8 \times (8 + \sqrt{9})$	$= 9 + (8 + 8 + 7)^4 - 2.$
$117659 := (1 + 1 + 5)^6 + 7 + \sqrt{9}$	$= 9 + 7^6 + \sqrt{5-1} - 1.$	$279924 := (-2 + 2 \times 4)^7 - 9 - \sqrt{9}$	$= (9 - \sqrt{9})^7 - (4 + 2) \times 2.$
$117669 := -1 + (1 + 6)^6 + 7 \times \sqrt{9}$	$= \sqrt{9} + 7^6 + 6 + 11.$	$279926 := -22 + 6^7 + 9 + \sqrt{9}$	$= (9 - \sqrt{9})^7 - 6 \times 2 + 2.$
$118784 := (11 \times \sqrt{4} + 7) \times \sqrt{8^8}$	$= \sqrt{8^8} \times (7 + \sqrt{4} \times 11).$	$279935 := (-2 + 3 + 5)^7 - 9/9$	$= ((9 - \sqrt{9})^7) - (5 - 3)/2.$
$137732 := ((1 + 2)^{3 \times 3} - 7) \times 7$	$= 7 \times (-7 + \sqrt{3^{-3+21}}).$	$279937 := (2 - 3 + 7)^7 + 9/9$	$= (\sqrt{9} \times (9 - 7))^7 + 3 - 2.$
$137733 := 1 + (3^{3 \times 3} - 7) \times 7$	$= 7 \times (-7 + 3^{3 \times 3}) + 1.$	$279941 := -1 + (2 + 4)^7 + 9 - \sqrt{9}$	$= (9 - \sqrt{9})^7 + \sqrt{4 + 21}.$
$137799 := (1 + 3^7 \times 7) \times 9 + 9$	$= (\sqrt{9^9} + 7) \times 7 - 31.$	$279942 := (2 + (2 + 4)^7/\sqrt{9}) \times \sqrt{9}$	$= (9 - \sqrt{9})^7 + 4 \times 2 - 2.$
$139965 := \sqrt{(1 + 35)^6} \times \sqrt{9} - \sqrt{9}$	$= -\sqrt{9} + \sqrt{9} \times 6^{\sqrt{5+31}}.$	$279943 := -2 + (3 \times \sqrt{4})^7 + \sqrt{9} \times 9$	$= (9 - \sqrt{9})^7 + \sqrt{(4 + 3)^2}.$
$139967 := -1 + 3 \times 6^{(-7+9) \times \sqrt{9}}$	$= (-9/9 + 7)^6 \times 3 - 1.$	$279944 := 2 + (\sqrt{4} + 4)^7 + 9 - \sqrt{9}$	$= (9 - \sqrt{9})^7 - (4 \times 4)/2.$
$139994 := -1 + 3 \times ((4 \times 9)^{\sqrt{9}} + 9)$	$= \sqrt{9} \times (9 + (9 \times 4)^3) - 1.$	$279946 := 2 - 4 + 6^7 + 9 + \sqrt{9}$	$= (9 - \sqrt{9})^7 + \sqrt{(6 + 4)^2}.$
$147393 := ((1 + 3)^{3+4} - 7) \times 9$	$= 9 \times (-7 + \sqrt{4^{-3+31}}).$	$279954 := (2 \times \sqrt{4 + 5})^7 + 9 + 9$	$= (9 - \sqrt{9})^7 + 5 \times 4 - 2.$
$147394 := 1 + (-3 - 4 + 4^7) \times 9$	$= 9 \times (-7 + 4^{4+3}) + 1.$	$279966 := 2 \times 6 + 6^7 + 9 + 9$	$= (9 - \sqrt{9})^7 - 6 + 6^2.$
$156245 := -1 + 2 \times (-\sqrt{4} + 5 \times 5^6)$	$= -6 + 5^{5+\sqrt{4}} \times 2 + 1.$	$279969 := (2 + 6^7/\sqrt{9} + 9) \times \sqrt{9}$	$= -\sqrt{9} - ((\sqrt{9} - 9)^7) + 6^2.$
$159358 := (-1 + 3 \times 5^5) \times (8 + 9)$	$= (9 + 8) \times (5^5 \times 3 - 1).$	$285719 := (12 + 5) \times 7^{8-\sqrt{9}}$	$= (9 + 8) \times 7^5 \times (2 - 1).$
$165888 := \sqrt{\left(\sqrt{(-1 + 5) \times \sqrt{\sqrt{6^8}}}\right)^8} \times 8$	$= 8 \times (8 + 8) \times 6^{5-1}.$	$294897 := (-2 + \sqrt{4^{7+8}}) \times 9 + \sqrt{9}$	$= \sqrt{9} + 9 \times (8^{7-\sqrt{4}} - 2).$
$177143 := -11 + 3^{4+7} + 7$	$= 7 - 7 - 4 + 3^{11}.$	$294948 := (\sqrt{2^4} + (4 \times 8)^{\sqrt{9}}) \times 9$	$= (9 + 9) \times (8^4 \times 4 + 2).$
$186368 := (-1 + 3^6) \times (-6 + 8)^8$	$= (-8 \times 8 + 6^6) \times (3 + 1).$	$294984 := (2 \times 4 + (4 \times 8)^{\sqrt{9}}) \times 9$	$= (9 + 9 \times 8^4) \times 4 \times 2.$
$186614 := -1 - 1 + 4 \times 6^6 - 8$	$= (-8 + 6^6 \times 4) - 1 - 1.$	$314429 := -1 - 2 + (34 \times \sqrt{4})^{\sqrt{9}}$	$= -\sqrt{9} + (4 + 4^3)^{2+1}.$
$186616 := \sqrt{1 \times 16} \times 6^6 - 8$	$= -8 + 6^6 \times (6 - 1 - 1).$	$314929 := 1 + 2^3 \times \sqrt{4} \times \sqrt{9^9}$	$= (9^{\sqrt{9}}) \times 432 + 1.$
$186625 := 1 + (2^5 \times 6^6)/8$	$= 8 \times 6 \times 6^{5/2} + 1.$	$323435 := 2 + 33^3 \times (4 + 5)$	$= (5 + 4) \times 33^3 + 2.$
$186626 := (1 + 2 \times 6^6) \times (-6 + 8)$	$= (8 - 6) \times (6^6 \times 2 + 1).$	$326567 := -(2 + 3) \times 5 + 6^6 \times 7$	$= 7 \times 6^6 - 5 \times (3 + 2).$
$186629 := \sqrt{-1 + 26} + 6^8/9$	$= -\sqrt{9} + 8 \times (6^6/2 + 1).$	$326576 := -\sqrt{2^{3+5}} + 6^6 \times 7$	$= 7 \times (6^6 - 5 + 3) - 2.$
$186632 := 12/3 \times 6^6 + 8$	$= 8 + 6^6 \times (3 + 2 - 1).$	$326613 := (1 + 2 \times 3) \times (3 + 6^6)$	$= (6^6 + 3)/3 \times 21.$
$186634 := \sqrt{1 + 3} + 4 \times 6^6 + 8$	$= 8 + 6^6 \times 4 + 3 - 1.$	$326648 := (2 + 3 + \sqrt{4}) \times (6^6 + 8)$	$= (8 + 6^6) \times (\sqrt{4} + 3 + 2).$
$186645 := 1 + 4 \times (5 + 6\sqrt{\sqrt{6^8}})$	$= 8 \times (6^6 + 5)/\sqrt{4} + 1.$	$326674 := -2 + (3 \times 4 + 6^6) \times 7$	$= 7 \times (6^6 + 4 \times 3) - 2.$
$186656 := (-1 + 5) \times (6 + 6^6) + 8$	$= 8 + (6 + 6^6) \times (5 - 1).$	$326676 := (2 \times \sqrt{36} + 6^6) \times 7$	$= 7 \times (6^6 + 6 + 3 \times 2).$
$186659 := (-1 + 5) \times (6^6 + 8) + \sqrt{9}$	$= \sqrt{9} + (8 + 6^6) \times (5 - 1).$	$342998 := -2 + (3^4 - 8 - \sqrt{9})^{\sqrt{9}}$	$= (\sqrt{9} \times 9 \times 8 - \sqrt{4})^3 - 2.$
$188415 := -1 + (1 + 45) \times \sqrt{8^8}$	$= \sqrt{8^8} \times (5 + 41) - 1.$	$352949 := 2 + 3 \times (4 + 5 \times 9)^{\sqrt{9}}$	$= \sqrt{9} \times (9 \times 5 + 4)^3 + 2.$
$188416 := (1 - 1 + 46) \times \sqrt{8^8}$	$= \sqrt{8^8} \times (6 + 41 - 1).$	$354286 := 2 \times \sqrt{3^{4 \times (5+6)}} - 8$	$= -8 + 6 \times (5 + 4)^{3+2}.$
$194478 := (-1 + 4)^4 \times \sqrt{7^8} - \sqrt{9}$	$= \sqrt{\sqrt{9^8}} \times 7^4 - 4 + 1.$	$354291 := (-1 + 2 \times (\sqrt{3^{4 \times 5}})) \times \sqrt{9}$	$= 9^5 \times \sqrt{4} \times 3 - 2 - 1.$
$196829 := -1 + (\sqrt{-2 + 6} + 8) \times \sqrt{9^9}$	$= \sqrt{9^9} \times (8 + \sqrt{6-2}) - 1.$	$354292 := -2 + 2 \times 3^{4+5} \times 9$	$= 9^5 \times \sqrt{4 + 32} - 2.$
$226981 := (122/(-6 + 8))^{\sqrt{9}}$	$= (-9 + 8 + 62)^{2+1}.$	$354296 := 2 \times (3 + (4 + 5)^6)/\sqrt{9}$	$= (\sqrt{9}^{6+5} + 4 - 3) \times 2.$
$234256 := 22^{34-5 \times 6}$	$= (65 - 43)^{2^2}.$	$354339 := (3^{3 \times 3} \times \sqrt{4} + 5) \times 9$	$= 9 \times (5 + \sqrt{4} \times 3^{3 \times 3}).$
$234259 := 22^{3-4+5} + \sqrt{9}$	$= \sqrt{9} + (\sqrt{5^4} - 3)^{2 \times 2}.$	$389018 := 0 + 1 + (\sqrt{3^8} - 8)^{\sqrt{9}}$	$= (9 + 8 \times 8)^3 + 1 + 0.$
$236199 := 12 \times \sqrt{(3 + 6)^9} + \sqrt{9}$	$= \sqrt{9} \times ((9 \times 6)^3/2 + 1).$	$397944 := 3 \times (4 + 47)^{\sqrt{9}} - 9$	$= \sqrt{9} \times (-\sqrt{9} + (7 + 44)^3).$
$248831 := 12^{3+\sqrt{4}} - 8/8$	$= (8 + 8 - 4)^{3+2} - 1.$	$397953 := (-3 - 3 + 57)^{\sqrt{9}} \times \sqrt{9}$	$= \sqrt{9} \times (-9 + 7 + 53)^3.$
$248832 := 2 \times 2 \times 3 \times \sqrt{(4 + 8)^8}$	$= (8 + 8 - 4)^{\sqrt{3+22}}.$	$419966 := -1 + (-\sqrt{4} + 6^6 + 9) \times 9$	$= 9 \times (\sqrt{9} + 6^6 + 4) - 1.$
$253125 := \sqrt{(1 + 2)^{2^3}} \times 5^5$	$= 5 \times (5 \times 3)^{2 \times 2} \times 1.$	$438979 := 3 + (-\sqrt{4} + 78)^{\sqrt{9 \times 9}}$	$= \sqrt{9} + (-9 + 87 - \sqrt{4})^3.$
$262138 := 1 \times 2 + 2^{3 \times 6} - 8$	$= 8^6 - \sqrt{3 + 22} - 1.$	$453789 := 3 \times (4 + 5) \times 7^{8-\sqrt{9}}$	$= \sqrt{\sqrt{\sqrt{9^8}}} \times \sqrt{(7^5)^{\sqrt{4}}} \times 3.$
$262148 := 12 + (-2 \times 4)^6 - 8$	$= 8^6 + 4^{2-2+1}.$	$453962 := 2 \times (3 + \sqrt{4} + 56)^{\sqrt{9}}$	$= (9 \times 6 + 5 + \sqrt{4})^3 \times 2.$
$265489 := (-2 \times 4 + 5^6) \times (8 + 9)$	$= (-\sqrt{9} + \sqrt{8^6}) \times 521.$	$458744 := \sqrt{4} \times (4 + 4)^5 \times 7 - 8$	$= -8 + 7 \times (5 \times 4 - 4)^4.$
$265795 := (2 + 5^5) \times (6 + 79)$	$= (9 + 76) \times (5^5 + 2).$	$459375 := (3 + 4) \times 5^5 \times 7 \times \sqrt{9}$	$= \sqrt{9} \times 7 \times 5^5 \times (4 + 3).$
$278528 := (-2 + 2 \times 5 \times 7) \times \sqrt{8^8}$	$= \sqrt{(8 + 8)^7} \times (-5 + 22).$	$466539 := -3 + \sqrt{4} \times (5 \times 6^6 - 9)$	$= (-9 + 6^6 \times 5) \times \sqrt{4} - 3.$
		$466544 := -4 \times 4 + \sqrt{4} \times 5 \times 6^6$	$= (6^6 \times 5) \times \sqrt{4} - 4 \times 4.$
		$466546 := -\sqrt{4} + \sqrt{4} \times (5 \times 6^6 - 6)$	$= (6 + 6^6 \times 5) \times \sqrt{4} + \sqrt{4}.$

$$\begin{aligned}
466548 &:= 4 + \sqrt{4} \times (5 \times 6^6 - 8) &= (-8 + 6^6 \times 5 + \sqrt{4}) \times \sqrt{4}. & 574992 &:= \sqrt{\sqrt{2^4}} \times (57 + 9)^{\sqrt{9}} &= (\sqrt{9} + 9 \times 7)^{\sqrt{5+4}} \times 2. \\
466549 &:= \sqrt{4} \times (-4 + 5 \times 6^6) - \sqrt{9} &= -\sqrt{9} + (6^6 \times 5 - 4) \times \sqrt{4}. & 589818 &:= -1 - 5 + \sqrt{(8+8)^8} \times 9 &= 9 \times \sqrt{(8+8)^8} - 5 - 1. \\
466550 &:= \sqrt{04} \times (-5 + 5 \times 6^6) &= (6^6 \times 5 - 5) \times \sqrt{4} + 0. & 589822 &:= -2 + 2^{5+8} \times 8 \times 9 &= \sqrt{\sqrt{\sqrt{9^8}}} \times 8^5 \times 2 - 2. \\
466551 &:= 1 + \sqrt{4} \times (-5 + 5 \times 6^6) &= (6^6 \times 5 - 5) \times \sqrt{4} + 1. & 589842 &:= (2 + 4^5 \times 8 \times 8) \times 9 &= 9 \times (8 \times 8^5 / 4 + 2). \\
466552 &:= -2 \times 4 + (5 + 5) \times 6^6 &= 6^6 \times (5 + 5) - 4 \times 2. & 592704 &:= ((0 + 2 + \sqrt{4} \times 5) \times 7)^{\sqrt{9}} &= (9 + 75)^{4-2^0}. \\
466553 &:= -3 - 4 + (5 + 5) \times 6^6 &= 6^6 \times (5 + 5) - 4 - 3. & 629848 &:= -2 \times 4 + 6^8 / 8 \times \sqrt{9} &= (\sqrt{9^8} \times 8 \times 6 - 4) \times 2. \\
466554 &:= -\sqrt{4} - 4 + (5 + 5) \times 6^6 &= (6^6 \times 5 - \sqrt{5 + 4}) \times \sqrt{4}. & 629853 &:= (2 \times 3^5) \times \sqrt{6^8} - \sqrt{9} &= \sqrt{\sqrt{9^8}} \times 6^5 - \sqrt{3^2}. \\
466556 &:= \sqrt{4} + (5 + 5) \times 6^6 - 6 &= 6^{\sqrt{6 \times 6}} \times (5 + 5) - 4. & 629856 &:= (-2 + 56) \times \sqrt{6^8} \times 9 &= 9^{8-6} \times \sqrt{6^{5 \times 2}}. \\
466557 &:= 4 + (5 + 5) \times 6^6 - 7 &= -7 + 6^6 \times (5 + 5) + 4. & 629868 &:= (-2 + 6 + 6^8 / 8) \times \sqrt{9} &= (\sqrt{9^8} \times 8 \times 6 + 6) \times 2. \\
466558 &:= -\sqrt{4} + (5 + 5) \times 6^{\sqrt{\sqrt{6^8}}} &= 8 + (6^6 \times 5 - 5) \times \sqrt{4}. & 663546 &:= 3 \times 4^5 \times \sqrt{6^6} - 6 &= -6 + 6 \times (-6 + 54)^3. \\
466559 &:= \sqrt{4} + (5 + 5) \times 6^6 - \sqrt{9} &= \sqrt{9} + 6^6 \times (5 + 5) - 4. & 663549 &:= (3 \times 4^5) \times \sqrt{6^6} - \sqrt{9} &= -\sqrt{9} + 6 \times (-6 + 54)^3. \\
466560 &:= \sqrt{04} \times 5 \times 6^{\sqrt{6 \times 6}} &= 6^6 \times (-6 \times 5 + 40). & 699846 &:= (\sqrt{4} + 6^6 \times (8 - \sqrt{9})) \times \sqrt{9} &= -\sqrt{9} \times ((\sqrt{9} - 8) \times 6^6 - \sqrt{4}). \\
466561 &:= 1 + (\sqrt{4} \times 5) \times 6^{\sqrt{6 \times 6}} &= 6^{\sqrt{6 \times 6}} \times 5 \times \sqrt{4} + 1. & 699867 &:= 6^6 \times (7 + 8) + \sqrt{9} \times 9 &= \sqrt{9} \times 9 + (8 + 7) \times 6^6. \\
466562 &:= 2 \times (4 + 5 \times 6^6) - 6 &= 6 + (6^6 \times 5 - \sqrt{4}) \times 2. & 728991 &:= (12 + 78)^{\sqrt{9}} - 9 &= -9 + (\sqrt{9} + 87)^{2+1}. \\
466563 &:= -3 + \sqrt{4} \times (5 \times 6^6) + 6 &= 6 + 6^6 \times 5 \times \sqrt{4} - 3. & 728997 &:= (2 \times 7 \times 7 - 8)^{\sqrt{9}} - \sqrt{9} &= -\sqrt{9} + (\sqrt{9} + 87)^{\sqrt{7+2}}. \\
466564 &:= \sqrt{4} \times (-4 + 5 \times 6^6 + 6) &= (6 + 6^6 \times 5 - 4) \times \sqrt{4}. & 746464 &:= -4 + 4 \times (4 \times 6^6 - 7) &= (-7 + 6^6 \times 4) \times 4 - 4. \\
466566 &:= \sqrt{4} \times 5 \times 6^6 + \sqrt{6 \times 6} &= \sqrt{6 \times 6} + (6^6 \times 5) \times \sqrt{4}. & 746468 &:= 4 \times (4 \times 6^6 - \sqrt{\sqrt{\sqrt{7^8}}}) &= 8 \times (-7 + 6^6 \times 4) / \sqrt{4}. \\
466567 &:= \sqrt{4} \times 5 \times 6^{\sqrt{6 \times 6}} + 7 &= 7 + 6^{\sqrt{6 \times 6}} \times 5 \times \sqrt{4}. & 746493 &:= -3 + (4 + 4) \times 6^7 / \sqrt{9} &= (9 + 7) \times 6^{\sqrt{4+4}} - 3. \\
466568 &:= (4 + 5 \times 6^6) \times (-6 + 8) &= (8 - 6) \times (6^6 \times 5 + 4). & 746494 &:= -\sqrt{4} + (4 + 4) \times 6^7 / \sqrt{9} &= (9 + 7) \times 6^{\sqrt{4+4}} - \sqrt{4}. \\
466569 &:= \sqrt{4} \times (5 \times 6^6 + 6) - \sqrt{9} &= -\sqrt{9} + (6 + 6^6 \times 5) \times \sqrt{4}. & 746498 &:= \sqrt{4} + \sqrt{4} \times (-6 + 78)^{\sqrt{9}} &= (\sqrt{9} - 8 - 7)^6 / 4 + \sqrt{4}. \\
466599 &:= \sqrt{4} \times 5 \times (6^6 + \sqrt{9}) + 9 &= 9 + ((\sqrt{9} + 6^6) \times 5) \times \sqrt{4}. & 746499 &:= ((4 + 4) \times 6^7 + 9) / \sqrt{9} &= \sqrt{9} + (9 + 7) \times 6^{\sqrt{4+4}}. \\
468528 &:= (2 + 4 \times \sqrt{(5 + 6^8)}) \times 8 &= (8 + (8 - 6 \times 5^4)) \times 2. & 746608 &:= \sqrt{04} \times (6^6 + 7) \times 8 &= 8 \times (7 + 6^6) \times \sqrt{4} + 0. \\
468759 &:= \sqrt{4} \times 5^6 \times (7 + 8) + 9 &= (-\sqrt{9} + 8)^7 \times 6 + 5 + 4. & 746664 &:= 4 \times (4 \times 6^6 + 6 \times 7) &= (7 \times 6 + 6^6 \times 4) \times 4. \\
472398 &:= (2 + 3^{\sqrt{4+7}} \times 8) \times \sqrt{9} &= \sqrt{9} \times ((8 \times 7 - \sqrt{4})^3 + 2). & 759358 &:= (3 \times 5)^5 + 7 - 8 \times \sqrt{9} &= (-9 + (8 + 7)^5 - 5 - 3). \\
497666 &:= ((\sqrt{4} \times 6)^6 / 6 - 7 + 9) &= ((9 - 7) \times 6)^6 / 6 + \sqrt{4}. & 777924 &:= ((2 - \sqrt{47}) \times 7)^{\sqrt{\sqrt{7+9}}} &= (9 \times 7 \times (7 + 7))^{4/2}. \\
497668 &:= 4 + (6 + 6)^7 / (8 \times 9) &= (\sqrt{9} - 8 - 7)^6 / 6 + 4. & 786429 &:= ((2 \times 4)^6 + 7 - 8) \times \sqrt{9} &= -\sqrt{9} + 8^7 \times 6 / 4^2. \\
513216 &:= 11 \times (-2 + 3 + 5)^6 &= 6^{5+3-2} \times 11. & 786432 &:= 2 \times 3 \times (-\sqrt{4} + 6)^7 \times 8 &= \sqrt{\sqrt{87 - 6}} \times 4^3. \\
524286 &:= 2^{2^4-5} + 6 - 8 &= (8 - 6)^{5 \times 4} / 2 - 2. & 823545 &:= 2 + (3 + 4)^{-\sqrt{5^8+8}} &= (8 - 5/5)^{4+3} + 2. \\
524292 &:= 2 \times (2 + 2^{4+5+9}) &= ((\sqrt{9} + 5)^{4+2} + 2) \times 2. & 823767 &:= \sqrt{(2 \times 3)^6} + 7^7 + 8 &= 8 + 7^7 + \sqrt{6^3 \times 2}. \\
524328 &:= 2^{2^3-4} + 5 \times 8 &= 8 \times 5 + \sqrt{4^{-3+22}}. & 827647 &:= \sqrt{2^{4 \times 6}} + 7^7 + 8 &= 8 + 7^7 + 64^2. \\
524448 &:= (2^{4 \times 4} + 4 \times 5) \times 8 &= 8 \times (5 \times 4 + 4^{4 \times 2}). & 839664 &:= 3 \times \sqrt{4} \times (6^6 - 8) \times \sqrt{9} &= \sqrt{9} \times (-8 \times 6 + 6^{4+3}). \\
531395 &:= -1 + ((3 \times 3)^5 - 5) \times 9 &= (9^5 - 5) \times 3 \times 3 - 1. & 875336 &:= (3 + 3 + 5^6) \times 7 \times 8 &= 8 \times 7 \times (6 + 5^{3+3}). \\
531396 &:= (1 + (3 \times 3)^5 - 6) \times 9 &= 9^6 - 5 \times 3^{3-1}. & 884739 &:= 3 + (\sqrt{4} \times (7 \times 8 - 8))^{\sqrt{9}} &= \sqrt{9} + ((-8 + 8 \times 7) \times \sqrt{4})^3. \\
531435 &:= -1 + 3^{3+4+5} - 5 &= -5 + (5 + 4)^{3+3} - 1. & 885735 &:= 3^{5+5} \times (7 + \sqrt{8 \times 8}) &= \sqrt{(88 - 7)^5} \times 5 \times 3. \\
531440 &:= 0 - 1 + 3^{4 \times \sqrt{4+5}} &= \sqrt{(5 + 4)^{4 \times 3}} - 1 + 0. & 886468 &:= 4 + \sqrt{6^6} \times (8 + \sqrt{8^8}) &= (8 + \sqrt{8^8}) \times \sqrt{6^6} + 4. \\
531442 &:= (1 + 2)^{3 \times 4} - 4 + 5 &= (5 + 4)^{\sqrt{4+32}} + 1. & 912673 &:= ((12 + 3) \times 6 + 7)^{\sqrt{9}} &= 9^{7^3/2^1}. \\
531459 &:= (\sqrt{1+3} + (4 + 5)^5) \times 9 &= 9^6 - \sqrt{5+4} + 31. & 934407 &:= \sqrt{(03)^4} \times (47)^{\sqrt{9}} &= 9 \times (\sqrt{7^4} - \sqrt{4})^3 + 0. \\
531496 &:= 1 + (\sqrt{3^{4 \times 5}} + 6) \times 9 &= 9^6 + 5 \times (4 \times 3 - 1). & 943298 &:= 2 + 3 \times (-4 + 8 \times 9)^{\sqrt{9}} &= \sqrt{9} \times (9 \times 8 - 4)^3 + 2. \\
548864 &:= (4 \times \sqrt{4^5} + 6) \times \sqrt{8^8} &= \sqrt{8^8} \times (65 \times \sqrt{4} + 4). & 944496 &:= (44 + 4) \times (-6 + \sqrt{9^9}) &= (\sqrt{9^9} - 6) \times (4 + 44). \\
559862 &:= (-25 - 5 + 6^8) / \sqrt{9} &= 9 \times 8 \times 6^5 - 5 \times 2. & & & \\
559869 &:= ((5 - 5 + 6)^8 - 9) / \sqrt{9} &= -\sqrt{9} + 9 \times 8 \times \sqrt{6^3+5}. & & &
\end{aligned}$$

6.2 Selfie Representations in Increasing Order of Digits

$$\begin{aligned}
 112896 &:= 112^{-6+8} \times 9. & 147384 &:= (13 - 4) \times (4^7 - 8). & 191664 &:= \sqrt{(11 \times \sqrt{4})^6} \times 6 \times \sqrt{9}. \\
 112923 &:= (112^2 + 3) \times 9. & 147397 &:= 1 + 3 + (4^7 - 7) \times 9. & 192699 &:= (\sqrt{12^6} + \sqrt{9^9}) \times 9. \\
 114244 &:= (-11 + 24)^4 \times 4. & 147419 &:= -1 - (1 \times 4 - 4^7) \times 9. & 194672 &:= \sqrt{(-1 + 24)^6} \times (7 + 9). \\
 114352 &:= 112 \times (-3 + 4^5). & 147429 &:= (-12/4 + 4^7) \times 9. & 195112 &:= (-1 - 1 + 12 \times 5)^{\sqrt{9}}. \\
 114674 &:= (-1 - 1 + 4 \times 4^6) \times 7. & 147439 &:= -13 - 4 + 4^7 \times 9. & 196841 &:= (\sqrt{\sqrt{11^{4 \times 6}} + 8})/9. \\
 114677 &:= -11 - (\sqrt{4} - 6)^7 \times 7. & 147448 &:= \sqrt{(1 - 4)^4} \times 4^7 - 8. & 206839 &:= \sqrt{(023)^6} \times (8 + 9). \\
 114772 &:= (1 \times 12 + 4^7) \times 7. & 147449 &:= -14/\sqrt{4} + 4^7 \times 9. & 215991 &:= (1 \times 12 \times 5)^{\sqrt{9}} - 9. \\
 114921 &:= \sqrt{(1 + 112)^4} \times 9. & 147491 &:= -1 + (1 \times 4 + 4^7) \times 9. & 215996 &:= -1 + (2 \times 5 \times 6)^{\sqrt{9}} - \sqrt{9}. \\
 115472 &:= 112 \times (4^5 + 7). & 147492 &:= (\sqrt{12 + 4} + 4^7) \times 9. & 215997 &:= (1 + 2 + 57)^{\sqrt{9}} - \sqrt{9}. \\
 117128 &:= 11^{-1-2+7} \times 8. & 147493 &:= 1^3 + (4 + 4^7) \times 9. & 215998 &:= 1 + (2 + 58)^{\sqrt{9}} - \sqrt{9}. \\
 117184 &:= (11^{1 \times 4} + 7) \times 8. & 147494 &:= 1 \times \text{sqrt}4 + (4 + 4^7) \times 9. & 215999 &:= (12 \times 5)^{\sqrt{9}} - 9/9. \\
 117584 &:= (11^4 + 57) \times 8. & 147897 &:= (1 \times 4^7 + \sqrt{\sqrt{7^8}}) \times 9. & 217728 &:= 12^{-2+7} \times 7/8. \\
 117777 &:= (1 + 1)^7 + 7^7/7. & 151734 &:= 11^3 \times \sqrt{4} \times 57. & 218765 &:= -1 + 2 \times (5^6 \times 7 + 8). \\
 118459 &:= 11^{\sqrt{4+5}} \times 89. & 151959 &:= ((1 + 1)^5 + 5)^{\sqrt{9}} \times \sqrt{9}. & 223573 &:= (22^3 \times 3 - 5) \times 7. \\
 123541 &:= 11^2 \times (-3 + 4^5). & 153657 &:= (-1 + \sqrt{(3 + 5 \times 5)^6}) \times 7. & 226979 &:= -2 + (-\sqrt{-2 + 6 + 7 \times 9})^{\sqrt{9}}. \\
 124416 &:= \sqrt{(1 \times 12)^{4+4}} \times 6. & 156254 &:= 1 \times 2 \times (\sqrt{4} + 5 \times 5^6). & 228488 &:= \sqrt{(2/2 + 4 + 8)^8} \times 8. \\
 124419 &:= (1 + 12^4) \times \sqrt{4} \times \sqrt{9}. & 156816 &:= (115 + 6) \times \sqrt{6^8}. & 229373 &:= 2^{(2+3) \times 3} \times 7 - \sqrt{9}. \\
 124464 &:= (12^4 + 4 + 4) \times 6. & 156864 &:= (-1 + (\sqrt{4} + 5)^6)/6 \times 8. & 229375 &:= 2 + 2^{3 \times 5} \times 7 - \sqrt{9}. \\
 124751 &:= 11^2 \times (4^5 + 7). & 160867 &:= (0 + 1 + 66) \times \sqrt{7^8}. & 231525 &:= (-1 + 22)^3 \times 5 \times 5. \\
 124856 &:= -\sqrt{12^4} + 5^6 \times 8. & 161045 &:= \sqrt{\sqrt{(011)^{4 \times 5}} - 6}. & 234178 &:= (-1 + 23)^4 - 78. \\
 124925 &:= 122 \times 4^5 - \sqrt{9}. & 161051 &:= (011)^{-1^5+6}. & 234222 &:= 22^{2 \times 2} - 34. \\
 124928 &:= 122 \times \sqrt{4} \times 8^{\sqrt{9}}. & 161587 &:= 11^5 + 67 \times 8. & 234248 &:= (22 \times (-3 + 4))^4 - 8. \\
 124997 &:= (1 + 2 + 47)^{\sqrt{9}} - \sqrt{9}. & 165886 &:= -\sqrt{-1 + 5} + \sqrt{(6 + 6)^8} \times 8. & 234251 &:= (1 - 2 + 23)^4 - 5. \\
 124998 &:= 1 + (2 + 48)^{\sqrt{9}} - \sqrt{9}. & 171875 &:= 11 \times 5^{7+7-8}. & 234262 &:= (22/(-2 + 3))^4 + 6. \\
 124999 &:= -1 + (-2 + 49 + \sqrt{9})^{\sqrt{9}}. & 172836 &:= 12 \times (-3 + 6 \times \sqrt{7^8}). & 234357 &:= -2 \times 3 + 3 \times (-4 + 5^7). \\
 125294 &:= 122 \times (4^5 + \sqrt{9}). & 172869 &:= 12 \times 6 \times \sqrt{7^8} - \sqrt{9}. & 234373 &:= -2 + 3 \times (3 \times 3 - 4)^7. \\
 125648 &:= ((1 + 2)^4 + 5^6) \times 8. & 172889 &:= -1 + (2 + \sqrt{7^8} \times 8) \times 9. & 234377 &:= 2 + 3 \times (3 \times 4 - 7)^7. \\
 125943 &:= 123 \times 4^5 - 9. & 173664 &:= 134 \times \sqrt{6 \times 6^7}. & 234579 &:= (2 \times 34 + 5^7) \times \sqrt{9}. \\
 131769 &:= \sqrt{11^{\text{sqrt}1-3+6^7}} \times 9. & 175692 &:= 12 \times (5 + 6)^{\sqrt{7+9}}. & 234759 &:= (2^{3+4} + 5^7) \times \sqrt{9}. \\
 133848 &:= \sqrt{(13 \times 3)^4} \times 88. & 176457 &:= (1 + 4 + 5)^6 - 7^7. & 234989 &:= (-2 + (3^4 + 8)^{\sqrt{9}})/\sqrt{9}. \\
 134456 &:= (1 \times 3 + 4)^4 \times 56. & 182476 &:= (12 + \sqrt{4^6}) \times \sqrt{7^8}. & 235364 &:= 2 \times (33 + (\sqrt{4} + 5)^6). \\
 136857 &:= (1^3 + 56) \times \sqrt{7^8}. & 185191 &:= -1 - 1 + (-1 + 58)^{\sqrt{9}}. & 236193 &:= 12 \times 3^{3+6} - \sqrt{9}. \\
 137719 &:= 1 + (-1 + 3^7) \times 7 \times 9. & 185192 &:= -1 + (1 - 2 + 58)^{\sqrt{9}}. & 236195 &:= -1 + (2 \times 3^5)^{6/\sqrt{9}}. \\
 137774 &:= (-1 + 3^{\sqrt{4+7^7}}) \times 7. & 185193 &:= (1^3 + 58)^{\sqrt{9}}. & 237998 &:= 2 + (3 + \sqrt{7^8}) \times 99. \\
 138958 &:= (-1 + 35) \times (\sqrt{8^8} - 9). & 185194 &:= 1 + (-1^4 + 58)^{\sqrt{9}}. & 238326 &:= -2 + \sqrt{(-2 + 33)^6} \times 8. \\
 139959 &:= (1 + 35)^{\sqrt{9}} \times \sqrt{9} - 9. & 186569 &:= 1 - 56 + 6^8/9. & 238464 &:= 23 \times 4 \times \sqrt{4 \times 6^8}. \\
 139971 &:= (1 + (-1 + 37)^{\sqrt{9}}) \times \sqrt{9}. & 186592 &:= -1 \times 2^5 + 6^8/9. & 242998 &:= -2 + (-2 + 4 \times 8)^{\sqrt{9}} \times 9. \\
 139995 &:= ((1 + 35)^{\sqrt{9}} + 9) \times \sqrt{9}. & 186619 &:= -11 + 6 + 6^8/9. & 245856 &:= (2 + 4^5 \times 5) \times 6 \times 8. \\
 140625 &:= \sqrt{(01 + 2)^4} \times 5^6. & 186643 &:= -13 + 4 \times (6^6 + 8). & 248754 &:= (2 \times 4 + 4)^5 - 78. \\
 143648 &:= 134^{-4+6} \times 8. & 186669 &:= (-1 + 6 + \sqrt{(6 + 6)^8}) \times 9. & 248835 &:= 2 + (3 \times 4)^5 + 8/8. \\
 145117 &:= ((1 + 11)^4 - 5) \times 7. & 186673 &:= (1 + 3) \times 6^6 + \sqrt{\sqrt{7^8}}. & 248897 &:= \sqrt{(\sqrt{2^4} + 7)^8} \times (8 + 9). \\
 146410 &:= (0 + 11)^4 \times (4 + 6). & 186674 &:= 1 + 4 \times 6^6 + \sqrt{\sqrt{7^8}}. & 249175 &:= \sqrt{12^{4 \times 5}} + 7^{\sqrt{9}}. \\
 146411 &:= 1 + 11^4 \times (4 + 6). & 186696 &:= \sqrt{16} \times 6^6 + 8 \times 9. & 249657 &:= 2^4 \times 5^6 - 7^{\sqrt{9}}. \\
 146655 &:= -1 + (\sqrt{4} \times 5)^5 + 6^6. & 188417 &:= 1 + (-1 + 47) \times \sqrt{8^8}. & 249856 &:= 2^4 \times (5\sqrt{\sqrt{6^8}} - 9). \\
 147249 &:= (1 - 24 + 4^7) \times 9. & 188784 &:= (-1 + 47) \times (\sqrt{8^8} + 8). & 249957 &:= -2 \times 45 + (7 \times 9)^{\sqrt{9}}. \\
 147349 &:= 1 + (-3 \times 4 + 4^7) \times 9. & & & 249982 &:= 2 \times (2 + 48)^{\sqrt{9}} - 9. \\
 147383 &:= -1 + 3 \times 3 \times (4^7 - 8). & & & 249997 &:= 2 \times (47 + \sqrt{9})^{\sqrt{9}} - \sqrt{9}. \\
 & & & & 251957 &:= 12^5 + \sqrt{5^{7+\sqrt{9}}}.
 \end{aligned}$$

$$\begin{aligned}
255994 &:= 2 \times (4^5 \times (5^{\sqrt{9}}) - \sqrt{9}). \\
259584 &:= (2^{4+5} - 5) \times 8^{\sqrt{9}}. \\
262123 &:= 1 - 22 + 2^{3 \times 6}. \\
262131 &:= -11 - 2 + 2^{3 \times 6}. \\
262132 &:= -12 + (2 + 2 \times 3)^6. \\
262136 &:= -1 \times 2 + 2^{3 \times 6} - 6. \\
262137 &:= (12 \times 2/3)^6 - 7. \\
262139 &:= -1 \times 2 + 2^{3 \times 6} - \sqrt{9}. \\
262141 &:= -\sqrt{11-2} + (2 \times 4)^6. \\
262142 &:= -1 \times 2 + 2^{24-6}. \\
262145 &:= 1 + 2^{(2-4+5) \times 6}. \\
262146 &:= 1 \times 2 + (-2 + 4 + 6)^6. \\
262149 &:= 1 \times 2 + (-2 \times 4)^6 + \sqrt{9}. \\
262153 &:= (1 + 2)^2 + (3 + 5)^6. \\
263538 &:= 2 \times 3 \times 3 \times \sqrt{(5 + 6)^8}. \\
264386 &:= 2 + 34 \times 6 \times \sqrt{6^8}. \\
265625 &:= (22 - 5) \times \sqrt{5^{6+5}}. \\
269586 &:= (2 \times 5^6 - \sqrt{6^8}) \times 9. \\
273383 &:= (2 + 3)^3 \times 3^7 + 8. \\
273456 &:= -(2 \times 3)^4 \times 5 + 6^7. \\
274629 &:= 2 \times 2 + (-\sqrt{4} + 67)^{\sqrt{9}}. \\
274649 &:= 24 + (-\sqrt{4} + 67)^{\sqrt{9}}. \\
275562 &:= 2 \times \sqrt{(2 + 5 \times 5)^6} \times 7. \\
276561 &:= -\sqrt{((1 + 2) \times 5)^6} + 6^7. \\
276563 &:= 2 - \sqrt{(3 \times 5)^6} + 6^7. \\
278492 &:= -2 + (-2 + 4^7) \times (8 + 9). \\
278494 &:= (2 - 4 + 4^7) \times (8 + 9). \\
279463 &:= 23^4 - 6 \times 7 \times 9. \\
279697 &:= -2 + 6^7 - 79 \times \sqrt{9}. \\
279834 &:= 23^4 + 7 \times (8 - 9). \\
279838 &:= (2 + 3 \times 7)^{\sqrt{8+8}} - \sqrt{9}. \\
279841 &:= (-1 + 24)\sqrt{(\sqrt{\sqrt{7^8+9}})}. \\
279843 &:= 23^4 + 7 - 8 + \sqrt{9}. \\
279846 &:= -\sqrt{2/\sqrt{4}} + 6^7 - 89. \\
279847 &:= (2 + 4)^{\sqrt{7 \times 7}} - 89. \\
279861 &:= -1 - 2 + 6^7 - 8 \times 9. \\
279862 &:= -\sqrt{2^2} + 6^7 - 8 \times 9. \\
279863 &:= 2 - 3 + 6^7 - 8 \times 9. \\
279864 &:= \sqrt{((2 + 4) \times 6)^7} - 8 \times 9. \\
279866 &:= 2 + \sqrt{(6 \times 6)^7} - 8 \times 9. \\
279869 &:= 2 + 6^7 - 8 \times 9 + \sqrt{9}. \\
279873 &:= (2 \times 3)^7 - \sqrt{\sqrt{7^8}} \times 9. \\
279876 &:= -2 + 6^7 - \sqrt{\sqrt{7^8}} - 9. \\
279886 &:= -2 + 6^7 - (8 + 8) \times \sqrt{9}. \\
279916 &:= -1 \times 2 + 6^7 - 9 - 9. \\
279938 &:= (2 \times 3)^7 + 8 - 9 + \sqrt{9}. \\
279948 &:= (2 + 4)^7 + \sqrt{8 \times (9 + 9)}. \\
279961 &:= -1 \times 2 + 6^7 + \sqrt{9} \times 9. \\
279962 &:= -\sqrt{2/2} + 6^7 + \sqrt{9} \times 9. \\
279963 &:= (2 \times (-3 + 6))^7 + \sqrt{9} \times 9. \\
279964 &:= 2^4 + 6^7 + 9 + \sqrt{9}. \\
279965 &:= 2^5 + 6^7 - \sqrt{\sqrt{9 \times 9}}. \\
279976 &:= -2 + 6^7 + 7 \times (-\sqrt{9} + 9). \\
279984 &:= (2 + 4)^7 - 8 \times (\sqrt{9} - 9). \\
279986 &:= 2 + 6^7 - 8 \times (\sqrt{9} - 9). \\
282123 &:= (-1 + 22 \times 2) \times 3^8. \\
285768 &:= (-2 + 5)^6 \times \sqrt{\sqrt{7^8}} \times 8. \\
287496 &:= (24 \times 6 - 78)^{\sqrt{9}}. \\
287498 &:= 2 + (-4 + 78 - 8)^{\sqrt{9}}. \\
294768 &:= 2 \times ((-\sqrt{4} + 6)^7 - 8) \times 9. \\
294888 &:= -24 + \sqrt{8^8} \times 8 \times 9. \\
294892 &:= -2 + (-2 + (4 \times 8)^{\sqrt{9}}) \times 9. \\
294912 &:= (1 \times 2)^{24-9} \times 9. \\
294913 &:= 1 + (-2 + 34)^{\sqrt{9}} \times 9. \\
294915 &:= (12 - 4)^5 \times 9 + \sqrt{9}. \\
294917 &:= -1 + 2 \times (4^7 \times 9 + \sqrt{9}). \\
294921 &:= 1 + 2^{24-9} \times 9. \\
294927 &:= (2 + 2 \times 4^7) \times 9 - \sqrt{9}. \\
294928 &:= -2 + (2 + (4 \times 8)^{\sqrt{9}}) \times 9. \\
294935 &:= 23 + \sqrt{4^{5 \times \sqrt{9}}} \times 9. \\
294936 &:= 2^3 \times (4^6 \times 9 + \sqrt{9}). \\
294939 &:= ((-2 + 34)^{\sqrt{9}} + \sqrt{9}) \times 9. \\
294946 &:= -2 + (4 + \sqrt{4^{6+9}}) \times 9. \\
294974 &:= 2 \times (4 + (4^7 + \sqrt{9}) \times 9). \\
294975 &:= ((2 \times 4)^5 + 7) \times \sqrt{9 \times 9}. \\
294987 &:= (2 \times 4^7 + 8) \times 9 + \sqrt{9}. \\
294993 &:= ((-2 + 34)^{\sqrt{9}} + 9) \times 9. \\
294995 &:= 2 + (\sqrt{4^{5 \times \sqrt{9}}} + 9) \times 9. \\
295335 &:= (2 + 3^{3+5}) \times 5 \times 9. \\
295463 &:= 23^4 + 5^6 - \sqrt{9}. \\
295479 &:= ((2 \times 4)^5 + 7 \times 9) \times 9. \\
295488 &:= ((2 \times 4)^5 + 8 \times 8) \times 9. \\
296347 &:= -2 - 3 + 4 \times (6 \times 7)^{\sqrt{9}}. \\
296595 &:= \sqrt{25} \times (5 \times 6 + 9)^{\sqrt{9}}. \\
296597 &:= 2 + 5 \times (6 \times 7 - \sqrt{9})^{\sqrt{9}}. \\
299617 &:= -1 \times 2 + 6^7 + \sqrt{9^9}. \\
316368 &:= 13^3 \times \sqrt{\sqrt{(6 + 6)^8}}. \\
319488 &:= 13 \times 48 \times 8^{\sqrt{9}}. \\
326376 &:= -(2 \times 3)^3 + 6^6 \times 7. \\
328509 &:= ((0 + 23) \times (-5 + 8))^{\sqrt{9}}. \\
342997 &:= (23 + 47)^{\sqrt{9}} - \sqrt{9}. \\
343476 &:= (3 + 3^4) \times (4^6 - 7). \\
347733 &:= 3^{3+3} \times 477. \\
349525 &:= (2 - 3 + 4^{5+5})/\sqrt{9}. \\
349528 &:= ((2^3 \times \sqrt{4})^5 + 8)/\sqrt{9}. \\
349875 &:= -3 \times (4^5 - \sqrt{\sqrt{7^8}}^{\sqrt{9}}). \\
352843 &:= 23^3 \times (4 + \sqrt{\sqrt{5^8}}). \\
352946 &:= 2 - 3 + (\sqrt{4} + 5)^6 \times \sqrt{9}. \\
354699 &:= 3^4 \times (5 + 6 \times 9^{\sqrt{9}}). \\
357911 &:= (1 + 13 + 57)^{\sqrt{9}}. \\
357926 &:= 23 \times (5^6 - 7 \times 9). \\
359286 &:= 23 \times 5^6 - 89. \\
359628 &:= 23 \times (5^6 + 8 + \sqrt{9}). \\
367389 &:= (-3 + 3^6 \times 7 \times 8) \times 9. \\
369754 &:= (3 + 4)^5 \times (6 + 7 + 9). \\
374994 &:= 3 \times (-\sqrt{4} + (47 + \sqrt{9})^{\sqrt{9}}). \\
375168 &:= 1 \times 3 \times (5^6 + 7) \times 8. \\
376824 &:= 23 \times (-\sqrt{4} + 6)^7 - 8. \\
389286 &:= 2 \times \sqrt{3^{6+8}} \times 89. \\
389893 &:= -3 + (3 - 8)^8 - 9^{\sqrt{9}}. \\
389896 &:= (3 - 6 + 8)^8 - 9^{\sqrt{9}}. \\
390583 &:= -033 + 5^8 - 9. \\
390598 &:= 0 \times 3 + 5^8 - \sqrt{9} \times 9. \\
390625 &:= (02 + 3)^{\sqrt{-5+69}}. \\
390628 &:= (-02 + 3 - 6)^8 + \sqrt{9}. \\
413357 &:= (\sqrt{1+3} + \sqrt{3^{4 \times 5}}) \times 7. \\
419869 &:= 1 + (-4 + \sqrt{\sqrt{6^8 \times \sqrt{9}}}) \times 9. \\
419886 &:= 1 \times \sqrt{4} \times (6^8/8 - 9). \\
419895 &:= (-1 - (4 - 5 \times 8)^{\sqrt{9}}) \times 9. \\
419949 &:= (1 + 4 + (4 \times 9)^{\sqrt{9}}) \times 9. \\
434328 &:= (233^{\sqrt{4}} + \sqrt{4}) \times 8. \\
437465 &:= (-3 - \sqrt{4} + 4 \times 5^6) \times 7. \\
437516 &:= (1 + 3) \times (4 + 5^6 \times 7). \\
437563 &:= (3 \times 3 + 4 \times 5^6) \times 7. \\
437665 &:= -3 + 4 \times (5^6 + 6) \times 7. \\
437675 &:= (-3 + 4 \times (5^6 + 7)) \times 7. \\
438973 &:= -\sqrt{3 \times 3} + (-\sqrt{4} + 78)^{\sqrt{9}}. \\
446148 &:= (-1 + 4)^{4+4} \times 68. \\
452939 &:= 23 \times (\sqrt{4} \times 5 + \sqrt{9^9}). \\
453317 &:= 1 + 3^{3 \times 4} - 5^7. \\
453965 &:= 3 + \sqrt{4} \times (5 + 56)^{\sqrt{9}}. \\
454896 &:= (44 - 5) \times \sqrt{6^8} \times 9. \\
457143 &:= (1 + (3 + \sqrt{4}) \times 4)^5/7. \\
458748 &:= -4 + 4^5 \times 7 \times 8 \times 8. \\
458752 &:= \sqrt{2 \times \sqrt{4^{5 \times 5}}} \times 7 \times 8. \\
458784 &:= (4 + 4^5 \times 7 \times 8) \times 8. \\
458966 &:= (-\sqrt{4} + \sqrt{(5 \times 6)^6}) \times (8 + 9). \\
468522 &:= (22^4 + 5) \times (-6 + 8). \\
468758 &:= \sqrt{4} \times 5^6 \times (7 + 8) + 8. \\
470596 &:= (0 + 4) \times (56 - 7)^{\sqrt{9}}. \\
472336 &:= 2^3 \times (3^{4+6} - 7). \\
474298 &:= 2 - 4^4 + 78^{\sqrt{9}}. \\
479466 &:= (\sqrt{4} + 4^6) \times (6 + 7) \times 9. \\
492975 &:= -2 \times \sqrt{4^5} + 79^{\sqrt{9}}.
\end{aligned}$$

$$\begin{aligned}
497662 &:= -2 + \sqrt{4^6} \times \sqrt{6^{7+\sqrt{9}}}. \\
499125 &:= (1+2) \times (-4+59)^{\sqrt{9}}. \\
499964 &:= 4 \times ((-4+6 \times 9)^{\sqrt{9}} - 9). \\
511999 &:= -1 + (-1^5 + 9 \times 9)^{\sqrt{9}}. \\
515625 &:= (1+2^5) \times \sqrt{(5 \times 5)^6}. \\
517968 &:= \sqrt{(1+5)^6} \times (\sqrt{7^8} - \sqrt{9}). \\
518617 &:= 1 + \sqrt{(1+5)^6} \times \sqrt{7^8}. \\
524243 &:= 2^{23-4} - 45. \\
524274 &:= \sqrt{2^2} \times (4^{4+5} - 7). \\
524279 &:= 2^{-2+\sqrt{4+5 \times 7}} - 9. \\
524290 &:= 0 + 2 + 2^{\sqrt{4 \times 5+9}}. \\
524291 &:= 1 \times 2^{24-5} + \sqrt{9}. \\
524294 &:= \sqrt{2^2} \times (4^{4+5} + \sqrt{9}). \\
524297 &:= 2^{-2+\sqrt{4+5 \times 7}} + 9. \\
524299 &:= 2 + 2^{\sqrt{4 \times 5+9}} + 9. \\
524488 &:= (2^{4 \times 4} + \sqrt{5^8}) \times 8. \\
524974 &:= 2 \times (4^{4+5} + 7^{\sqrt{9}}). \\
528632 &:= (-2 + (2 \times 3)^5) \times 68. \\
531379 &:= 1 + ((3 \times 3)^5 - 7) \times 9. \\
531384 &:= 1 + 3^{3 \times 4} - 58. \\
531426 &:= -12 - 3 + (4+5)^6. \\
531428 &:= (1+2)^{3 \times 4} - 5 - 8. \\
531429 &:= -12 + 3^{\sqrt{4+5+9}}. \\
531433 &:= -13 + 3^{3 \times 4} + 5. \\
531434 &:= 1 \times 3^{3 \times 4} - \sqrt{4} - 5. \\
531437 &:= -1 - 3 + \sqrt{\sqrt{3^{4 \times (5+7)}}}. \\
531495 &:= (1 + \sqrt{3^{4 \times 5}} + 5) \times 9. \\
533847 &:= (3^{3 \times 4} + 5) + \sqrt{7^8}. \\
534375 &:= 3 \times (3 + \sqrt{4})^5 \times 57. \\
534573 &:= 3^{3 \times 4} + 5^5 + 7. \\
537789 &:= -35 + (7+7)^{8-\sqrt{9}}. \\
546656 &:= \sqrt{4^5} \times 5^6 + 6^6. \\
546879 &:= 4 + 5^6 \times 7 \times (8 - \sqrt{9}). \\
547337 &:= (33 \times \sqrt{4} + 5^7) \times 7. \\
547575 &:= (4 \times 5 \times 5 + 5^7) \times 7. \\
549258 &:= 2 \times (4 + (5 \times (5+8))^{\sqrt{9}}). \\
559816 &:= -1 - 55 + 6^8/\sqrt{9}. \\
559861 &:= -1 - 5 - 5 + 6^8/\sqrt{9}. \\
559864 &:= \sqrt{4} - 5 - 5 + 6^8/\sqrt{9}. \\
559866 &:= 5 - 5 - 6 + 6^8/\sqrt{9}. \\
559867 &:= -5 + (5 - 6 + 7)^8/\sqrt{9}. \\
559868 &:= -5 + (-5 + 6^8 + 8)/\sqrt{9}. \\
559871 &:= -1 + (-5/5 + 7)^8/\sqrt{9}. \\
559872 &:= (-2 + 5) \times \sqrt{(5+7)^8} \times 9. \\
559873 &:= (3 + (-5/5 + 7)^8)/\sqrt{9}. \\
559874 &:= \sqrt{4} + (-5/5 + 7)^8/\sqrt{9}. \\
559877 &:= 5 + (5 + 7/7)^8/\sqrt{9}. \\
559896 &:= 5 \times 5 + (6^8 - \sqrt{9})/\sqrt{9}. \\
562392 &:= (2+2) \times (-3+5^6) \times 9. \\
562491 &:= (1-2+4 \times 5^6) \times 9. \\
562492 &:= (2+2) \times (-\sqrt{4} + 5^6 \times 9). \\
562494 &:= -2 - 4 + 4 \times 5^6 \times 9. \\
562496 &:= 2 \times (-\sqrt{4} + 5^6 \times 6 \times \sqrt{9}). \\
562498 &:= -2 + 4 \times 5^{\sqrt{\sqrt{6^8}}} \times 9. \\
562499 &:= 2 + 4 \times 5^6 \times 9 - \sqrt{9}. \\
562644 &:= (2+4) \times (4+5^6) \times 6. \\
562646 &:= 2 + (4+5^6) \times 6 \times 6. \\
566937 &:= (-3 + \sqrt{(5 \times 6)^6}) \times 7 \times \sqrt{9}. \\
566973 &:= 3 \times (\sqrt{(5 \times 6)^6} \times 7 - 9). \\
566997 &:= \sqrt{(5 \times 6)^6} \times 7 \times \sqrt{9} - \sqrt{9}. \\
567378 &:= (-3^5 + 6) \times (7 - \sqrt{7^8}). \\
574991 &:= -1 + \sqrt{4} \times (57+9)^{\sqrt{9}}. \\
574994 &:= \sqrt{4} + \sqrt{4} \times (57+9)^{\sqrt{9}}. \\
575991 &:= (-1 + (5+5 \times 7)^{\sqrt{9}}) \times 9. \\
575995 &:= (-5 + (5+5 \times 7)^{\sqrt{9}}) \times 9. \\
583443 &:= (3 \times (3+4))^4 \times (-5+8). \\
583759 &:= (3 \times 5)^5 - (7 \times 8)^{\sqrt{9}}. \\
585387 &:= \sqrt{3^{5+5}} \times (\sqrt{7^8} + 8). \\
587965 &:= -5 \times (56 - (\sqrt{\sqrt{7^8}})^{\sqrt{9}}). \\
588237 &:= (2+3^5) \times \sqrt{7^8} - 8. \\
589797 &:= ((5-7/7)^8 - \sqrt{9}) \times 9. \\
591948 &:= 14 \times 58 \times 9^{\sqrt{9}}. \\
595276 &:= 2 \times (-5^5 + 67^{\sqrt{9}}). \\
596288 &:= (2+5) \times (\sqrt{\sqrt{6^8}} + 8)^{\sqrt{9}}. \\
599386 &:= (-3 + \sqrt{5^6}) \times (8+9)^{\sqrt{9}}. \\
614644 &:= (14 \times \sqrt{4})^4 - 6 - 6. \\
627264 &:= \sqrt{22^4} \times \sqrt{6 \times 6^7}. \\
628342 &:= 22 \times \sqrt{(3+4+6)^8}. \\
629784 &:= 2 \times (-4 + 6^7/8) \times 9. \\
629838 &:= (-2 \times 3 + 6^8/8) \times \sqrt{9}. \\
629847 &:= 2 \times (-4 + 6^7)/8 \times 9. \\
629874 &:= (2 + \sqrt{4} \times 6^7/8) \times 9. \\
629889 &:= (2 + 6^8/8 + 9) \times \sqrt{9}. \\
649728 &:= \sqrt{24^6} \times (7 \times 8 - 9). \\
655473 &:= 3 \times (\sqrt{4} + 5)^5 \times (6+7). \\
655935 &:= 35 \times (5^5 \times 6 - 9). \\
656244 &:= (-2 + 44) \times 5^6 - 6. \\
656271 &:= (1 + 2 + 5^6 \times 6) \times 7. \\
656373 &:= -3 + (3 + 5^6) \times 6 \times 7. \\
656376 &:= (-3 + 5^6 + 6) \times 6 \times 7. \\
656379 &:= (3 + 5^6) \times 6 \times 7 + \sqrt{9}. \\
656417 &:= -1 + (4 + 5^6) \times 6 \times 7. \\
656979 &:= 5^6 \times 6 \times 7 + 9^{\sqrt{9}}. \\
658485 &:= 45 \times (\sqrt{(5+6)^8} - 8). \\
658845 &:= 45 \times (5+6)^{\sqrt{8+8}}. \\
658944 &:= \sqrt{4^{4+5}} \times (\sqrt{6^8} - 9). \\
659664 &:= (4^5 - 6) \times \sqrt{6^6 \times 9}. \\
663543 &:= 3 \times (-3 + 4^5 \times \sqrt{6^6}). \\
667648 &:= 4^6 \times (-6 + \sqrt{\sqrt{(6+7)^8}}). \\
684288 &:= (2+4) \times \sqrt{6^8} \times 88. \\
685994 &:= \sqrt{4} \times ((5 \times (6+8))^{\sqrt{9}} - \sqrt{9}). \\
687544 &:= 44 \times (5^6 - 7 + 8). \\
689395 &:= 35 \times (6+8 + \sqrt{9^9}). \\
699855 &:= (5 + 5 \times \sqrt{\sqrt{6^8}})^{\sqrt{9}} \times \sqrt{9}. \\
703125 &:= (0 + 12 - 3) \times 5^7. \\
704969 &:= (0 + 4 + 6 + 79)^{\sqrt{9}}. \\
728998 &:= -2 + (-7 + 88 + 9)^{\sqrt{9}}. \\
734824 &:= (2 \times \sqrt{3^4})^4 \times 7 - 8. \\
734832 &:= (-2 \times 3 \times 3)^4 \times \sqrt{\sqrt{7^8}}. \\
746492 &:= 2 \times (-\sqrt{4} + 4 \times 6^7/\sqrt{9}). \\
751599 &:= ((-1+5)^5 + 7) \times 9^{\sqrt{9}}. \\
759312 &:= (12+3)^5 - 7 \times 9. \\
759352 &:= -2 + (3 \times 5)^5 - 7 \times \sqrt{9}. \\
759354 &:= (3^4 \times 5^5 - 7) \times \sqrt{9}. \\
759355 &:= (3 \times 5)^5 - 5 \times \sqrt{7+9}. \\
759359 &:= (3 \times 5)^5 - 7 - \sqrt{9 \times 9}. \\
759365 &:= (3 \times 5)^5 + 6 - 7 - 9. \\
759366 &:= (3 \times 5)^{6+6-7} - 9. \\
759375 &:= (3 \times 5)^{\sqrt{57+7}-\sqrt{9}}. \\
759385 &:= (3 \times 5)^5 - 7 + 8 + 9. \\
759395 &:= (3 \times 5)^5 - 7 + \sqrt{9} \times 9. \\
759519 &:= 15^5 + (7+9) \times 9. \\
765427 &:= -2 + (-4 + 5^6) \times 7 \times 7. \\
765478 &:= (4 + 5^6 - 7) \times \sqrt{\sqrt{7^8}}. \\
765527 &:= (-2 + \sqrt{(5 \times 5)^6}) \times 7 \times 7. \\
765576 &:= (5 + 5^6 - 6) \times 7 \times 7. \\
765625 &:= (2+5) \times \sqrt{5^{6+6}} \times 7. \\
765627 &:= 2 + 5^6 \times (6 \times 7 + 7). \\
765772 &:= ((2+5^6) \times 7 + 7) \times 7. \\
765977 &:= (5^6 + 7) \times 7 \times 7 + 9. \\
781243 &:= -1 + 2 \times (-3 + (\sqrt{4} - 7)^8). \\
796875 &:= 5^6 \times ((-7 + \sqrt{\sqrt{7^8}}) + 9). \\
815775 &:= -(1+5)^5 + 7^7 + 8. \\
823574 &:= 23 + (\sqrt{4} + 5)^7 + 8. \\
824577 &:= 2 + 4^5 + 7^7 + 8. \\
830746 &:= 0346 \times \sqrt{7^8}. \\
839523 &:= 23\sqrt{\sqrt{(3-5)^8}} \times \sqrt{9}. \\
839676 &:= (-36 + 6^7 - 8) \times \sqrt{9}. \\
839736 &:= 3 \times \sqrt{36^7} - 8 \times 9. \\
839766 &:= (-\sqrt{36} + 6^7 - 8) \times \sqrt{9}. \\
839768 &:= 3 \times 6^7 + 8 \times (-8 + \sqrt{9}). \\
839776 &:= 3 \times (6^7 - 7) - 8 - \sqrt{9}. \\
839784 &:= ((3 \times \sqrt{4})^7 - \sqrt{8 \times 8}) \times \sqrt{9}.
\end{aligned}$$

$$\begin{aligned}
839793 &:= ((3+3)^7 - 8) \times \sqrt{9} + 9. & 899973 &:= ((3+7)^{8-\sqrt{9}} - \sqrt{9}) \times 9. & 943294 &:= -2 + (34 \times \sqrt{4})^{\sqrt{9}} \times \sqrt{9}. \\
839796 &:= 3 \times (6^7 + 8 - 9) - 9. & 917487 &:= ((-1 + 4^7 \times 7) \times 8 - 9). & 943296 &:= (2 \times 34)^{-6+9} \times \sqrt{9}. \\
852357 &:= 2 + 355 \times \sqrt{7^8}. & 923521 &:= (1 - 2^{2+3})^{-5+9}. & 943299 &:= (2 \times 34)^{\sqrt{9}} \times \sqrt{9} + \sqrt{9}. \\
859287 &:= (\sqrt{25^7} - 8) \times (8 + \sqrt{9}). & 923523 &:= 2 + (-2 + 33)^{-5+9}. & 946177 &:= 1 + 4^6 \times 77 \times \sqrt{9}. \\
859371 &:= -1 - 3 + 5^7 \times (8 + \sqrt{9}). & 925967 &:= 2 + 5 \times (-6 + 7 \times 9)^{\sqrt{9}}. & 959985 &:= 5 \times ((5 \times 8)^{\sqrt{9}} \times \sqrt{9} - \sqrt{9}). \\
859374 &:= 3 - 4 + 5^7 \times (8 + \sqrt{9}). & 928557 &:= (2 + 5) \times (-5 + 7 \times 8)^{\sqrt{9}}. & 963144 &:= 13 \times (-4 + 46)^{\sqrt{9}}. \\
859378 &:= 3 + 5^7 \times (\sqrt{\sqrt{8+8}} + 9). & 937485 &:= (3 + 4 \times 5^7 - 8) \times \sqrt{9}. & 979767 &:= 6^7 \times 7 / \sqrt{\sqrt{7+9}} - 9. \\
868352 &:= (2 + 35 \times 6) \times \sqrt{8^8}. & 937495 &:= (-3 - \sqrt{4}) + 5^7 \times (\sqrt{9} + 9). & 979776 &:= 6^7 \times 7 / \sqrt{\sqrt{7+9} \times 9}. \\
868624 &:= (2 \times 466)^{\sqrt{\sqrt{8+8}}}. & 937497 &:= -3 - (\sqrt{4} - 7)^7 \times (\sqrt{9} + 9). & 984149 &:= -1 + (\sqrt{4} + 48) \times \sqrt{9^9}. \\
874576 &:= (-4 + (5^6 - 7) \times 7) \times 8. & 937524 &:= (2^3 + 4 \times 5^7) \times \sqrt{9}. & 995326 &:= -2 + ((3 + 5) \times 6)^{\sqrt{9}} \times 9. \\
874965 &:= (-4 + 5^6 \times 7) \times 8 - \sqrt{9}. & 937539 &:= 3 + (3 + 5^7) \times (\sqrt{9} + 9). & 995626 &:= (2 \times 5)^6 - 6 \times 9^{\sqrt{9}}. \\
875256 &:= (2^5 + 5^6 \times 7) \times 8. & 941191 &:= -1 + ((1 + 1) \times 49)^{\sqrt{9}}. & 996625 &:= (2 \times 5)^6 - (6 + 9)^{\sqrt{9}}. \\
877952 &:= 2 \times (5 - 7 + 78)^{\sqrt{9}}. & 941192 &:= ((1 - 1 + 2) \times 49)^{\sqrt{9}}. & 999919 &:= (1 + 99)^{\sqrt{9}} - 9 \times 9. \\
884928 &:= 24 \times (8 + \sqrt{8^8} \times 9). & 941193 &:= 1 + ((-1 + 3) \times 49)^{\sqrt{9}}. & 999982 &:= (2 + 8)^{9-\sqrt{9}} - 9 - 9. \\
885743 &:= \sqrt{3^{4 \times 5}} \times (7 + 8) + 8. & 941194 &:= 1 + 1 + (\sqrt{4} \times 49)^{\sqrt{9}}. & 999991 &:= (19 + 9 \times 9)^{\sqrt{9}} - 9. \\
889288 &:= (\sqrt{(2+8)^8} - 8) \times 89. & 941869 &:= 1 + (-4 + \sqrt{6^8}) \times 9^{\sqrt{9}}. & 999997 &:= (7 + \sqrt{9})^{(9+9)/\sqrt{9}} - \sqrt{9}. \\
943286 &:= 2 + 3 \times (-4 + 68^{\sqrt{9}}). & & & &
\end{aligned}$$

6.3 Selfie Representations in Decreasing Order of Digits

$$\begin{aligned}
104858 &:= ((8+8)^5 + 4)/10. & 117633 &:= 7^6 - 3^3 + 11. & 127893 &:= \sqrt{9} \times (8 \times 73^2 - 1). \\
104944 &:= (9 \times \sqrt{4})^4 - \sqrt{\sqrt{4^{10}}}. & 117634 &:= 7^6 - 4^{3-1} + 1. & 129024 &:= \sqrt{9} \times 42 \times 2^{10}. \\
104963 &:= (\sqrt{9} \times 6)^4 - 3 - 10. & 117635 &:= 7^6 - 5 \times 3 + 1 \times 1. & 129598 &:= -\sqrt{9} + (9 \times 8 \times 5)^2 + 1. \\
104964 &:= (\sqrt{9} \times 6)^4 - \sqrt{4} - 10. & 117636 &:= 7^6 - 6/3 - 11. & 129599 &:= ((9 \times 9 - 9) \times 5)^2 - 1. \\
104966 &:= ((9 - 6) \times 6)^4 - 10. & 117637 &:= -7 + 7^6 - 3 - 1 - 1. & 131264 &:= 64 \times (3 + 2^{11}). \\
104969 &:= \sqrt{9} + (\sqrt{9} \times 6)^4 - 10. & 117638 &:= -8 + 7^6 - 3 + 1 - 1. & 132645 &:= -6 + (54 - 3)^{2+1}. \\
104975 &:= (9 \times (7 - 5))^4 - 1^0. & 117639 &:= -9 + 7^6 - 3 + 1 + 1. & 134457 &:= 7^5 \times (-4 + 4 \times 3) + 1. \\
104986 &:= (9 \times (8 - 6))^4 + 10. & 117640 &:= 7\sqrt{\sqrt{6^4}} + 1 - 10. & 134847 &:= \sqrt{(8 \times 7)^4} \times 43 - 1. \\
105625 &:= (65 \times 5)^{2 \times 1 + 0}. & 117644 &:= 7^6 + \sqrt{4} + 4 - 11. & 137257 &:= (7^7 + 5)/(3 \times 2) - 1. \\
114737 &:= 7 \times (7 + \sqrt{4^{3+11}}). & 117646 &:= 7^6 + \sqrt{64} - 11. & 137842 &:= (-8 + \sqrt{7^4})^3 \times 2 \times 1. \\
115249 &:= (9 + 5)^4 \times (2 + 1) + 1. & 117647 &:= 7 + 7^6 + \sqrt{4} - 11. & 137969 &:= (\sqrt{9} + \sqrt{9^7}) \times 63 - 1. \\
116640 &:= 6^6/4 \times 1 \times 10. & 117650 &:= 7^6 + 511^0. & 137996 &:= \sqrt{9^9} \times 7 + 6^3 - 1. \\
116745 &:= (7 + 6^5) \times (4 + 11). & 117651 &:= 7^6 + \sqrt{\sqrt{5+11}} \times 1. & 139500 &:= 9 \times 5 \times 3100. \\
116964 &:= (9 \times (6 \times 6 + \sqrt{4}))^{1+1}. & 117652 &:= 7^6 + \sqrt{-5+21} - 1. & 139644 &:= 9 \times \sqrt{6^4} \times 431. \\
117316 &:= 7^6 - 3 \times 111. & 117653 &:= 7^6 + 5 \times 3 - 11. & 139676 &:= (-97 + 6^6) \times 3 - 1. \\
117406 &:= 7^6 - \sqrt{(4-1)^{10}}. & 117657 &:= 7 + 7^6 + \sqrt{5-1} - 1. & 141680 &:= (-8 + 6^4) \times 110. \\
117571 &:= 7 \times (7^5 - 11) - 1. & 117658 &:= 8 + 7^6 + \sqrt{5-1} - 1. & 142875 &:= -8 + (7 \times 54)^2 - 1. \\
117572 &:= 7 \times (\sqrt{7^{5 \times 2}} - 11). & 117673 &:= -7 + 7^6 + 31 \times 1. & 144375 &:= 7 \times 5^4 \times (\sqrt{4} + 31). \\
117586 &:= -8 + 7^6 - 5 \times 11. & 117694 &:= \sqrt{9} + 7^6 + 41 + 1. & 145924 &:= (95 \times 4 + \sqrt{4})^2 \times 1. \\
117596 &:= -\sqrt{9} + 7^6 - 51 + 1. & 117695 &:= -9 + 7^6 + 5 \times 11. & 145925 &:= (-\sqrt{9^5} + 5^4)^2 + 1. \\
117613 &:= 7^6 - 3 \times (1 + 11). & 117747 &:= 7 \times 7 \times (7^4 + 1 + 1). & 146333 &:= 6 \times (-4 + 33)^3 - 1. \\
117623 &:= 7^6 - 3^{2+1} + 1. & 117754 &:= 7 \times (7^5 + 4 + 11). & 146450 &:= ((6 + 5)^4 + 4) \times 10. \\
117624 &:= 7^6 - (4 + 21) \times 1. & 117775 &:= 7 \times (7 + 7^5 + 11). & 147456 &:= (76 \times 5 + 4)^{\sqrt{4}} \times 1. \\
117625 &:= 7^6 - (5^2 - 1) \times 1. & 117963 &:= \sqrt{9} + 7^6 + 311. & 148877 &:= (\sqrt{8+8} + 7 \times 7)^{4-1}. \\
117626 &:= 7^6 - 6 \times 2 - 11. & 118098 &:= \sqrt{9^8} \times (8 + 1 \times 10). & 149769 &:= (9 + 9 \times 7 \times 6)^{\sqrt{4}} \times 1. \\
117627 &:= \sqrt{(7 \times 7)^6} - 21 - 1. & 119716 &:= (\sqrt{9} + \sqrt{7^{6 \times 1}})^{1+1}. & 151279 &:= 9 \times (7^5 + 2) - 1 - 1. \\
117628 &:= -8 + 7^6 - 2 - 11. & 122880 &:= \sqrt{8^8} \times (-2 + \sqrt{2^{10}}). & 151874 &:= (8 + 7)^5/(4 + 1) - 1. \\
117629 &:= -9 + 7^{\sqrt{6^2}} - 11. & 126000 &:= 6 \times 21000. & 151875 &:= (8 + 7)^5/(5 - 1 + 1). \\
117632 &:= 7^6 + 3 - 21 + 1. & 127680 &:= 8 \times 76 \times 210. & 153664 &:= (6 \times 65 + \sqrt{4})^{3-1}. \\
& & & & 155620 &:= (6^5 + 5) \times 2 \times 10. \\
& & & & 155850 &:= (-8 + 5^5) \times 5 \times 10.
\end{aligned}$$

$$\begin{aligned}
156243 &:= -6 + 5^{4+3} \times 2 - 1. \\
156550 &:= (6 + 5^5) \times 5 \times 10. \\
156984 &:= \sqrt{9} \times 8 \times 6541. \\
157452 &:= -7 - 5 + 54^{2+1}. \\
157453 &:= -7 - 5 + 54^3 + 1. \\
157463 &:= (7 - 6) \times 54^3 - 1. \\
157464 &:= (7 - 6) \times 54^{4-1}. \\
158499 &:= 99 \times (\sqrt{(8 \times 5)^4} + 1). \\
159300 &:= \sqrt{9} \times 53100. \\
159997 &:= -\sqrt{9} + (\sqrt{9} \times 9 - 7)^{5-1}. \\
161792 &:= (\sqrt{9} + 76) \times 2^{11}. \\
163275 &:= 7 \times 6^5 \times 3 - 21. \\
163297 &:= \sqrt{9} \times 7 \times 6^{3+2} + 1. \\
163680 &:= 8 \times 66 \times 310. \\
166374 &:= (-7 + 66 - 4)^3 - 1. \\
166464 &:= (6 \times (66 + \sqrt{4}))^{\sqrt{4}} \times 1. \\
168750 &:= \sqrt{(8 + 7)^6} \times 5 \times 10. \\
169744 &:= ((97 + 6) \times 4)^{\sqrt{4}} \times 1. \\
172224 &:= (-7 + 422)^2 - 1. \\
172873 &:= 8 \times (7 \times 7 \times 3)^2 + 1. \\
174960 &:= \sqrt{9^7 \times 64} \times 10. \\
176371 &:= -776 + 3^{11}. \\
176400 &:= \sqrt{(7 \times 6)^4} \times 100. \\
176469 &:= (-\sqrt{9} + 7^6) \times 6/4 \times 1. \\
177133 &:= -7 \times \sqrt{7-3} + 3^{11}. \\
177135 &:= -\sqrt{7 \times 7} - 5 + 3^{11}. \\
177146 &:= -7/7 + (6/\sqrt{4})^{11}. \\
177153 &:= 7/7 + 5 + 3^{11}. \\
177154 &:= \sqrt{7 \times 7} + \sqrt{(5+4)^{11}}. \\
177193 &:= -\sqrt{9} + 7 \times 7 + 3^{11}. \\
178184 &:= 8 + 87 \times \sqrt{4^{11}}. \\
178929 &:= (9 \times (9 - 8 \times 7))^2 \times 1. \\
179331 &:= \sqrt{9^7} - 3 + 3^{11}. \\
181243 &:= 8^4 + \sqrt{3^{2 \times 11}}. \\
182700 &:= 87 \times 2100. \\
184329 &:= 9 \times (8^4 \times (3 + 2) + 1). \\
184789 &:= (\sqrt{9} + 8) \times (-8 + 7^{4+1}). \\
184877 &:= (\sqrt{8 + 8} + 7) \times 7^{4+1}. \\
186591 &:= \sqrt{9} \times (8 \times 6^5 - 11). \\
186593 &:= \sqrt{9} \times 8 \times 6^5 - 31. \\
186622 &:= 8 \times 6^6/2 - 2 \times 1. \\
186623 &:= ((8 - 6) \times 6^3)^2 - 1. \\
186664 &:= 8 \times (6 + 6^6/\sqrt{4} - 1). \\
186672 &:= 8 \times (7 + 6^6/2 - 1). \\
186795 &:= \sqrt{9} \times (8 \times (7 + 6^5) + 1). \\
191970 &:= \sqrt{9} \times 9 \times 7110. \\
192721 &:= (9 \times 7^2 - 2)^{1+1}. \\
192722 &:= (9 \times 7^2 - 2)^2 + 1. \\
193635 &:= 9 \times 65 \times 331. \\
194437 &:= (\sqrt{9} \times 7)^4 - 43 - 1. \\
194472 &:= (\sqrt{9} \times 7)^4 - 4 \times 2 - 1. \\
194473 &:= (\sqrt{9} \times 7)^4 - 4 \times (3 - 1). \\
194474 &:= (\sqrt{9} \times 7)^4 - 4 - 4 + 1. \\
194476 &:= (\sqrt{9} \times 7)^{6-\sqrt{4}} - 4 - 1. \\
194477 &:= -\sqrt{9} + (7 \times (7 - 4))^4 - 1. \\
194479 &:= 9 \times 9 \times 7^4 - \sqrt{4} \times 1. \\
194484 &:= \sqrt{9} + (84/4)^4 \times 1. \\
194489 &:= 9 + (9 + 8 + 4)^4 - 1. \\
194625 &:= (9 + 6^5) \times (4 + 21). \\
195314 &:= (\sqrt{9} + 5^{\sqrt{4^3}})/(1 + 1). \\
195980 &:= (\sqrt{9^9} - 85) \times 10. \\
196830 &:= \sqrt{9^8} \times (6 - 3) \times 10. \\
196855 &:= (\sqrt{9^8} \times 6 + 5) \times 5 \times 1. \\
196890 &:= (\sqrt{9 \times 9^8} + 6) \times 10. \\
197136 &:= (\sqrt{9} + 7 \times 63)^{1+1}. \\
197505 &:= 9 \times 7 \times 5^5 - 10. \\
209718 &:= \sqrt{9} + (8^7 - 2)/10. \\
209943 &:= -9 + 9^4 \times 32 + 0. \\
209944 &:= ((9 + 9)^4 - 4) \times 2 + 0. \\
209946 &:= (-\sqrt{9} + (\sqrt{9} \times 6)^4) \times 2 + 0. \\
209949 &:= -\sqrt{9} + (9 + 9)^4 \times 2 + 0. \\
209952 &:= 9^{9-5} \times \sqrt{\sqrt{2^{20}}}. \\
214375 &:= (7 \times 5)^4 \times 3/21. \\
216513 &:= (6 + 5) \times 3^{-2+11}. \\
219025 &:= (9 \times 52)^2 + 1^0. \\
224676 &:= (7 \times (66 + \sqrt{4}) - 2)^2. \\
226576 &:= (7 \times (6 \times (6 + 5) + 2))^2. \\
226935 &:= (9 + 6) \times (5^3 - 2)^2. \\
227529 &:= (9 \times (75 - 22))^2. \\
228484 &:= (8 \times (\sqrt{8^4} - 4) - 2)^2. \\
229385 &:= 9 + 8^5 \times (3 + 2 + 2). \\
229842 &:= (\sqrt{9} + 8 \times 42)^2 \times 2. \\
232324 &:= 4 \times (3^{3+2} - 2)^2. \\
232974 &:= 9 \times 7 \times 43^2 \times 2. \\
233289 &:= (\sqrt{9} + 8^3 - 32)^2. \\
234385 &:= 8 + 5^{4+3} \times 3 + 2. \\
235224 &:= 54 \times (3 \times 22)^2. \\
235276 &:= 7^6 \times (5 - 3) - 22. \\
235294 &:= ((9 \times 5 + 4)^3 - 2) \times 2. \\
235296 &:= (9 \times 6 - 5)^3 \times 2 - 2. \\
235298 &:= \sqrt{(9 + 8 \times 5)^{3 \times 2}} \times 2. \\
235445 &:= 5 \times (5 \times 44 - 3)^2. \\
236197 &:= \sqrt{9^7} \times 6^3/2 + 1. \\
237652 &:= 76 \times (5^{3+2} + 2). \\
237699 &:= 99 \times 7^{\sqrt{6 \times 3-2}}. \\
237994 &:= 99 \times (7^4 + 3) - 2. \\
238143 &:= (8 \times (4^3 - 3))^2 - 1. \\
239398 &:= -\sqrt{9^9} + (8^3 - 3)^2. \\
239432 &:= (\sqrt{9} + (4 + 3)^3)^2 \times 2. \\
244944 &:= \sqrt{(9 \times \sqrt{4})^{\sqrt{4+4}}} \times 42. \\
245337 &:= -7^5 + 4\sqrt{(3 \times 3)^2}. \\
246518 &:= 8^6 - 5^{4+2} - 1. \\
248656 &:= 8 \times ((-6 + 6^5) \times 4 + 2). \\
248824 &:= -8 + (8 + 4)^{4+2/2}. \\
248833 &:= 8/8 + (4 \times 3)^{3+2}. \\
248836 &:= \sqrt{8+8} + (6 \times \sqrt{4})^{3+2}. \\
248840 &:= 8 + (8 + 4)^{4+2^0}. \\
248856 &:= 8 + 8 \times (6^5 \times 4 + 2). \\
253952 &:= (\sqrt{9^5} + 5) \times 32^2. \\
254364 &:= -6^5 - 4 + 4^3^2. \\
255886 &:= -8 + 8^6 - 5^5 \times 2. \\
258663 &:= 8^6 - (6 + 53)^2. \\
260846 &:= 8^6 - 6^4 - 2 + 0. \\
260864 &:= 8^6 - 64 \times 20. \\
261823 &:= 8^6 - 322 + 1. \\
262118 &:= 8^6 - 2 \times (2 + 11). \\
262128 &:= 8^6 - 2 \times 2^{2+1}. \\
262158 &:= 8^6 - 5 - 2 + 21. \\
262168 &:= 8^6 + 6/2 + 21. \\
262182 &:= 8^6 + 2 \times (-2 + 21). \\
262183 &:= 8^6 - 3 + 2 \times 21. \\
262184 &:= 8^6 + (42 - 2) \times 1. \\
262186 &:= 8^6 + \sqrt{6-2} \times 21. \\
262189 &:= \sqrt{9} + 8^6 + 2 \times 21. \\
262208 &:= 8^6 + 2 \times \sqrt{\sqrt{2^{20}}}. \\
262268 &:= 8^6 + \sqrt{(62 \times 2)^2}. \\
262286 &:= 8^6 + (6 \times 2)^2 - 2. \\
262468 &:= 8^6 + 6^4/(2 + 2). \\
262584 &:= 8^6 + 5 \times 4 \times 22. \\
262628 &:= 8^{\sqrt{6 \times 6}} + 22^2. \\
262648 &:= 8^6 + 6 \times 42 \times 2. \\
263168 &:= (86 \times 6 - 3)^2 - 1. \\
263984 &:= -9 + 8^6 + 43^2. \\
264188 &:= -8 + (\sqrt{8^6} + \sqrt{4})^2 \times 1. \\
264198 &:= \sqrt{9} + (\sqrt{8^6} + \sqrt{4})^2 - 1. \\
264992 &:= (\sqrt{9} + \sqrt{9^6} - 4)^2/2. \\
267289 &:= (\sqrt{9} - 87 \times 6 + 2)^2. \\
268322 &:= (\sqrt{8^6} + 3 \times 2)^2 - 2. \\
268324 &:= (86 + 432)^2. \\
268544 &:= 8^6 + (5 \times 4 \times 4)^2. \\
268784 &:= 8 \times (-8 + \sqrt{7^{6+4}}) \times 2. \\
268895 &:= -9 - 8 + (8 + 6)^5/2. \\
268915 &:= \sqrt{9} + (8 + 6)^5/2 \times 1. \\
269568 &:= \sqrt{9} \times 8 \times \sqrt{6^6} \times 52. \\
272482 &:= (87 \times (4 + 2))^2 - 2. \\
272484 &:= \sqrt{87^4} \times (4 + 2)^2.
\end{aligned}$$

$$\begin{aligned}
272486 &:= (87 \times 6)^{4/2} + 2. \\
272526 &:= 7 \times 6 + 522^2. \\
273369 &:= \sqrt{9} \times ((7 \times 6 + 3)^3 - 2). \\
273455 &:= 7 \times (5 + 5^{4+3})/2. \\
274625 &:= ((7 + 6) \times 5)^{(4+2)/2}. \\
275625 &:= (7 \times (65 + 5 \times 2))^2. \\
276340 &:= (-7 + (6 \times 4)^3) \times 20. \\
276674 &:= (7 \times 76 - 6)^{\sqrt{4}} - 2. \\
276676 &:= (7 \times 76 - 6)^{\sqrt{6-2}}. \\
276679 &:= \sqrt{9} + (-7 \times 76 + 6)^2. \\
278784 &:= (8 + 8 \times (7 - 74))^2. \\
278793 &:= 9 + (8 \times (7 - 73))^2. \\
279494 &:= (9 - \sqrt{9})^7 - 442. \\
279792 &:= (9 - \sqrt{9})^7 - 72 \times 2. \\
279887 &:= \left(\sqrt{9 \times \sqrt{8+8}} \right)^7 - 7^2. \\
279894 &:= \left(9 - \sqrt{\sqrt{\sqrt{9^8}}} \right)^7 - 42. \\
279904 &:= (9 - \sqrt{9})^7 - \sqrt{\sqrt{4^{20}}}. \\
279929 &:= -\sqrt{9} + (-\sqrt{9} + 9)^7 - 2 - 2. \\
279940 &:= (9 - \sqrt{9})^7 + \sqrt{-4 + 20}. \\
279949 &:= 9 + (-\sqrt{9} + 9)^7 + \sqrt{4^2}. \\
279951 &:= (9 - \sqrt{9})^7 + 5 \times (2 + 1). \\
279953 &:= ((9 - \sqrt{9})^7 - (((-5) \times 3) - 2)). \\
279957 &:= (9 - \sqrt{9})^7 + 7 \times (5 - 2). \\
279972 &:= (9 - \sqrt{9})^7 + 7/2. \\
279976 &:= (9 - \sqrt{9})^7 + 7 \times 6 - 2. \\
281994 &:= (-\sqrt{9} + \sqrt{9^8}) \times (42 + 1). \\
282240 &:= 84^2 \times 2 \times 20. \\
283648 &:= 8864 \times 32. \\
286225 &:= (\sqrt{8^6} + 5^2 - 2)^2. \\
286495 &:= \sqrt{9^8} + 6^{5+\sqrt{4}} - 2. \\
287493 &:= -\sqrt{9} + (-8 + 74)^{\sqrt{3^2}}. \\
288369 &:= ((98 - 8) \times 6 - 3)^2. \\
289444 &:= (9 \times (\sqrt{8^4} - 4) - \sqrt{4})^2. \\
291599 &:= ((9 + 99) \times 5)^2 - 1. \\
291600 &:= (9 \times 6)^2 \times 100. \\
292820 &:= (\sqrt{9} + 8)^{2 \times 2} \times 20. \\
294838 &:= 9 \times (-8 + (8 \times 4)^3) - 2. \\
294849 &:= (\sqrt{9} + 9 \times (\sqrt{8^4} - 4))^2. \\
294858 &:= \sqrt{\sqrt{\sqrt{9^8}} \times (8^5 - 4 - 2)}. \\
294883 &:= 9 \times (8 \times 8^4 - 3) - 2. \\
294895 &:= -9 + 9 \times 8^5 - 4 \times 2. \\
294985 &:= 9 \times (9 + 8^5) - 4 \times 2. \\
295025 &:= 9^5 \times 5 - 220. \\
295089 &:= -\sqrt{9} + 9 \times (8^5 + 20). \\
295205 &:= 9^5 \times 5 - 2 \times 20. \\
295223 &:= 9^5 \times (3 + 2) - 22. \\
295225 &:= 9^5 \times 5 - 22 + 2. \\
295235 &:= 9^5 \times 5 - (3 + 2) \times 2. \\
295243 &:= 9^5 \times (4 + 3 - 2) - 2. \\
295245 &:= 9^5 \times \sqrt{(\sqrt{5+4} + 22)}. \\
295251 &:= 9^5 \times 5 + 2 \times (2 + 1). \\
295253 &:= 9^5 \times 5 + \sqrt{32 \times 2}. \\
295255 &:= 9^5 \times 5 + \sqrt{(5 \times 2)^2}. \\
295259 &:= (\sqrt{9} + 9^5) \times 5 - 2/2. \\
295305 &:= 9^5 \times 5 + 3 \times 20. \\
295345 &:= (9^5 + 5 \times 4) \times (3 + 2). \\
295455 &:= 9^5 \times 5 + 5 \times 42. \\
297432 &:= \sqrt{9^7} \times 4 \times (32 + 2). \\
299376 &:= 99 \times 7 \times 6^3 \times 2. \\
299973 &:= -\sqrt{9} \times (9 - (\sqrt{9} + 7)^{3+2}). \\
299975 &:= \sqrt{9} \times (-9 + (\sqrt{9} + 7)^5) + 2. \\
312500 &:= 5^{3+2} \times 100. \\
312975 &:= 975 \times 321. \\
314199 &:= 9^{\sqrt{9}} \times 431 \times 1. \\
314426 &:= -6 + (4 + 4^3)^{2+1}. \\
314431 &:= (4 + 4^3)^3 \times 1 - 1. \\
314432 &:= (\sqrt{4} + \sqrt{4} \times 33)^{2+1}. \\
314433 &:= (4 + \sqrt{4^{3+3}})^3 + 1. \\
314434 &:= \sqrt{4} + (4 + 4^3)^3 \times 1. \\
314436 &:= (64 + 4)^3 + 3 + 1. \\
314463 &:= (64 + 4)^3 + 31. \\
314925 &:= -\sqrt{9} + 54^3 \times 2 \times 1. \\
314926 &:= (\sqrt{9} \times 6)^4 \times 3 - 2 \times 1. \\
314927 &:= \sqrt{9^7} \times (4 \times 3)^2 - 1. \\
314928 &:= \sqrt{9^8} \times 4 \times (3 + 21). \\
314936 &:= (((((\sqrt{9} \times 6)^4) + 3) \times 3) - 1). \\
318465 &:= \sqrt{8^6} \times (5^4 - 3) + 1. \\
319226 &:= (9 \times 63 - 2)^2 + 1. \\
321489 &:= \sqrt{9^8} \times (4 + 3)^2 \times 1. \\
325632 &:= 6 \times 53 \times 32^2. \\
326673 &:= 7 \times 6^6 + (3 \times 3)^2. \\
326767 &:= 7 \times (-7 + 6^6 + 32). \\
328329 &:= (-\sqrt{9} + (8 \times \sqrt{3 \times 3})^2)^2. \\
328508 &:= (8 \times 8 + 5)^3 - 2^0. \\
329476 &:= (97 \times 6 - \sqrt{4^3})^2. \\
331776 &:= ((7 + 7 - 6) \times 3)^{3+1}. \\
331869 &:= \sqrt{9} \times ((8 \times 6)^3 + 31). \\
334365 &:= 6^5 \times 43 - \sqrt{3 \times 3}. \\
335790 &:= 9 \times 7 \times 5330. \\
338551 &:= (8^5 - 5)/3 \times 31. \\
342792 &:= (9 \times (\sqrt{7^4} - 3))^2 \times 2. \\
342950 &:= (95 \times \sqrt{4})^3/20. \\
342980 &:= (9 \times 8 - \sqrt{4})^3 - 20. \\
342989 &:= -9 + (9 \times 8 - \sqrt{4})^3 - 2. \\
344148 &:= 84 \times ((4 \times 4)^3 + 1). \\
344763 &:= (\sqrt{7^6} - 4)^{\sqrt{4}} \times \sqrt{3 \times 3}. \\
346794 &:= ((\sqrt{9} - \sqrt{7^6})^{\sqrt{4}} - \sqrt{4}) \times 3. \\
349965 &:= (9 + 9 \times 6^5) \times (\sqrt{4} + 3). \\
351233 &:= (53 + 3)^3 \times 2 + 1. \\
352483 &:= ((85 + 4)^3 - 3)/2. \\
352489 &:= (9 + (85 + 4)^3)/2. \\
352697 &:= \sqrt{9} \times 7^6 - 5^3 \times 2. \\
352836 &:= ((8 - 6 \times 5) \times 3^3)^2. \\
352945 &:= \sqrt{9} \times (-5 + 54)^3 - 2. \\
352967 &:= \sqrt{9} \times (7^6 + 5) + 3 + 2. \\
353739 &:= (97 + 5)^3/3 + 3. \\
354289 &:= \sqrt{9^8} \times 54 - 3 - 2. \\
354293 &:= 9^5 \times \sqrt{4} \times 3 - 3 + 2. \\
354299 &:= \sqrt{9} \times 9^5 \times \sqrt{4} + 3 + 2. \\
354319 &:= (((9^5 + 4) \times (3 - (-3))) + 1). \\
354393 &:= (9^5 \times \sqrt{4} + 33) \times 3. \\
356168 &:= 8 \times (\sqrt{6^6} - 5)^{3-1}. \\
357894 &:= -9 - 8 + (75 - 4)^3. \\
357914 &:= \sqrt{9} + (75 - 4)^3 \times 1. \\
357974 &:= 9 \times 7 + (75 - 4)^3. \\
358546 &:= ((8 + 6)^5 - 5) \times \sqrt{4}/3. \\
367236 &:= (-7 \times 6 + 6^3 \times 3)^2. \\
367497 &:= -\sqrt{9} + (7 + \sqrt{7^6})^{\sqrt{4}} \times 3. \\
367693 &:= -\sqrt{9} + 7^6 + 63^3. \\
368640 &:= \sqrt{8^6} \times 6 \times 4 \times 30. \\
371286 &:= -8 + (7 + 6)^{3+2} + 1. \\
371293 &:= (9 + 7 - 3)^{3+2} \times 1. \\
371296 &:= \sqrt{9} + (7 + 6)^{3+2} \times 1. \\
371349 &:= (9 \times (((7 - (-4))^3) \times (31))). \\
373246 &:= (76 - 4)^{\sqrt{3 \times 3}} - 2. \\
373527 &:= \sqrt{7} \times 7^5 \times 33^2. \\
376942 &:= 97 \times (6^4 \times 3 - 2). \\
379447 &:= -9 + \sqrt{77^4} \times 4^3. \\
385947 &:= 9 \times (8 + \sqrt{\sqrt{(7 \times 5)^{4 \times 3}}}). \\
386400 &:= (-8 + 6^4) \times 300. \\
388937 &:= -9 \times 8 - 8 + 73^3. \\
390688 &:= (\sqrt{9} - 8)^8 + 63 + 0. \\
393660 &:= \sqrt{9^6} \times 6 \times 3 \times 30. \\
394272 &:= (9 \times \sqrt{7^4} + 3)^2 \times 2. \\
394415 &:= (\sqrt{9} + 5^4)^{\sqrt{4}} + 31. \\
399424 &:= ((-9 \times 9 + \sqrt{4}) \times \sqrt{4^3})^2. \\
401408 &:= 8^4 \times (-\sqrt{4} + 100). \\
411771 &:= (7^7 - \sqrt{4} + 1)/(1 + 1). \\
411772 &:= (7^7 + \sqrt{4}/2)/(1 + 1). \\
411773 &:= (7^{\sqrt{7^4}} + 3)/(1 + 1). \\
411775 &:= (7^7 + 5 + \sqrt{4})/(1 + 1). \\
411777 &:= (7^7 + 7 + 4)/(1 + 1). \\
412162 &:= 642^2 - 1 - 1. \\
412164 &:= (644 - 2)^{1+1}.
\end{aligned}$$

$$\begin{aligned}
415575 &:= 75 \times 5541. \\
419583 &:= (\sqrt{9^8} - 5) \times 4^3 - 1. \\
419584 &:= (\sqrt{9^8} - 5) \times 4^{4-1}. \\
419896 &:= -9 + \sqrt{9^8} \times 64 + 1. \\
419903 &:= 9 \times (9 \times 4)^3 - 1 + 0. \\
419904 &:= 9 \times \sqrt{(9 \times 4)^{-4+10}}. \\
419913 &:= 9 \times ((9 \times 4)^3 + 1) \times 1. \\
419923 &:= 9 \times ((9 \times 4)^3 + 2) + 1. \\
420175 &:= 7^5 \times (4 + 21 - 0). \\
421875 &:= ((8 + 7) \times 5)^{4-2+1}. \\
426409 &:= (9 + 644)^2 + 0. \\
427695 &:= -\sqrt{9} \times 7 + 654^2. \\
427765 &:= 7 \times 7 + 654^2. \\
428415 &:= (8 + 5)^4 \times (4^2 - 1). \\
431649 &:= (9 + 6^4/\sqrt{4})^{3-1}. \\
432894 &:= (\sqrt{9^8} - \sqrt{4}) \times (4^3 + 2). \\
432964 &:= ((96 - \sqrt{4}) \times (4 + 3))^2. \\
433125 &:= 5^4 \times 33 \times 21. \\
438888 &:= -88 + (-8 + 84)^3. \\
438967 &:= -\sqrt{\sqrt{9^8} + \sqrt{76^4 \times 3}}. \\
438973 &:= (-9 + 87 - \sqrt{4})^3 - 3. \\
438985 &:= 9 + ((8 + 8) \times 5 - 4)^3. \\
439566 &:= (\sqrt{9} \times (\sqrt{6^6} + 5))^{\sqrt{4}} - 3. \\
439587 &:= \sqrt{9^8} \times (75 - \sqrt{4^3}). \\
441344 &:= 4^4 \times 4 \times 431. \\
442225 &:= (5^4 + 42 - 2)^2. \\
442366 &:= (6 \times 64)^{\sqrt{4}} \times 3 - 2. \\
443799 &:= 9 \times 9 \times (\sqrt{74^4} + 3). \\
444889 &:= (9 - 8 \times 84 - 4)^{\sqrt{4}}. \\
446226 &:= (664 + 4)^2 + 2. \\
446988 &:= \sqrt{9} \times (8 \times 8 \times 6 + \sqrt{4})^{\sqrt{4}}. \\
452927 &:= (-9 \times 75 + \sqrt{4})^2 - 2. \\
452929 &:= (9^{\sqrt{9}} - 54 - 2)^2. \\
453125 &:= 5^5 \times ((4 \times 3)^2 + 1). \\
453735 &:= (\sqrt{7^{5+5}} - \sqrt{4}) \times 3^3. \\
453759 &:= (9 \times 7^5 - 5 \times \sqrt{4}) \times 3. \\
453781 &:= -8 + 7^5 \times (-4 + 31). \\
453795 &:= (9 \times \sqrt{7^{5+5}} + \sqrt{4}) \times 3. \\
453897 &:= \sqrt{\sqrt{9^8} \times (7^5 + 4)} \times 3. \\
454276 &:= ((\sqrt{7^6} - 5) \times \sqrt{4} - \sqrt{4})^2. \\
455625 &:= (655 + 5 \times 4)^2. \\
456533 &:= (65 + 5 + 4 + 3)^3. \\
456949 &:= -\sqrt{9^{\sqrt{9}}} + (-6 \times 5 + 4)^4. \\
456994 &:= 9 + 9 + (6 \times 5 - 4)^4. \\
458329 &:= (-\sqrt{9} + 85 \times \sqrt{4^3})^2. \\
459278 &:= (\sqrt{9^8} \times 7 \times 5 + 4) \times 2. \\
459279 &:= 9 + \sqrt{9^7} \times 5 \times 42. \\
459684 &:= (\sqrt{9} \times 8 + 654)^{\sqrt{4}}. \\
459996 &:= -\sqrt{9} + 9^{\sqrt{9}} \times (6 + 5^4). \\
459997 &:= -\sqrt{9} + (9^{\sqrt{9}} + 7) \times 5^4. \\
459999 &:= 9^{\sqrt{9}} \times (-\sqrt{9} + 9 + 5^4). \\
466130 &:= (6^6 - 43) \times 10. \\
466480 &:= (-8 + 6^6)/4 \times 40. \\
466489 &:= (\sqrt{9} - (\sqrt{(8 + 6^6)/4})^{\sqrt{4}})^{\sqrt{4}}. \\
466510 &:= (6^6 - \sqrt{\sqrt{5^4}}) \times 10. \\
466530 &:= 6^6 \times 5 \times \sqrt{4} - 30. \\
466555 &:= 6^6 \times (5 + 5) - \sqrt{\sqrt{5^4}}. \\
466620 &:= (6 + 6^6)/\sqrt{4} \times 20. \\
468512 &:= (-8 + 6 \times 5)^4 \times 2 \times 1. \\
468544 &:= 8 \times ((6 + 5)^4 \times 4 + 4). \\
468735 &:= -8 - 7 + 6 \times 5^{4+3}. \\
468749 &:= (-\sqrt{9} + 8)^7 \times 6 - 4/4. \\
469225 &:= (9 + (6 \times 5 - 4)^2)^2. \\
470556 &:= (7^6 - 5 - 5) \times 4 + 0. \\
470568 &:= (-8 + (7^6 - 5) \times (4 - 0)). \\
470576 &:= (\sqrt{7 \times 7^6} - 5) \times 4 + 0. \\
470593 &:= -\sqrt{9} + 7^5 \times (-\sqrt{4} + 30). \\
470615 &:= (7^6 + 5) \times 4 - 1 + 0. \\
470618 &:= (8 + 7^6) \times 4 - 10. \\
470628 &:= (8 + 7^6) \times \sqrt{-4 + 20}. \\
471620 &:= 7^6 \times 4 + 2^{10}. \\
471969 &:= (99 \times 7 - 6)^{\sqrt{4}} \times 1. \\
472389 &:= -\sqrt{9} + 8 \times (7 + \sqrt{4})^{3+2}. \\
472392 &:= \sqrt{9^7} \times 432/2. \\
472394 &:= 9^{7-\sqrt{4}} \times \sqrt{4^3} + 2. \\
472896 &:= (\sqrt{9^8} + 7) \times \sqrt{6^4} \times 2. \\
474688 &:= \sqrt{8^8} + 7^6 \times 4 - 4. \\
476288 &:= 8 \times (8 - 7 \times \sqrt{6^4})^2. \\
476739 &:= \sqrt{9^7} + (76 + \sqrt{4})^3. \\
478864 &:= (8 \times 87 - 6 + \sqrt{4})^{\sqrt{4}}. \\
478953 &:= \sqrt{9^8} \times (7 \times 5 \times \sqrt{4} + 3). \\
479994 &:= \sqrt{9} \times ((\sqrt{9} \times 9 - 7)^4 - \sqrt{4}). \\
483159 &:= ((\sqrt{9} + 8)^5 + \sqrt{4}) \times 3 \times 1. \\
484129 &:= 984^{\sqrt{4}}/2 + 1. \\
484417 &:= (87 \times (4 + 4))^{\sqrt{4}} + 1. \\
488598 &:= -\sqrt{9} + (88 \times 8 - 5)^{\sqrt{4}}. \\
489375 &:= 9 \times 87 \times \sqrt{5^{\sqrt{4^3}}}. \\
492095 &:= \sqrt{9^9} \times \sqrt{5^4} + 20. \\
493038 &:= (\sqrt{\sqrt{9^8}} - \sqrt{4})^3 - 3^0. \\
493039 &:= (9 \times 9 - \sqrt{4})^{\sqrt{3 \times (3+0)}}. \\
493848 &:= 9 \times ((-8 + 84)/\sqrt{4})^3. \\
495615 &:= (\sqrt{9^6} - 5 \times 5)^{\sqrt{4}} - 1. \\
495936 &:= (-\sqrt{9^{\sqrt{9}}} + 6^5) \times 4^3. \\
496837 &:= (\sqrt{9^8} + 7^6) \times 4 - 3. \\
496935 &:= -9^{\sqrt{9}} + 6^5 \times 4^3. \\
497536 &:= (-\sqrt{\sqrt{9+7}} + 6^5) \times 4^3. \\
497656 &:= (9 - 7) \times ((6 + 6)^5 - 4). \\
497794 &:= (\sqrt{9} \times 9 + 7) \times (7 + 4)^4. \\
498636 &:= \sqrt{9^8} \times (6 + 6 + 4^3). \\
498637 &:= \sqrt{9^8} \times 76 + 4 - 3. \\
499847 &:= ((\sqrt{9} + 98) \times 7)^{\sqrt{4}} - \sqrt{4}. \\
499849 &:= (9^{\sqrt{9}} - \sqrt{9} \times 8 + \sqrt{4})^{\sqrt{4}}. \\
521017 &:= 7^5 \times (21 + 10). \\
521680 &:= 8 \times 65210. \\
523648 &:= (8^6 - 5 \times 4^3) \times 2. \\
524268 &:= (8^6 - 5 \times 4/2) \times 2. \\
524368 &:= (8^6 + 5 \times \sqrt{4^3}) \times 2. \\
525189 &:= (9 + 8 \times 5^5) \times 21. \\
528529 &:= (\sqrt{9} \times (8 - 5)^5 - 2)^2. \\
528766 &:= (-8 + 76) \times 6^5 - 2. \\
529984 &:= (\sqrt{9} + 9^{8-5} - 4)^2. \\
531431 &:= -5 \times \sqrt{4} + 3 \times 3^{11}. \\
531444 &:= (54/\sqrt{4})^4 + 3 \times 1. \\
531596 &:= 9^6 + \sqrt{5 \times 5} \times 31. \\
531691 &:= 9^6 + 5^3 \times (1 + 1). \\
531692 &:= 9^6 + 5^3 \times 2 + 1. \\
531966 &:= 9^6 - 6 + 531. \\
531969 &:= -\sqrt{9} + 9^6 + 531. \\
534569 &:= 9^6 + \sqrt{5^5 \times \sqrt{4}} + 3. \\
535824 &:= (8 - 5 + (5 + 4)^3)^2. \\
536542 &:= 6^5 \times (5 + 4^3) - 2. \\
536544 &:= 6^5 \times (5 + \sqrt{\sqrt{4^4 \times 3}}). \\
537472 &:= (-7 + 7^5 - 4) \times 32. \\
537792 &:= ((9 - 7) \times 7)^5 - 32. \\
537827 &:= 8 + (7 + 7)^5 - 3 - 2. \\
537828 &:= \sqrt{8 + 8} + 7^5 \times 32. \\
537829 &:= (98/7)^5 + 3 + 2. \\
537832 &:= 8 + (7 \times (5 - 3))^{3+2}. \\
537848 &:= \sqrt{8 \times 8} \times (7^5 \times 4 + 3). \\
537877 &:= 8 \times 7 + (7 + 7)^5 - 3. \\
537923 &:= \sqrt{9} + (7^5 + 3) \times 32. \\
537929 &:= 9 + (\sqrt{9} + 7^5) \times 32. \\
537952 &:= (9 + 7^5 - 5) \times 32. \\
539566 &:= 9^6 + 65 \times 5^3. \\
544644 &:= (6 \times (5 + 4^4/\sqrt{4}))^{\sqrt{4}}. \\
546996 &:= \sqrt{9} + 9^6 + 6^5 \times \sqrt{4}. \\
549256 &:= (\sqrt{9} + 65^{\sqrt{5+4}}) \times 2. \\
551367 &:= (7 \times (6 + 5) + 5)^3 - 1. \\
551369 &:= (\sqrt{\sqrt{9^6}} + 55)^3 + 1. \\
556947 &:= \sqrt{9} \times ((7 + 6)^5 + 5)/\sqrt{4}. \\
563922 &:= (9 \times (6 + 53))^2 \times 2. \\
564248 &:= 86 \times ((5 + 4)^4) + 2. \\
567646 &:= (7 + 66) \times 6^5 - \sqrt{4}. \\
570025 &:= 755^2 + 0 + 0. \\
574564 &:= (765 - 5 - \sqrt{4})^{\sqrt{4}}.
\end{aligned}$$

$$\begin{aligned}
575937 &:= 9 \times (-7 + (7 \times 5 + 5)^3). & 688000 &:= 8 \times 86000. & 815776 &:= 8 + 7^7 - 6^5 + 1. \\
579121 &:= (9 + 752)^{1+1}. & 691489 &:= (9 + 9) \times (8 + 6)^4 + 1. & 816977 &:= -\sqrt{9^8} + 7^7 - 6 + 1. \\
579122 &:= (9 + 752)^2 + 1. & 697225 &:= ((9 - \sqrt{7^6}) \times 5/2)^2. & 816979 &:= -\sqrt{9} - \sqrt{9^8} + 7^{6+1}. \\
585336 &:= (8 \times 6 + 5 + 5)^3 \times 3. & 697653 &:= -\sqrt{9^7} + 6^6 \times 5 \times 3. & 819425 &:= (9 + 8^5) \times (4 + 21). \\
588267 &:= (\sqrt{8 + 8} + 7^6) \times 5 + 2. & 699759 &:= 9 \times (-9 + (\sqrt{9} + 7) \times 6^5). & 822657 &:= 8 + (7 + (6 \times 5)^2)^2. \\
589827 &:= \sqrt{9} + (8 \times 8 \times (7 + 5))^2. & 699840 &:= 9 \times 9 \times 8640. & 823677 &:= 8 + 7^7 + 63 \times 2. \\
589914 &:= (9 + 9) \times (8^5 + 4 + 1). & 702464 &:= \sqrt{7^6} \times 4 \times \sqrt{\sqrt{4^{20}}}. & 824464 &:= (864 + 44)^2. \\
589915 &:= (9 + 9) \times (8^5 + 5) + 1. & 705846 &:= (-8 + 7^6) \times (5 + 4^0). & 827587 &:= \sqrt{8^8} + 7^7 - 52. \\
589932 &:= (9 + 9) \times (8^5 + 3 \times 2). & 707616 &:= 7 \times (7 + 6) \times \sqrt{6^{10}}. & 839496 &:= (-9 + (9 + 8 + 6)^4) \times 3. \\
589992 &:= (\sqrt{9} + 9 \times (9 + 8^5)) \times 2. & 728993 &:= -9 + (\sqrt{9} + 87)^3 + 2. & 839787 &:= (\sqrt{9 \times \sqrt{8 + 8} - 7}) \times 3. \\
590493 &:= \sqrt{9} + \sqrt{9^{5+4}} \times 30. & 738267 &:= (8^7 + 7^6)/\sqrt{3^2}. & 839799 &:= -9 + (\sqrt{9} - 9)^8/\sqrt{7 - 3}. \\
592703 &:= (9 + 75)^3 - 2^0. & 741830 &:= (-8 + 7^4) \times 310. & 844993 &:= (\sqrt{9^9} - 8 \times 4) \times 43. \\
597529 &:= (9 + 9 + 755)^2. & 742568 &:= (-8 + (7 + 6)^5) \times \sqrt{4} - 2. & 846369 &:= \sqrt{9^{8+6/6}} \times 43. \\
598776 &:= \sqrt{9} \times 8 + 77 \times 6^5. & 742569 &:= -9 + ((7 + 6)^5 - 4) \times 2. & 856664 &:= 8 + 6^6 + (6 \times 5)^4. \\
599997 &:= -\sqrt{9} + (-\sqrt{9} + 9) \times (\sqrt{9} + & 742576 &:= (-7 + (7 + 6)^5 + \sqrt{4}) \times 2. & 857157 &:= (8 - 7) \times 7^5 \times 51. \\
7)^5. & & 742586 &:= 8 \times (7 + 6)^5/\sqrt{4^2}. & 857158 &:= 8/8 + 7^5 \times 51. \\
602177 &:= 776^2 + 1 + 0. & 742596 &:= (9 + (7 + 6)^5 - 4) \times 2. & 857375 &:= ((-8 \times 7 + 75) \times 5)^3. \\
614657 &:= (7 \times (-6/6 + 5))^4 + 1. & 744310 &:= \sqrt{7^{4+4}} \times 310. & 857383 &:= 8 + (87 + 5 + 3)^3. \\
629694 &:= 9 \times 9 \times (\sqrt{6^{6+4}} - 2). & 751689 &:= (-9 + 876)^{\sqrt{5-1}}. & 859329 &:= 9 \times ((98 + 5) \times 3)^2. \\
629852 &:= \sqrt{\sqrt{9^8}} \times 6^5 - 2 - 2. & 753496 &:= 97 \times (6^5 - \sqrt{4^3}). & 879844 &:= ((\sqrt{9} + 8 \times 8) \times 7)^{\sqrt{4}} \times 4. \\
629854 &:= \sqrt{\sqrt{9^8}} \times 6^5 - 4 + 2. & 754369 &:= 97 \times (6^5 + 4 - 3). & 884733 &:= ((-8 + 8 \times 7) \times \sqrt{4})^3 - 3. \\
629858 &:= \sqrt{\sqrt{\sqrt{9^{8+8}}}} \times 6^5 + 2. & 755975 &:= (9 \times (-7 + 7^5) - 5) \times 5. & 884736 &:= \sqrt{8^8} \times (76 - 4) \times 3. \\
629859 &:= \sqrt{9} + \sqrt{\sqrt{9^8}} \times \sqrt{6^{5 \times 2}}. & 755997 &:= -\sqrt{9} + 9 \times (-7 + 7^5) \times 5. & 885143 &:= (-8 + (8 + 5)^4) \times 31. \\
634207 &:= \sqrt{7^6} \times 43^2 + 0. & 756496 &:= (9 + 7) \times (6^6 + 5^4). & 889249 &:= (-9 \times 9 + \sqrt{8^8}/4)^2. \\
642978 &:= \sqrt{9^8} \times \sqrt{\sqrt{7^{\sqrt{6^4}}}} \times 2. & 758641 &:= (876 - 5)^{\sqrt{4}} \times 1. & 890771 &:= (-\sqrt{9} + 8 \times 7) \times \sqrt{7^{10}}. \\
645576 &:= (\sqrt{7^6} + (6 + 5)^5) \times 4. & 759369 &:= -\sqrt{9} + (\sqrt{9} \times 7 - 6)^5 - 3. & 893730 &:= (\sqrt{9} \times 8 + 7)^3 \times 30. \\
647119 &:= (9 + 7^6)/\sqrt{4} \times 11. & 759378 &:= \sqrt{9} + (8 + 7)^{\sqrt{75^3}}. & 898773 &:= -\sqrt{9} - (8 - 8^7)/7 \times 3. \\
658503 &:= (86 + 5/5)^3 + 0. & 759381 &:= 9 + (8 + 7)^5 - 3 \times 1. & 898774 &:= \sqrt{9} \times (-8 + 8^7)/7 - \sqrt{4}. \\
662833 &:= 8^6 + 633^2. & 759383 &:= 9 + (8 + 7)^5 - 3/3. & 898777 &:= (\sqrt{9} \times (-8 + 8^7) + 7)/7. \\
663424 &:= ((6 + 6)^4 - 4) \times 32. & 759384 &:= 9 + (8 + 7)^{5 \times (4-3)}. & 898779 &:= \sqrt{9} \times (-9 + 8 + 8^7)/7. \\
663488 &:= 8 \times (-8 + 6 \times (6 \times 4)^3). & 759387 &:= 9 + (8 + \sqrt{7 \times 7})^5 + 3. & 899955 &:= 9 \times (9 + 9 - 8)^5 - 5. \\
663534 &:= 6 \times ((-6 + 54)^3 - 3). & 759416 &:= (\sqrt{9} \times 7 - 6)^5 + 41. & 911250 &:= (9 \times 5)^{2+1} \times 10. \\
663568 &:= 8 \times (6 + (6 + 6)^5)/3. & 767543 &:= 7 \times (7^6 - (5 \times 4)^3). & 912674 &:= 97^{6/(4-2)} + 1. \\
666727 &:= 7^7 - (66 \times 6)^2. & 774198 &:= \sqrt{9^8} \times (77 + 41). & 918731 &:= (9 + 8)^{7-3} \times 11. \\
666791 &:= 9 \times \sqrt{7^6} \times \sqrt{6^6} - 1. & 776886 &:= -\sqrt{8/8} + 7^7 - 6^6. & 921600 &:= 96^2 \times 100. \\
666792 &:= 9 \times (7 \times 6)^{6/\sqrt{6-2}}. & 776896 &:= \sqrt{\sqrt{\sqrt{9^8}} + 7^7 - 6^6}. & 925444 &:= (954 + 4 + 4)^2. \\
666794 &:= (9 \times \sqrt{7^6}) \times \sqrt{6^6} + \sqrt{4}. & 776968 &:= \sqrt{\sqrt{9^8}} + 7^7 - 6^6. & 931226 &:= (963 + 2)^2 + 1. \\
668564 &:= 86 \times \sqrt{(6 \times 6)^5} - \sqrt{4}. & 777922 &:= (9 \times 7 \times (7 + 7))^2 - 2. & 932940 &:= (-9 + (9 \times 4)^3) \times 20. \\
672966 &:= 9 \times \sqrt{7^6} \times (\sqrt{6^6} + 2). & 783225 &:= (8 + 7 \times 5^3 + 2)^2. & 934443 &:= 9 \times (4 + (4 + 43)^3). \\
673815 &:= 87 \times (6^5 - 31). & 786433 &:= 8 - 7 + 64^3 \times 3. & 941181 &:= 98^{4-1} - 11. \\
677384 &:= 8 + 7 \times 7 \times (6 \times 4)^3. & 786438 &:= ((8 \times (8 - 7))^6 + \sqrt{4}) \times 3. & 941189 &:= -\sqrt{9} + 98^{4-1} \times 1. \\
681424 &:= 8 \times (-6 + 44^{2+1}). & 788544 &:= (887 + 5 - 4)^{\sqrt{4}}. & 944699 &:= 9 \times (-9 + (\sqrt{9} \times 6)^4) - 4. \\
681472 &:= (8 + 76 + 4)^{2+1}. & 788548 &:= 888^{7-5} + 4. & 944785 &:= ((\sqrt{9} + 8 + 7)^5 + \sqrt{4})/\sqrt{4}. \\
681473 &:= (8 + 76 + 4)^3 + 1. & 789525 &:= \sqrt{9} \times 87 \times 55^2. & 944856 &:= 9 \times (8 + (6 \times 54)^{\sqrt{4}}). \\
683584 &:= 88 \times (6^5 - \sqrt{4^3}). & 789750 &:= 9 \times 87750. & 944928 &:= (9 + \sqrt{9^{8+\sqrt{4}}}) \times 4^2. \\
684286 &:= 88 \times \sqrt{6^{6+4}} - 2. & 794624 &:= 97 \times \sqrt{64^4} \times 2. & 946729 &:= (997 - 6 \times 4)^2. \\
684816 &:= 88 \times (6 + 6^{4+1}). & 794728 &:= (\sqrt{9^8} + 7) \times (7 + 4)^2. & 950625 &:= 9 \times (65 \times 5)^2 + 0. \\
& & 801792 &:= 9 \times 87 \times 2^{10}. & 952576 &:= (976 - 5 + 5)^2. \\
& & & & 956579 &:= (-9 + 9^7 - 65)/5. \\
& & & & 956596 &:= (9 \times 9^6 + 6 + 5)/5. \\
& & & & 956597 &:= \sqrt{9} + (9^7 + 6 - 5)/5.
\end{aligned}$$

$$956607 := (9^7 + 66)/5 + 0.$$

$$957999 := (\sqrt{9} + \sqrt{9} \times (9 + 9)) \times 7^5.$$

$$964324 := (\sqrt{9^6} + (4^4 - 3))^2.$$

$$966289 := (-9 + 986 + 6)^2.$$

$$967872 := \sqrt{9} \times (8 \times (77 - 6))^2.$$

$$968256 := 9 \times (8 \times (6 \times 6 + 5))^2.$$

$$969842 := (-\sqrt{9^9} + 8^6) \times 4 - 2.$$

$$969844 := (-\sqrt{9^9} + 8^6) \times \sqrt{4 \times 4}.$$

$$972197 := (9 + 977)^2 + 1.$$

$$974138 := 987^{\sqrt{4}} - 31.$$

$$974168 := 987^{6-4} - 1.$$

$$978121 := (987 + 2)^{1+1}.$$

$$978122 := (987 + 2)^2 + 1.$$

$$982600 := \sqrt{(9 + 8)^6} \times 200.$$

$$983043 := \sqrt{9} + (8 \times 4)^3 \times 30.$$

$$984375 := \sqrt{\sqrt{\sqrt{9^8}} \times 7 \times \sqrt{5^{4 \times 3}}}.$$

$$990025 := 995^2 + 00.$$

$$992016 := 996^2 \times (1 + 0).$$

$$994599 := ((-9)^{\sqrt{9}} + (\sqrt{9} + 9)^5) \times 4.$$

$$995292 := (9 - (\sqrt{9} + 9)^5) \times (-2 - 2).$$

$$995294 := (-9 + (\sqrt{9} + 9)^5) \times 4 + 2.$$

$$995334 := (\sqrt{9} + 9)^5 \times 4 + 3 + 3.$$

$$995345 := ((\sqrt{9} + 9)^5 + 5) \times 4 - 3.$$

$$995346 := ((\sqrt{9} + 9)^6 + 54)/3.$$

$$995544 := ((\sqrt{9} + 9)^5 + 54) \times 4.$$

$$999967 := -99/\sqrt{9} + (\sqrt{9} + 7)^6.$$

$$999976 := \sqrt{9} - \sqrt{9} \times 9 + (\sqrt{9} + 7)^6.$$

7 Patterned Selfie Numbers

As explained in subsection 1.5, here we shall present *patterned Selfie numbers* in two different ways. One in order of digits and another in decreasing order of digits. As explained above, the numbers are limited only for six digits without factorial.

7.1 Patterned Selfie Numbers in Order of Digits

$$102487 = \sqrt{(10 + 2/\sqrt{4})^8} \times 7$$

$$1024870 = \sqrt{(10 + 2/\sqrt{4})^8} \times 70$$

$$104976 = (10 - \sqrt{4}) \times \sqrt{9^7} \times 6$$

$$1049760 = (10 - \sqrt{4}) \times \sqrt{9^7} \times 60$$

$$106929 = (106 + \sqrt{9})^2 \times 9$$

$$1069290 = (106 + \sqrt{9})^2 \times 90$$

$$116645 = 1 \times (1 + 6^6/\sqrt{4}) \times 5$$

$$1166450 = 1 \times (1 + 6^6/\sqrt{4}) \times 50$$

$$117128 = 11^{7-1-2} \times 8$$

$$1171280 = 11^{7-1-2} \times 80$$

$$117396 = (-117 + 3^9) \times 6$$

$$1173960 = (-117 + 3^9) \times 60$$

$$117655 = (1 + (1 + 7^6)/5) \times 5$$

$$1176550 = (1 + (1 + 7^6)/5) \times 50$$

$$117996 = 1 \times (-17 + \sqrt{9^9}) \times 6$$

$$1179960 = 1 \times (-17 + \sqrt{9^9}) \times 60$$

$$124386 = (12^4 + 3 - 8) \times 6$$

$$1243860 = (12^4 + 3 - 8) \times 60$$

$$124413 = (12^4 \times \sqrt{4} - 1) \times 3$$

$$1244130 = (12^4 \times \sqrt{4} - 1) \times 30$$

$$124852 = \sqrt{(1 - 2 \times 4)^8} \times 52$$

$$1248520 = \sqrt{(1 - 2 \times 4)^8} \times 520$$

$$129375 = (12^{\sqrt{9}} - 3) \times 75$$

$$1293750 = (12^{\sqrt{9}} - 3) \times 750$$

$$131072 = (1 + 3)^{1+07} \times 2$$

$$1310720 = (1 + 3)^{1+07} \times 20$$

$$134456 = 1 \times (3 + 4)^4 \times 56$$

$$1344560 = 1 \times (3 + 4)^4 \times 560$$

$$136462 = (\sqrt{13^6} + 4) \times 62$$

$$1364620 = (\sqrt{13^6} + 4) \times 620$$

$$136857 = \sqrt{(13 - 6)^8} \times 57$$

$$1368570 = \sqrt{(13 - 6)^8} \times 570$$

$$137979 = (1 + (3^7 + \sqrt{9}) \times 7) \times 9$$

$$1379790 = (1 + (3^7 + \sqrt{9}) \times 7) \times 90$$

$$138915 = (13 + 8)^{\sqrt{9}} \times 15$$

$$1389150 = (13 + 8)^{\sqrt{9}} \times 150$$

$$139953 = (((1 + 3) \times 9)^{\sqrt{9}} - 5) \times 3$$

$$1399530 = (((1 + 3) \times 9)^{\sqrt{9}} - 5) \times 30$$

$$146461 = (1^4 + 6)^4 \times 61$$

$$1464610 = (1^4 + 6)^4 \times 610$$

$$147249 = (1 + 4^7 - 24) \times 9$$

$$1472490 = (1 + 4^7 - 24) \times 90$$

$$147429 = (-1 + 4^7 - 4/2) \times 9$$

$$1474290 = (-1 + 4^7 - 4/2) \times 90$$

$$147519 = (1 + 4^7 + 5 + 1) \times 9$$

$$1475190 = (1 + 4^7 + 5 + 1) \times 90$$

$$148862 = \sqrt{\sqrt{(1 + 48)^8}} \times 62$$

$$1488620 = \sqrt{\sqrt{(1 + 48)^8}} \times 620$$

$$148945 = ((-1 + 4 \times 8)^{\sqrt{9}} - \sqrt{4}) \times 5$$

$$1489450 = ((-1 + 4 \times 8)^{\sqrt{9}} - \sqrt{4}) \times 50$$

$$156225 = (-1 + (5^6 - 2) \times 2) \times 5$$

$$1562250 = (-1 + (5^6 - 2) \times 2) \times 50$$

$$156235 = 1 \times (5^6 \times 2 - 3) \times 5$$

$$1562350 = 1 \times (5^6 \times 2 - 3) \times 50$$

$$156245 = (-1 + 5^6 \times (-2 + 4)) \times 5$$

$$1562450 = (-1 + 5^6 \times (-2 + 4)) \times 50$$

$$156251 = (1 + 5^6 \times 2 \times 5) \times 1$$

$$1562510 = (1 + 5^6 \times 2 \times 5) \times 10$$

$$156275 = ((-1 + 5^6) \times 2 + 7) \times 5$$

$$1562750 = ((-1 + 5^6) \times 2 + 7) \times 50$$

$$156285 = (-1 + 5^6 \times 2 + 8) \times 5$$

$$1562850 = (-1 + 5^6 \times 2 + 8) \times 50$$

$$156295 = (1 \times 5^6 \times 2 + 9) \times 5$$

$$1562950 = (1 \times 5^6 \times 2 + 9) \times 50$$

$$158466 = (15 - 8)^4 \times 66$$

$$1584660 = (15 - 8)^4 \times 660$$

$$158499 = (1 + \sqrt{(5 \times 8)^4}) \times 99$$

$$1584990 = (1 + \sqrt{(5 \times 8)^4}) \times 990$$

$$160867 = \sqrt{(1 + 6)^{08}} \times 67$$

$$1608670 = \sqrt{(1 + 6)^{08}} \times 670$$

$$161051 = (1^6 + 10)^5 \times 1$$

$$1610510 = (1^6 + 10)^5 \times 10$$

$$163835 = (-1 + (-6 + 38)^3) \times 5$$

$$1638350 = (-1 + (-6 + 38)^3) \times 50$$

$$163855 = (1 \times 6 - 3 + 8^5) \times 5$$

$$1638550 = (1 \times 6 - 3 + 8^5) \times 50$$

$$163875 = (16^3 \times 8 + 7) \times 5$$

$$1638750 = (16^3 \times 8 + 7) \times 50$$

$$165888 = \sqrt{(\sqrt{16} \times (-5 + 8))^8} \times 8$$

$$1658880 = \sqrt{(\sqrt{16} \times (-5 + 8))^8} \times 80$$

$$167286 = (167^2 - 8) \times 6$$

$$1672860 = (167^2 - 8) \times 60$$

$$170471 = (1 \times 7^{04}) \times 71$$

$$1704710 = (1 \times 7^{04}) \times 710$$

$$172872 = 1 \times (7^{\sqrt{2 \times 8}}) \times 72$$

$$1728720 = 1 \times (7^{\sqrt{2 \times 8}}) \times 720$$

$$175232 = (-1 + 75)^2 \times 32$$

$$1752320 = (-1 + 75)^2 \times 320$$

$$175446 = \sqrt{(175 - 4)^4} \times 6$$

$$1754460 = \sqrt{(175 - 4)^4} \times 60$$

$$177674 = 1 \times 7 \times \sqrt{7^6} \times 74$$

$$1776740 = 1 \times 7 \times \sqrt{7^6} \times 740$$

$$179469 = (17 \times \sqrt{9})^{\sqrt{4}} \times 69$$

$$1794690 = (17 \times \sqrt{9})^{\sqrt{4}} \times 690$$

$$181447 = (1 - 81 \times \sqrt{4})^{\sqrt{4}} \times 7$$

$$1814470 = (1 - 81 \times \sqrt{4})^{\sqrt{4}} \times 70$$

$$182476 = (1 + 8 - 2)^4 \times 76$$

$$1824760 = (1 + 8 - 2)^4 \times 760$$

$$184275 = (-1 + 8^4) \times (2 + 7) \times 5$$

$$1842750 = (-1 + 8^4) \times (2 + 7) \times 50$$

$$184325 = (1 + 8^4 \times 3^2) \times 5$$

$$1843250 = (1 + 8^4 \times 3^2) \times 50$$

$$184329 = (1 + 8^4 \times (3 + 2)) \times 9$$

$$1843290 = (1 + 8^4 \times (3 + 2)) \times 90$$

$$184335 = (1 + 8^4 \times 3) \times 3 \times 5$$

$$1843350 = (1 + 8^4 \times 3) \times 3 \times 50$$

$$184365 = (1 + 8^4) \times (3 + 6) \times 5$$

$$1843650 = (1 + 8^4) \times (3 + 6) \times 50$$

$$184495 = (-1 + (8^4 + 4) \times 9) \times 5$$

$$1844950 = (-1 + (8^4 + 4) \times 9) \times 50$$

$$184545 = 1 \times (8^4 + 5) \times 45$$

$$1845450 = 1 \times (8^4 + 5) \times 450$$

$$184877 = (8 - 1)^{-4+8} \times 77$$

$$1848770 = (8 - 1)^{-4+8} \times 770$$

$$186624 = (18 \times (6 + 6))^2 \times 4$$

$$1866240 = (18 \times (6 + 6))^2 \times 40$$

$$186644 = (1 + 8 + 6^6 - 4) \times 4$$

$$1866440 = (1 + 8 + 6^6 - 4) \times 40$$

$$186684 = (-1 + 8 + 6^6 + 8) \times 4$$

$$1866840 = (-1 + 8 + 6^6 + 8) \times 40$$

$$187278 = ((-1 + 8) \times 7)^2 \times 78$$

$$1872780 = ((-1 + 8) \times 7)^2 \times 780$$

$$188646 = (-1 + \sqrt{8^8} + 6) \times 46$$

$$1886460 = (-1 + \sqrt{8^8} + 6) \times 460$$

$$194481 = 1 \times (9 - \sqrt{4})^4 \times 81$$

$$1944810 = 1 \times (9 - \sqrt{4})^4 \times 810$$

$$194692 = (1 + 9 + 46^{\sqrt{9}}) \times 2$$

$$1946920 = (1 + 9 + 46^{\sqrt{9}}) \times 20$$

$$196882 = \sqrt{(1^9 + 6)^8} \times 82$$

$$1968820 = \sqrt{(1^9 + 6)^8} \times 820$$

$$209952 = (2 \times 09)^{9-5} \times 2$$

$$2099520 = (2 \times 09)^{9-5} \times 20$$

$$218491 = (-2 + 1 + 8)^4 \times 91$$

$$2184910 = (-2 + 1 + 8)^4 \times 910$$

$$227529 = (22 \times 7 + 5)^2 \times 9$$

$$2275290 = (22 \times 7 + 5)^2 \times 90$$

$$228488 = \sqrt{((-2 + 28)/\sqrt{4})^8} \times 8$$

$$2284880 = \sqrt{((-2 + 28)/\sqrt{4})^8} \times 80$$

$$229397 = (2^{2 \times 9 - 3} + \sqrt{9}) \times 7$$

$$2293970 = (2^{2 \times 9 - 3} + \sqrt{9}) \times 70$$

$$232324 = (2 - 3^{2+3})^2 \times 4$$

$$2323240 = (2 - 3^{2+3})^2 \times 40$$

$$232897 = \sqrt{(2 - 3^2)^8} \times 97$$

$$2328970 = \sqrt{(2 - 3^2)^8} \times 970$$

$$233255 = ((2 \times 3)^{3 \times 2} - 5) \times 5$$

$$2332550 = ((2 \times 3)^{3 \times 2} - 5) \times 50$$

$$233295 = ((2 \times 3)^{3 \times 2} + \sqrt{9}) \times 5$$

$$2332950 = ((2 \times 3)^{3 \times 2} + \sqrt{9}) \times 50$$

$$234365 = (-2 + 3 \times (\sqrt{4} + 3)^6) \times 5$$

$$2343650 = (-2 + 3 \times (\sqrt{4} + 3)^6) \times 50$$

$$234375 = (2 + 3)^4 \times 375$$

$$2343750 = (2 + 3)^4 \times 3750$$

$$236196 = 2 \times 3^{6+1} \times 9 \times 6$$

$$2361960 = 2 \times 3^{6+1} \times 9 \times 60$$

$$238328 = (23 + 8)^{\sqrt{3^2}} \times 8$$

$$2383280 = (23 + 8)^{\sqrt{3^2}} \times 80$$

$$238464 = \sqrt{(2 \times 3)^8} \times 46 \times 4$$

$$2384640 = \sqrt{(2 \times 3)^8} \times 46 \times 40$$

$$253135 = (2 + (5 \times 3)^{1+3}) \times 5$$

$$2531350 = (2 + (5 \times 3)^{1+3}) \times 50$$

$$266565 = (2^{6+6} + 5) \times 65$$

$$2665650 = (2^{6+6} + 5) \times 650$$

$$273375 = (2 + 7)^3 \times 375$$

$$2733750 = (2 + 7)^3 \times 3750$$

$$278868 = (-2 + 7 + \sqrt{8^8}) \times 68$$

$$2788680 = (-2 + 7 + \sqrt{8^8}) \times 680$$

$$279666 = ((2 - 7) \times 9 + 6^6) \times 6$$

$$2796660 = ((2 - 7) \times 9 + 6^6) \times 60$$

$$279841 = (2 \times 7 + 9)^{8-4} \times 1$$

$$2798410 = (2 \times 7 + 9)^{8-4} \times 10$$

$$279936 = (27 + 9)^{9/3} \times 6$$

$$2799360 = (27 + 9)^{9/3} \times 60$$

$$279966 = (-2 + 7 + (9 - \sqrt{9})^6) \times 6$$

$$2799660 = (-2 + 7 + (9 - \sqrt{9})^6) \times 60$$

$$289444 = (2^8 + 9 + 4)^{\sqrt{4}} \times 4$$

$$2894440 = (2^8 + 9 + 4)^{\sqrt{4}} \times 40$$

$$29282 = (2 + 9)^{\sqrt{2 \times 8}} \times 2$$

$$292820 = (2 + 9)^{\sqrt{2 \times 8}} \times 20$$

$$294849 = (2 - 9 + 4^8/\sqrt{4}) \times 9$$

$$2948490 = (2 - 9 + 4^8/\sqrt{4}) \times 90$$

$$294895 = (2 + (9^4 - 8) \times 9) \times 5$$

$$2948950 = (2 + (9^4 - 8) \times 9) \times 50$$

$$294939 = (2^{9+\sqrt{4 \times 9}} + 3) \times 9$$

$$2949390 = (2^{9+\sqrt{4 \times 9}} + 3) \times 90$$

$$294955 = (-29 \times \sqrt{4} + 9^5) \times 5$$

$$2949550 = (-29 \times \sqrt{4} + 9^5) \times 50$$

$$295195 = (-2 + 9^5 + 1 - 9) \times 5$$

$$2951950 = (-2 + 9^5 + 1 - 9) \times 50$$

$$295235 = (-2 + 9^5) \times (-2 + 3) \times 5$$

$$2952350 = (-2 + 9^5) \times (-2 + 3) \times 50$$

$$295245 = (2 + 9^5 + 2 - 4) \times 5$$

$$2952450 = (2 + 9^5 + 2 - 4) \times 50$$

$$295285 = (2 + 9^5 - 2 + 8) \times 5$$

$$2952850 = (2 + 9^5 - 2 + 8) \times 50$$

$$295295 = (2 + 9^5 + 2^{\sqrt{9}}) \times 5$$

$$2952950 = (2 + 9^5 + 2^{\sqrt{9}}) \times 50$$

$$295465 = (-2 + 9^5 + 46) \times 5$$

$$2954650 = (-2 + 9^5 + 46) \times 50$$

$$295505 = (2 + 9^5 + 50) \times 5$$

$$2955050 = (2 + 9^5 + 50) \times 50$$

$$296344 = (((-2 + 9) \times 6)^3 - \sqrt{4}) \times 4$$

$$2963440 = (((-2 + 9) \times 6)^3 - \sqrt{4}) \times 40$$

$$296384 = (((-2 + 9) \times 6)^3 + 8) \times 4$$

$$2963840 = (((-2 + 9) \times 6)^3 + 8) \times 40$$

$$299575 = (2^9 + 9) \times 575$$

$$2995750 = (2^9 + 9) \times 5750$$

$$312325 = 31^2 \times 325$$

$$3123250 = 31^2 \times 3250$$

$$314928 = \sqrt{3^{14}} \times 9 \times 2 \times 8$$

$$3149280 = \sqrt{3^{14}} \times 9 \times 2 \times 80$$

$$324723 = (327 + \sqrt{4})^2 \times 3$$

$$3247230 = (327 + \sqrt{4})^2 \times 30$$

$$325125 = ((3 + 2) \times 51)^2 \times 5$$

$$3251250 = ((3 + 2) \times 51)^2 \times 50$$

$$326557 = (3 \times 2 \times 6^5 - 5) \times 7$$

$$3265570 = (3 \times 2 \times 6^5 - 5) \times 70$$

$$326627 = (3 + 2 + 6^{\sqrt{6^2}}) \times 7$$

$$3266270 = (3 + 2 + 6^{\sqrt{6^2}}) \times 70$$

$$326697 = ((3 \times 2)^6 + 6 + 9) \times 7$$

$$3266970 = ((3 \times 2)^6 + 6 + 9) \times 70$$

$$327485 = (-32 - 7 + 4^8) \times 5$$

$$3274850 = (-32 - 7 + 4^8) \times 50$$

$$327695 = (3 + 2^{7+6+\sqrt{9}}) \times 5$$

$$3276950 = (3 + 2^{7+6+\sqrt{9}}) \times 50$$

$$333234 = (3 \times 33)^2 \times 34$$

$$3332340 = (3 \times 33)^2 \times 340$$

$$34295 = (3 + 4^2)^{\sqrt{9}} \times 5$$

$$342950 = (3 + 4^2)^{\sqrt{9}} \times 50$$

$$345744 = ((-3 + 45) \times 7)^{\sqrt{4}} \times 4$$

$$3457440 = ((-3 + 45) \times 7)^{\sqrt{4}} \times 40$$

$$348145 = \sqrt{(3 + 4)^8} \times 145$$

$$3481450 = \sqrt{(3 + 4)^8} \times 1450$$

$$351232 = (3 + 51 + 2)^3 \times 2$$

$$3512320 = (3 + 51 + 2)^3 \times 20$$

$$352947 = 3 \times (5 + 2)^{9-4} \times 7$$

$$3529470 = 3 \times (5 + 2)^{9-4} \times 70$$

$$354186 = (3^{5 \times \sqrt{4}} - 18) \times 6$$

$$3541860 = (3^{5 \times \sqrt{4}} - 18) \times 60$$

$$354246 = (3^{5 \times \sqrt{4}} - 2 \times 4) \times 6$$

$$3542460 = (3^{5 \times \sqrt{4}} - 2 \times 4) \times 60$$

$$354273 = (3^{5 \times \sqrt{4}} \times 2 - 7) \times 3$$

$$3542730 = (3^{5 \times \sqrt{4}} \times 2 - 7) \times 30$$

$$354276 = (-3 + (5 + 4)^{-2+7}) \times 6$$

$$3542760 = (-3 + (5 + 4)^{-2+7}) \times 60$$

$$354277 = ((3 \times 5)^4 - 2 \times 7) \times 7$$

$$3542770 = ((3 \times 5)^4 - 2 \times 7) \times 70$$

$$354294 = \sqrt{4} \times 9^{2+\sqrt{4+5}} \times 3$$

$$3542940 = \sqrt{4} \times 9^{2+\sqrt{4+5}} \times 30$$

$$354486 = (3^{5 \times \sqrt{4}} + 4 \times 8) \times 6$$

$$3544860 = (3^{5 \times \sqrt{4}} + 4 \times 8) \times 60$$

$$354487 = ((3 \times 5)^4 + \sqrt{4} \times 8) \times 7$$

$$3544870 = ((3 \times 5)^4 + \sqrt{4} \times 8) \times 70$$

$$354627 = ((3 \times 5)^4 + 6^2) \times 7$$

$$3546270 = ((3 \times 5)^4 + 6^2) \times 70$$

$$354726 = (3^{5 \times \sqrt{4}} + 72) \times 6$$

$$3547260 = (3^{5 \times \sqrt{4}} + 72) \times 60$$

$$356445 = (3^5 + 6 \times 4)^{\sqrt{4}} \times 5$$

$$3564450 = (3^5 + 6 \times 4)^{\sqrt{4}} \times 50$$

$$360855 = (-3 + 6)^{08} \times 55$$

$$3608550 = (-3 + 6)^{08} \times 550$$

$$366795 = (-3^6 + (6 \times 7)^{\sqrt{9}}) \times 5$$

$$3667950 = (-3^6 + (6 \times 7)^{\sqrt{9}}) \times 50$$

$$367272 = (3^6 \times 7 + 2) \times 72$$

$$3672720 = (3^6 \times 7 + 2) \times 720$$

$$374439 = (-3 + 7^4 \times 4) \times 39$$

$$3744390 = (-3 + 7^4 \times 4) \times 390$$

$$374452 = (3 \times 7^4 - \sqrt{4}) \times 52$$

$$3744520 = (3 \times 7^4 - \sqrt{4}) \times 520$$

$$375168 = 3 \times (7 + 5^{1 \times 6}) \times 8$$

$$3751680 = 3 \times (7 + 5^{1 \times 6}) \times 80$$

$$391864 = (-3^9 + (-1 + 8)^6) \times 4$$

$$3918640 = (-3^9 + (-1 + 8)^6) \times 40$$

$$393222 = (2 + 2^{2+9}) \times 3$$

$$3932220 = (2 + 2^{2+9}) \times 30$$

$$393645 = (-3 + \sqrt{9^{3+6}} \times 4) \times 5$$

$$3936450 = (-3 + \sqrt{9^{3+6}} \times 4) \times 50$$

$$397535 = (3 \times (9 + 7) - 5)^3 \times 5$$

$$3975350 = (3 \times (9 + 7) - 5)^3 \times 50$$

$$411845 = (41 \times (-1 + 8))^{\sqrt{4}} \times 5$$

$$4118450 = (41 \times (-1 + 8))^{\sqrt{4}} \times 50$$

$$413357 = (\sqrt{4} + 1 \times (3 \times 3)^5) \times 7$$

$$4133570 = (\sqrt{4} + 1 \times (3 \times 3)^5) \times 70$$

$$413466 = (41^3 - 4 - 6) \times 6$$

$$4134660 = (41^3 - 4 - 6) \times 60$$

$$413496 = (41^3 + 4 - 9) \times 6$$

$$4134960 = (41^3 + 4 - 9) \times 60$$

$$413526 = 41^{\sqrt{3 \times 5 - 2}} \times 6$$

$$4135260 = 41^{\sqrt{3 \times 5 - 2}} \times 60$$

$$413556 = (41^3 + \sqrt{5 \times 5}) \times 6$$

$$4135560 = (41^3 + \sqrt{5 \times 5}) \times 60$$

$$417595 = (-\sqrt{4} + 17^{-5+9}) \times 5$$

$$4175950 = (-\sqrt{4} + 17^{-5+9}) \times 50$$

$$417625 = (4 + 17^{6-2}) \times 5$$

$$4176250 = (4 + 17^{6-2}) \times 50$$

$$419888 = (-\sqrt{4} + 1 \times \sqrt{9^8} \times 8) \times 8$$

$$4198880 = (-\sqrt{4} + 1 \times \sqrt{9^8} \times 8) \times 80$$

$$435456 = (\sqrt{4} \times 3)^{\sqrt{\sqrt{5^4}}} \times 56$$

$$4354560 = (\sqrt{4} \times 3)^{\sqrt{\sqrt{5^4}}} \times 560$$

$$438928 = (-4 + 38^{\sqrt{9}} - 2) \times 8$$

$$4389280 = (-4 + 38^{\sqrt{9}} - 2) \times 80$$

$$438944 = \sqrt{4} \times (38^{\sqrt{9}} - 4) \times 4$$

$$4389440 = \sqrt{4} \times (38^{\sqrt{9}} - 4) \times 40$$

$$442368 = 4 \times \sqrt{(4 \times 2 \times 3)^6} \times 8$$

$$4423680 = 4 \times \sqrt{(4 \times 2 \times 3)^6} \times 80$$

$$455147 = (-4 + (5 \times 51)^{\sqrt{4}}) \times 7$$

$$4551470 = (-4 + (5 \times 51)^{\sqrt{4}}) \times 70$$

$$466375 = (\sqrt{4} \times 6^6 - 37) \times 5$$

$$4663750 = (\sqrt{4} \times 6^6 - 37) \times 50$$

$$466495 = (\sqrt{4} \times 6^6 - 4 - 9) \times 5$$

$$4664950 = (\sqrt{4} \times 6^6 - 4 - 9) \times 50$$

$$466515 = (\sqrt{4} \times (6^6 - 5) + 1) \times 5$$

$$4665150 = (\sqrt{4} \times (6^6 - 5) + 1) \times 50$$

$$466525 = (\sqrt{4} \times 6^6 - 5 - 2) \times 5$$

$$4665250 = (\sqrt{4} \times 6^6 - 5 - 2) \times 50$$

$$466536 = (-4 + 6^6 \times 5/3) \times 6$$

$$4665360 = (-4 + 6^6 \times 5/3) \times 60$$

$$466575 = (\sqrt{4} \times (6^6 + 5) - 7) \times 5$$

$$4665750 = (\sqrt{4} \times (6^6 + 5) - 7) \times 50$$

$$466585 = \left(\sqrt{4} \times 6^6 + \sqrt{\sqrt{\sqrt{5^8}}} \right) \times 5$$

$$4665850 = \left(\sqrt{4} \times 6^6 + \sqrt{\sqrt{\sqrt{5^8}}} \right) \times 50$$

$$466595 = (\sqrt{4} \times (6^6 + 5) - \sqrt{9}) \times 5$$

$$4665950 = (\sqrt{4} \times (6^6 + 5) - \sqrt{9}) \times 50$$

$$466615 = (\sqrt{4} \times (6 + 6^6) - 1) \times 5$$

$$4666150 = (\sqrt{4} \times (6 + 6^6) - 1) \times 50$$

$$466635 = (\sqrt{4} \times (6 + 6^6) + 3) \times 5$$

$$4666350 = (\sqrt{4} \times (6 + 6^6) + 3) \times 50$$

$$466652 = (46 + 6^6 \times 5) \times 2$$

$$4666520 = (46 + 6^6 \times 5) \times 20$$

$$470604 = (\sqrt{4} + 7^{06}) \times 04$$

$$4706040 = (\sqrt{4} + 7^{06}) \times 040$$

$$471576 = (471 + 5^7) \times 6$$

$$4715760 = (471 + 5^7) \times 60$$

$$473344 = (4 + 7^3 - 3)^{\sqrt{4}} \times 4$$

$$4733440 = (4 + 7^3 - 3)^{\sqrt{4}} \times 40$$

$$483153 = (\sqrt{48 \times 3} - 1)^5 \times 3$$

$$4831530 = (\sqrt{48 \times 3} - 1)^5 \times 30$$

$$491775 = (-4 + \sqrt{9^{1+7}}) \times 75$$

$$4917750 = (-4 + \sqrt{9^{1+7}}) \times 750$$

$$492205 = 49^2 \times 205$$

$$4922050 = 49^2 \times 2050$$

$$492375 = (4 + \sqrt{9^{23}}) \times 75$$

$$4923750 = (4 + \sqrt{9^{23}}) \times 750$$

$$493839 = (-4 + \sqrt{9} + 38^3) \times 9$$

$$4938390 = (-4 + \sqrt{9} + 38^3) \times 90$$

$$499755 = (-49 + (\sqrt{9} + 7)^5) \times 5$$

$$4997550 = (-49 + (\sqrt{9} + 7)^5) \times 50$$

$$524088 = (-5^2 + 4^{08}) \times 8$$

$$5240880 = (-5^2 + 4^{08}) \times 80$$

$$524248 = (-5 + (-2 + 4)^{2^4}) \times 8$$

$$5242480 = (-5 + (-2 + 4)^{2^4}) \times 80$$

$$524288 = (5 - 2/(4/2))^8 \times 8$$

$$5242880 = (5 - 2/(4/2))^8 \times 80$$

$$524328 = (5 + 2^{\sqrt{4^3 \times 2}}) \times 8$$

$$5243280 = (5 + 2^{\sqrt{4^3 \times 2}}) \times 80$$

$$524392 = (52 + 4^{3 \times \sqrt{9}}) \times 2$$

$$5243920 = (52 + 4^{3 \times \sqrt{9}}) \times 20$$

$$524488 = (5^{-2+4} + 4^8) \times 8$$

$$5244880 = (5^{-2+4} + 4^8) \times 80$$

$$526833 = (-5 + (2^6 - 8)^3) \times 3$$

$$5268330 = (-5 + (2^6 - 8)^3) \times 30$$

$$538412 = (5 + 3^8) \times 41 \times 2$$

$$5384120 = (5 + 3^8) \times 41 \times 20$$

$$559539 = (5^5 + 9^5 - 3) \times 9$$

$$5595390 = (5^5 + 9^5 - 3) \times 90$$

$$559872 = (\sqrt{5 \times 5} + 9 - 8)^7 \times 2$$

$$5598720 = (\sqrt{5 \times 5} + 9 - 8)^7 \times 20$$

$$562419 = ((5^6 - 2) \times 4 - 1) \times 9$$

$$5624190 = ((5^6 - 2) \times 4 - 1) \times 90$$

$$563922 = ((56 + 3) \times 9)^2 \times 2$$

$$5639220 = ((56 + 3) \times 9)^2 \times 20$$

$$566937 = \left(\sqrt{(5 \times 6)^6} - \sqrt{9} \right) \times 3 \times 7$$

$$5669370 = \left(\sqrt{(5 \times 6)^6} - \sqrt{9} \right) \times 3 \times 70$$

$$574644 = (5^7 + 4^{\sqrt{64}}) \times 4$$

$$5746440 = (5^7 + 4^{\sqrt{64}}) \times 40$$

$$574992 = (-5 + 74 - \sqrt{9})^{\sqrt{9}} \times 2$$

$$5749920 = (-5 + 74 - \sqrt{9})^{\sqrt{9}} \times 20$$

$$583443 = (5 + 8 - 34)^4 \times 3$$

$$5834430 = (5 + 8 - 34)^4 \times 30$$

$$584199 = (-\sqrt{5^8} + 4^{-1+9}) \times 9$$

$$5841990 = (-\sqrt{5^8} + 4^{-1+9}) \times 90$$

$$584647 = (5 + 8/4 \times 6)^4 \times 7$$

$$5846470 = (5 + 8/4 \times 6)^4 \times 70$$

$$588245 = \left(5 + \sqrt{\sqrt{8+8}} \right)^{2+4} \times 5$$

$$5882450 = \left(5 + \sqrt{\sqrt{8+8}} \right)^{2+4} \times 50$$

$$588765 = ((5 + 8) \times 8 + 7^6) \times 5$$

$$5887650 = ((5 + 8) \times 8 + 7^6) \times 50$$

$$629984 = (6 - 2 + \sqrt{9^9}) \times 8 \times 4$$

$$6299840 = (6 - 2 + \sqrt{9^9}) \times 8 \times 40$$

$$640024 = (6 + 400^2) \times 4$$

$$6400240 = (6 + 400^2) \times 40$$

$$653184 = 6^5 \times (3 + 18) \times 4$$

$$6531840 = 6^5 \times (3 + 18) \times 40$$

$$655284 = (6^5 + 5^2) \times 84$$

$$6552840 = (6^5 + 5^2) \times 840$$

$$655935 = (6 \times 5^5 - 9) \times 35$$

$$6559350 = (6 \times 5^5 - 9) \times 350$$

$$\begin{aligned}
656187 &= (6 \times 5^6 - 1 - 8) \times 7 & 746496 &= (7 + \sqrt{4}) \times (6 \times 4)^{\sqrt{9}} \times 6 & 839673 &= ((-8 + 3) \times 9 + 6^7) \times 3 \\
6561870 &= (6 \times 5^6 - 1 - 8) \times 70 & 7464960 &= (7 + \sqrt{4}) \times (6 \times 4)^{\sqrt{9}} \times 60 & 8396730 &= ((-8 + 3) \times 9 + 6^7) \times 30 \\
656376 &= (6 + 5^6 - 3) \times 7 \times 6 & 746523 &= (7 + (\sqrt{4} \times 6)^5 + 2) \times 3 & 839793 &= (-8 + (-3 + 9)^7 + \sqrt{9}) \times 3 \\
6563760 &= (6 + 5^6 - 3) \times 7 \times 60 & 7465230 &= (7 + (\sqrt{4} \times 6)^5 + 2) \times 30 & 8397930 &= (-8 + (-3 + 9)^7 + \sqrt{9}) \times 30 \\
656397 &= (6 \times (5^6 + 3) + \sqrt{9}) \times 7 & 756315 &= 7^5 \times (6 - 3) \times 15 & 907596 &= (9 \times (07)^5 + \sqrt{9}) \times 6 \\
6563970 &= (6 \times (5^6 + 3) + \sqrt{9}) \times 70 & 7563150 &= 7^5 \times (6 - 3) \times 150 & 9075960 &= (9 \times (07)^5 + \sqrt{9}) \times 60 \\
656817 &= (6 \times 5^6 + 81) \times 7 & 756325 &= (7^5 \times (6 + 3) + 2) \times 5 & 911493 &= (9 \times 11)^{\sqrt{4}} \times 93 \\
6568170 &= (6 \times 5^6 + 81) \times 70 & 7563250 &= (7^5 \times (6 + 3) + 2) \times 50 & 9114930 &= (9 \times 11)^{\sqrt{4}} \times 930 \\
658845 &= (6 + 5)^{\sqrt{8+8}} \times 45 & 756495 &= (7^5 + 6 - \sqrt{4}) \times 9 \times 5 & 912247 &= (9 + 12 - 2)^4 \times 7 \\
6588450 &= (6 + 5)^{\sqrt{8+8}} \times 450 & 7564950 &= (7^5 + 6 - \sqrt{4}) \times 9 \times 50 & 9122470 &= (9 + 12 - 2)^4 \times 70 \\
659685 &= (6^5 - 9 - 6) \times 85 & 756549 &= ((7^5 + 6) \times 5 - 4) \times 9 & 924385 &= (9 - 2)^4 \times 385 \\
6596850 &= (6^5 - 9 - 6) \times 850 & 7565490 &= ((7^5 + 6) \times 5 - 4) \times 90 & 9243850 &= (9 - 2)^4 \times 3850 \\
684288 &= \sqrt{6^8} \times (4 + 2) \times 88 & 766927 &= (7 + 6 \times 6 \times 9)^2 \times 7 & 938492 &= (93 + 8)^{\sqrt{4}} \times 92 \\
6842880 &= \sqrt{6^8} \times (4 + 2) \times 880 & 7669270 &= (7 + 6 \times 6 \times 9)^2 \times 70 & 9384920 &= (93 + 8)^{\sqrt{4}} \times 920 \\
688128 &= 6 \times \sqrt{8^8} \times 1 \times 28 & 777924 &= 7 \times 7 \times (7 \times 9)^2 \times 4 & 941168 &= (\sqrt{9} + (-4 + 11)^6) \times 8 \\
6881280 &= 6 \times \sqrt{8^8} \times 1 \times 280 & 7779240 &= 7 \times 7 \times (7 \times 9)^2 \times 40 & 9411680 &= (\sqrt{9} + (-4 + 11)^6) \times 80 \\
699735 &= (6^{9-\sqrt{9}} - 7) \times 3 \times 5 & 786393 &= (-7 + 8^6 + 3 - 9) \times 3 & 944559 &= ((9 \times \sqrt{4})^4 - 5 \times 5) \times 9 \\
6997350 &= (6^{9-\sqrt{9}} - 7) \times 3 \times 50 & 7863930 &= (-7 + 8^6 + 3 - 9) \times 30 & 9445590 &= ((9 \times \sqrt{4})^4 - 5 \times 5) \times 90 \\
699875 &= (6^9 / (9 \times 8) + 7) \times 5 & 786411 &= (-7 + 8^6) \times (4 - 1) \times 1 & 944784 &= 9^4 \times (4 \times 7 + 8) \times 4 \\
6998750 &= (6^9 / (9 \times 8) + 7) \times 50 & 7864110 &= (-7 + 8^6) \times (4 - 1) \times 10 & 9447840 &= 9^4 \times (4 \times 7 + 8) \times 40 \\
705642 &= (7^{05} - 6) \times 42 & 786423 &= (-7 + 8^6 + \sqrt{4^2}) \times 3 & 948395 &= \sqrt{(9 - \sqrt{4})^8} \times 395 \\
7056420 &= (7^{05} - 6) \times 420 & 7864230 &= (-7 + 8^6 + \sqrt{4^2}) \times 30 & 9483950 &= \sqrt{(9 - \sqrt{4})^8} \times 3950 \\
708295 &= \sqrt{7^{08}} \times 295 & 786483 &= (7 + 8^6 + \sqrt{4} + 8) \times 3 & 973944 &= ((9 \times 7)^3 - 9^4) \times 4 \\
7082950 &= \sqrt{7^{08}} \times 2950 & 7864830 &= (7 + 8^6 + \sqrt{4} + 8) \times 30 & 9739440 &= ((9 \times 7)^3 - 9^4) \times 40 \\
715822 &= 71^{\sqrt{5+8/2}} \times 2 & 789647 &= (7^{8-\sqrt{9}} - 6) \times 47 & 989497 &= (98 + \sqrt{9})^{\sqrt{4}} \times 97 \\
7158220 &= 71^{\sqrt{5+8/2}} \times 20 & 7896470 &= (7^{8-\sqrt{9}} - 6) \times 470 & 9894970 &= (98 + \sqrt{9})^{\sqrt{4}} \times 970 \\
741321 &= (7 \times 41 \times 3)^2 \times 1 & 796488 &= 7 \times (-\sqrt{9} + 6^4) \times 88 & 995319 &= ((\sqrt{9} + 9 \times 5)^3 - 1) \times 9 \\
7413210 &= (7 \times 41 \times 3)^2 \times 10 & 7964880 &= 7 \times (-\sqrt{9} + 6^4) \times 880 & 9953190 &= ((\sqrt{9} + 9 \times 5)^3 - 1) \times 90 \\
742572 &= ((7 + 4 + 2)^5 - 7) \times 2 & 798848 &= (79 \times \sqrt{8+8})^{\sqrt{4}} \times 8 & 995324 &= ((9 + \sqrt{9})^5 - 3 + 2) \times 4 \\
7425720 &= ((7 + 4 + 2)^5 - 7) \times 20 & 7988480 &= (79 \times \sqrt{8+8})^{\sqrt{4}} \times 80 & 9953240 &= ((9 + \sqrt{9})^5 - 3 + 2) \times 40 \\
742592 &= ((7 + 4 + 2)^5 + \sqrt{9}) \times 2 & 805255 &= (8 + 05 - 2)^5 \times 5 & 995544 &= ((9 + \sqrt{9})^5 + 54) \times 4 \\
7425920 &= ((7 + 4 + 2)^5 + \sqrt{9}) \times 20 & 8052550 &= (8 + 05 - 2)^5 \times 50 & 9955440 &= ((9 + \sqrt{9})^5 + 54) \times 40 \\
744385 &= (\sqrt{7^4} + 4) \sqrt{\sqrt{3^8}} \times 5 & 805655 &= (80 + (5 + 6)^5) \times 5 & & \\
7443850 &= (\sqrt{7^4} + 4) \sqrt{\sqrt{3^8}} \times 50 & 8056550 &= (80 + (5 + 6)^5) \times 50 & &
\end{aligned}$$

7.2 Patterned Selfie Numbers in Decreasing Order of Digits

$$\begin{aligned}
 137842 &= (-8 + \sqrt{7^4})^3 \times 2 \times 1 & 235294 &= ((9 \times 5 + 4)^3 - 2) \times 2 & 283648 &= 8864 \times 32 \\
 1378420 &= (-8 + \sqrt{7^4})^3 \times 2 \times 10 & 2352940 &= ((9 \times 5 + 4)^3 - 2) \times 20 & 2836480 &= 8864 \times 320 \\
 \\
 139644 &= 9 \times \sqrt{6^4} \times 431 & 235298 &= \sqrt{(9 + 8 \times 5)^{3 \times 2}} \times 2 & 29282 &= (\sqrt{9} + 8)^{2 \times 2} \times 2 \\
 1396440 &= 9 \times \sqrt{6^4} \times 4310 & 2352980 &= \sqrt{(9 + 8 \times 5)^{3 \times 2}} \times 20 & 292820 &= (\sqrt{9} + 8)^{2 \times 2} \times 20 \\
 \\
 145924 &= (95 \times 4 + \sqrt{4})^2 \times 1 & 236196 &= (9 \times 6 \times (6 + 3))^2 \times 1 & 294894 &= (-9 + 9 \times 8^4 \times 4) \times 2 \\
 1459240 &= (95 \times 4 + \sqrt{4})^2 \times 10 & 2361960 &= (9 \times 6 \times (6 + 3))^2 \times 10 & 2948940 &= (-9 + 9 \times 8^4 \times 4) \times 20 \\
 \\
 147456 &= (76 \times 5 + 4)^{\sqrt{4}} \times 1 & 239432 &= (\sqrt{9} + (4 + 3)^3)^2 \times 2 & 294984 &= (9 + 9 \times 8^4) \times 4 \times 2 \\
 1474560 &= (76 \times 5 + 4)^{\sqrt{4}} \times 10 & 2394320 &= (\sqrt{9} + (4 + 3)^3)^2 \times 20 & 2949840 &= (9 + 9 \times 8^4) \times 4 \times 20 \\
 \\
 149769 &= (9 + 9 \times 7 \times 6)^{\sqrt{4}} \times 1 & 244944 &= \sqrt{(9 \times \sqrt{4})^{\sqrt{4}+4}} \times 42 & 299376 &= 99 \times 7 \times 6^3 \times 2 \\
 1497690 &= (9 + 9 \times 7 \times 6)^{\sqrt{4}} \times 10 & 2449440 &= \sqrt{(9 \times \sqrt{4})^{\sqrt{4}+4}} \times 420 & 2993760 &= 99 \times 7 \times 6^3 \times 20 \\
 \\
 156984 &= \sqrt{9} \times 8 \times 6541 & 253125 &= 5 \times (5 \times 3)^{2 \times 2} \times 1 & 312975 &= 975 \times 321 \\
 1569840 &= \sqrt{9} \times 8 \times 65410 & 2531250 &= 5 \times (5 \times 3)^{2 \times 2} \times 10 & 3129750 &= 975 \times 3210 \\
 \\
 166464 &= (6 \times (66 + \sqrt{4}))^{\sqrt{4}} \times 1 & 262144 &= (6 - 4)^{-4+22} \times 1 & 314199 &= 9^{\sqrt{9}} \times 431 \times 1 \\
 1664640 &= (6 \times (66 + \sqrt{4}))^{\sqrt{4}} \times 10 & 2621440 &= (6 - 4)^{-4+22} \times 10 & 3141990 &= 9^{\sqrt{9}} \times 431 \times 10 \\
 \\
 169744 &= ((97 + 6) \times 4)^{\sqrt{4}} \times 1 & 263169 &= (9 \times (6 - 63))^2 \times 1 & 314925 &= (-\sqrt{9} + 54^3 \times 2) \times 1 \\
 1697440 &= ((97 + 6) \times 4)^{\sqrt{4}} \times 10 & 2631690 &= (9 \times (6 - 63))^2 \times 10 & 3149250 &= (-\sqrt{9} + 54^3 \times 2) \times 10 \\
 \\
 176469 &= (-\sqrt{9} + 7^6) \times 6/4 \times 1 & 264188 &= (-8 + (\sqrt{8^6} + \sqrt{4})^2) \times 1 & 314926 &= ((\sqrt{9} \times 6)^4 \times 3 - 2) \times 1 \\
 1764690 &= (-\sqrt{9} + 7^6) \times 6/4 \times 10 & 2641880 &= (-8 + (\sqrt{8^6} + \sqrt{4})^2) \times 10 & 3149260 &= ((\sqrt{9} \times 6)^4 \times 3 - 2) \times 10 \\
 \\
 178929 &= (9 \times (9 - 8 \times 7))^2 \times 1 & 265189 &= (-\sqrt{9} + \sqrt{8^6}) \times 521 & 321489 &= \sqrt{9^8} \times (4 + 3)^2 \times 1 \\
 1789290 &= (9 \times (9 - 8 \times 7))^2 \times 10 & 2651890 &= (-\sqrt{9} + \sqrt{8^6}) \times 5210 & 3214890 &= \sqrt{9^8} \times (4 + 3)^2 \times 10 \\
 \\
 193635 &= 9 \times 65 \times 331 & 268784 &= 8 \times (-8 + \sqrt{7^6+4}) \times 2 & 326613 &= (6^6 + 3)/3 \times 21 \\
 1936350 &= 9 \times 65 \times 3310 & 2687840 &= 8 \times (-8 + \sqrt{7^6+4}) \times 20 & 3266130 &= (6^6 + 3)/3 \times 210 \\
 \\
 229842 &= (\sqrt{9} + 8 \times 42)^2 \times 2 & 268915 &= (\sqrt{9} + (8 + 6)^5/2) \times 1 & 338551 &= (8^5 - 5)/3 \times 31 \\
 2298420 &= (\sqrt{9} + 8 \times 42)^2 \times 20 & 2689150 &= (\sqrt{9} + (8 + 6)^5/2) \times 10 & 3385510 &= (8^5 - 5)/3 \times 310 \\
 \\
 232974 &= 9 \times 7 \times 43^2 \times 2 & 269568 &= \sqrt{9} \times 8 \times \sqrt{6^6} \times 52 & 342792 &= (9 \times (\sqrt{7^4} - 3))^2 \times 2 \\
 2329740 &= 9 \times 7 \times 43^2 \times 20 & 2695680 &= \sqrt{9} \times 8 \times \sqrt{6^6} \times 520 & 3427920 &= (9 \times (\sqrt{7^4} - 3))^2 \times 20 \\
 \\
 & & & & 346794 &= ((\sqrt{9} - \sqrt{7^6})^{\sqrt{4}} - \sqrt{4}) \times 3 \\
 & & & & 3467940 &= ((\sqrt{9} - \sqrt{7^6})^{\sqrt{4}} - \sqrt{4}) \times 30 \\
 \\
 & & & & 349191 &= 9 \times 9 \times 4311 \\
 & & & & 3491910 &= 9 \times 9 \times 43110
 \end{aligned}$$

$$354294 = \sqrt{9^{54-43}} \times 2$$

$$3542940 = \sqrt{9^{54-43}} \times 20$$

$$354296 = (\sqrt{9^{6+5}} + 4 - 3) \times 2$$

$$3542960 = (\sqrt{9^{6+5}} + 4 - 3) \times 20$$

$$354393 = (9^5 \times \sqrt{4} + 33) \times 3$$

$$3543930 = (9^5 \times \sqrt{4} + 33) \times 30$$

$$357914 = (\sqrt{9} + (75 - 4)^3) \times 1$$

$$3579140 = (\sqrt{9} + (75 - 4)^3) \times 10$$

$$371293 = (9 + 7 - 3)^{3+2} \times 1$$

$$3712930 = (9 + 7 - 3)^{3+2} \times 10$$

$$371349 = 9 \times (7 + 4)^3 \times 31$$

$$3713490 = 9 \times (7 + 4)^3 \times 310$$

$$394272 = (9 \times \sqrt{7^4} + 3)^2 \times 2$$

$$3942720 = (9 \times \sqrt{7^4} + 3)^2 \times 20$$

$$415575 = 75 \times 5541$$

$$4155750 = 75 \times 55410$$

$$419913 = 9 \times ((9 \times 4)^3 + 1) \times 1$$

$$4199130 = 9 \times ((9 \times 4)^3 + 1) \times 10$$

$$433125 = 5^4 \times 33 \times 21$$

$$4331250 = 5^4 \times 33 \times 210$$

$$441344 = 4^4 \times 4 \times 431$$

$$4413440 = 4^4 \times 4 \times 4310$$

$$453759 = (9 \times 7^5 - 5 \times \sqrt{4}) \times 3$$

$$4537590 = (9 \times 7^5 - 5 \times \sqrt{4}) \times 30$$

$$453789 = \sqrt{\sqrt{\sqrt{9^8}} \times \sqrt{7^{5 \times \sqrt{4}}}} \times 3$$

$$4537890 = \sqrt{\sqrt{\sqrt{9^8}} \times \sqrt{7^{5 \times \sqrt{4}}}} \times 30$$

$$453795 = (9 \times \sqrt{7^{5+5}} + \sqrt{4}) \times 3$$

$$4537950 = (9 \times \sqrt{7^{5+5}} + \sqrt{4}) \times 30$$

$$453897 = \sqrt{\sqrt{\sqrt{9^8}} \times (7^5 + 4)} \times 3$$

$$4538970 = \sqrt{\sqrt{\sqrt{9^8}} \times (7^5 + 4)} \times 30$$

$$453962 = (9 \times 6 + 5 + \sqrt{4})^3 \times 2$$

$$4539620 = (9 \times 6 + 5 + \sqrt{4})^3 \times 20$$

$$459278 = (\sqrt{9^8} \times 7 \times 5 + 4) \times 2$$

$$4592780 = (\sqrt{9^8} \times 7 \times 5 + 4) \times 20$$

$$459279 = 9 + \sqrt{9^7} \times 5 \times 42$$

$$4592790 = 9 + \sqrt{9^7} \times 5 \times 420$$

$$468512 = (-8 + 6 \times 5)^4 \times 2 \times 1$$

$$4685120 = (-8 + 6 \times 5)^4 \times 2 \times 10$$

$$468528 = (8 + (8 - 6 \times 5)^4) \times 2$$

$$4685280 = (8 + (8 - 6 \times 5)^4) \times 20$$

$$471969 = (99 \times 7 - 6)^{\sqrt{4}} \times 1$$

$$4719690 = (99 \times 7 - 6)^{\sqrt{4}} \times 10$$

$$472896 = (\sqrt{9^8} + 7) \times \sqrt{6^4} \times 2$$

$$4728960 = (\sqrt{9^8} + 7) \times \sqrt{6^4} \times 20$$

$$483159 = ((\sqrt{9} + 8)^5 + \sqrt{4}) \times 3 \times 1$$

$$4831590 = ((\sqrt{9} + 8)^5 + \sqrt{4}) \times 3 \times 10$$

$$513216 = 6^{5+3-2} \times 11$$

$$5132160 = 6^{5+3-2} \times 110$$

$$523648 = (8^6 - 5 \times 4^3) \times 2$$

$$5236480 = (8^6 - 5 \times 4^3) \times 20$$

$$524268 = (8^6 - 5 \times 4/2) \times 2$$

$$5242680 = (8^6 - 5 \times 4/2) \times 20$$

$$524284 = (8^5 \times (4 + 4) - 2) \times 2$$

$$5242840 = (8^5 \times (4 + 4) - 2) \times 20$$

$$524292 = ((\sqrt{9} + 5)^{4+2} + 2) \times 2$$

$$5242920 = ((\sqrt{9} + 5)^{4+2} + 2) \times 20$$

$$524368 = (8^6 + 5 \times \sqrt{4^3}) \times 2$$

$$5243680 = (8^6 + 5 \times \sqrt{4^3}) \times 20$$

$$531438 = ((85 - 4)^3 - 3) \times 1$$

$$5314380 = ((85 - 4)^3 - 3) \times 10$$

$$531444 = ((54/\sqrt{4})^4 + 3) \times 1$$

$$5314440 = ((54/\sqrt{4})^4 + 3) \times 10$$

$$537472 = (-7 + 7^5 - 4) \times 32$$

$$5374720 = (-7 + 7^5 - 4) \times 320$$

$$537952 = (9 + 7^5 - 5) \times 32$$

$$5379520 = (9 + 7^5 - 5) \times 320$$

$$549256 = (\sqrt{9} + 65^{\sqrt{5+4}}) \times 2$$

$$5492560 = (\sqrt{9} + 65^{\sqrt{5+4}}) \times 20$$

$$563922 = (9 \times (6 + 53))^2 \times 2$$

$$5639220 = (9 \times (6 + 53))^2 \times 20$$

$$574992 = (\sqrt{9} + 9 \times 7)^{\sqrt{5+4}} \times 2$$

$$5749920 = (\sqrt{9} + 9 \times 7)^{\sqrt{5+4}} \times 20$$

$$585336 = (8 \times 6 + 5 + 5)^3 \times 3$$

$$5853360 = (8 \times 6 + 5 + 5)^3 \times 30$$

$$589992 = (\sqrt{9} + 9 \times (9 + 8^5)) \times 2$$

$$5899920 = (\sqrt{9} + 9 \times (9 + 8^5)) \times 20$$

$$629848 = (\sqrt{9^8} \times 8 \times 6 - 4) \times 2$$

$$6298480 = (\sqrt{9^8} \times 8 \times 6 - 4) \times 20$$

$$629868 = (\sqrt{9^8} \times 8 \times 6 + 6) \times 2$$

$$6298680 = (\sqrt{9^8} \times 8 \times 6 + 6) \times 20$$

$$642978 = \sqrt{9^8} \times \sqrt{\sqrt{7^{\sqrt{6^4}}}} \times 2$$

$$6429780 = \sqrt{9^8} \times \sqrt{\sqrt{7^{\sqrt{6^4}}}} \times 20$$

$$645576 = (\sqrt{7^6} + (6 + 5)^5) \times 4$$

$$6455760 = (\sqrt{7^6} + (6 + 5)^5) \times 40$$

$$647119 = (9 + 7^6)/\sqrt{4} \times 11$$

$$6471190 = (9 + 7^6)/\sqrt{4} \times 110$$

$$663424 = ((6 + 6)^4 - 4) \times 32$$

$$6634240 = ((6 + 6)^4 - 4) \times 320$$

$$688128 = 8 \times 8 \times \sqrt{8^6} \times 21$$

$$6881280 = 8 \times 8 \times \sqrt{8^6} \times 210$$

$$742576 = (-7 + (7 + 6)^5 + \sqrt{4}) \times 2$$

$$7425760 = (-7 + (7 + 6)^5 + \sqrt{4}) \times 20$$

$$742596 = (9 + (7 + 6)^5 - 4) \times 2$$

$$7425960 = (9 + (7 + 6)^5 - 4) \times 20$$

$$746664 = (7 \times 6 + 6^6 \times 4) \times 4$$

$$7466640 = (7 \times 6 + 6^6 \times 4) \times 40$$

$$755975 = 9 \times (-7 + 7^5 + 5) \times 5$$

$$7559750 = 9 \times (-7 + 7^5 + 5) \times 50$$

$$758641 = (876 - 5)^{\sqrt{4}} \times 1$$

$$7586410 = (876 - 5)^{\sqrt{4}} \times 10$$

$$759381 = (9 + (8 + 7)^5 - 3) \times 1$$

$$7593810 = (9 + (8 + 7)^5 - 3) \times 10$$

$$786438 = (8^{(8-7) \times 6} + \sqrt{4}) \times 3$$

$$7864380 = (8^{(8-7) \times 6} + \sqrt{4}) \times 30$$

$$794624 = 97 \times \sqrt{64^4} \times 2$$

$$7946240 = 97 \times \sqrt{64^4} \times 20$$

$$839496 = (-9 + (9 + 8 + 6)^4) \times 3$$

$$8394960 = (-9 + (9 + 8 + 6)^4) \times 30$$

$$839787 = (\sqrt{(9 \times \sqrt{8 + 8})^7} - 7) \times 3$$

$$8397870 = (\sqrt{(9 \times \sqrt{8 + 8})^7} - 7) \times 30$$

$$844993 = (\sqrt{9^9} - 8 \times 4) \times 43$$

$$8449930 = (\sqrt{9^9} - 8 \times 4) \times 430$$

$$846369 = \sqrt{9^{8+6/6}} \times 43$$

$$8463690 = \sqrt{9^{8+6/6}} \times 430$$

$$852926 = (\sqrt{9^8} \times 65 - 2) \times 2$$

$$8529260 = (\sqrt{9^8} \times 65 - 2) \times 20$$

$$852936 = (\sqrt{9^8} \times 65 + 3) \times 2$$

$$8529360 = (\sqrt{9^8} \times 65 + 3) \times 20$$

$$857157 = (8 - 7) \times 7^5 \times 51$$

$$8571570 = (8 - 7) \times 7^5 \times 510$$

$$857158 = 8/8 + 7^5 \times 51$$

$$8571580 = 8/8 + 7^5 \times 510$$

$$879844 = ((\sqrt{9} + 8 \times 8) \times 7)^{\sqrt{4}} \times 4$$

$$8798440 = ((\sqrt{9} + 8 \times 8) \times 7)^{\sqrt{4}} \times 40$$

$$884736 = \sqrt{8^8} \times (76 - 4) \times 3$$

$$8847360 = \sqrt{8^8} \times (76 - 4) \times 30$$

$$885143 = (-8 + (8 + 5)^4) \times 31$$

$$8851430 = (-8 + (8 + 5)^4) \times 310$$

$$885735 = \sqrt{(88 - 7)^5} \times 5 \times 3$$

$$8857350 = \sqrt{(88 - 7)^5} \times 5 \times 30$$

$$918731 = (9 + 8)^{7-3} \times 11$$

$$9187310 = (9 + 8)^{7-3} \times 110$$

$$941189 = (-\sqrt{9} + 98^{4-1}) \times 1$$

$$9411890 = (-\sqrt{9} + 98^{4-1}) \times 10$$

$$983043 = \sqrt{9} + (8 \times 4)^3 \times 30$$

$$9830430 = \sqrt{9} + (8 \times 4)^3 \times 300$$

$$995544 = ((\sqrt{9} + 9)^5 + 54) \times 4$$

$$9955440 = ((\sqrt{9} + 9)^5 + 54) \times 40$$

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References

- [1] ABRAHAM, M, Lots more numbers, deemed "crazy consecutive", IMPROBABLE RESEARCH, <http://www.improbable.com/2013/06/08/lots-more-numbers-deemed-crazy-consecutive>.
- [2] HEINZ, H., "Number Patterns. <http://www.magic-squares.net> and <http://www.magic-squares.net/square-update.htm>.
- [3] FREIDMAN, E., Problems of the Month (April 2012), <http://www2.stetson.edu/~efriedma/mathmagic/0412.html>.
- [4] MADACHY, J.S., Mathematics on Vacations, Charlers Scriber's Son, New York, 1966.
- [5] NEBUS, J., Counting From 52 to 11,108, nebusresearch, <http://nebusresearch.wordpress.com/2013/06/10/counting-from-52-to-11108/>.
- [6] ROSE, C., "Radical Narcissistic numbers", J. Recreational Mathematics, vol. 33, (2004-2005), pp. 250-254.

- [7] 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.
- [8] ROSE, C., "Pretty Wild Narcissistic numbers", <http://www.tri.org.au/numQ/pwn/>.
- [9] 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/>.
- [10] TANEJA, I.J., Crazy Sequential Representation: Numbers from 0 to 11111 in terms of Increasing and Decreasing Orders of 1 to 9, Jan. 2014, <http://arxiv.org/abs/1302.1479>.
- [11] TANEJA, I.J., Selfie Numbers: Consecutive Representations in Increasing and Decreasing Orders, RGMIA Research Report Collection, 17(2014), Article 140, pp. 1-57. <http://rgmia.org/papers/v17/v17a140.pdf>.
- [12] TANEJA, I.J., Single Digit Representations of Natural Numbers, Feb., 2015 <http://arxiv.org/abs/1502.03501>.
- [13] TANEJA, I.J., Single Letter Representations of Natural Numbers, Palindromic Symmetries and Number Patterns, RGMIA Research Report Collection, 18(2015), Article 40, pp. 1-30. <http://rgmia.org/papers/v18/v18a40.pdf>.
- [14] TANEJA, I.J., Running Expressions in Increasing and Decreasing Orders of Natural Numbers Separated by Equality Signs, RGMIA Research Report Collection, 18(2015), Article 27, pp. 1-54. <http://rgmia.org/papers/v18/v18a27.pdf>.
- [15] TANEJA, I.J., Different Types of Pretty Wild Narcissistic Numbers: Selfie Representations – I, RGMIA Research Report Collection, 18(2015), Article 32, pp. 1-43. <http://rgmia.org/papers/v18/v18a32.pdf>.
- [16] TANEJA, I.J., Selfie Numbers: Representations in Increasing and Decreasing Orders of Non Consecutive Digits, RGMIA Research Report Collection, 18(2015), Article 70, pp. 1-104. <http://rgmia.org/papers/v18/v18a70.pdf>.
- [17] TANEJA, I.J., Single Letter Representations of Natural Numbers, RGMIA Research Report Collection, 18(2015), Article 73, pp. 1-44. <http://rgmia.org/papers/v18/v18a73.pdf>.
- [18] TANEJA, I.J., Representations of Palindromic, Prime, and Fibonacci Sequence Patterns, RGMIA Research Report Collection, 18(2015), Article 99, pp. 1-24. <http://rgmia.org/papers/v18/v18a99.pdf>.
- [19] TANEJA, I.J., Crazy Representations and Selfie Numbers, RGMIA Research Report Collection, 18(2015), Article 141, pp. 1-9. <http://rgmia.org/papers/v18/v18a141.pdf>.
- [20] TANEJA, I.J., Unified Selfie Numbers, RGMIA Research Report Collection, 18(2015), Article 153, pp. 1-14. <http://rgmia.org/papers/v18/v18a153.pdf>.
- [21] TANEJA, I.J., Patterns in Selfie Numbers, RGMIA Research Report Collection, 18(2015), Article 154, pp. 1-41. <http://rgmia.org/papers/v18/v18a154.pdf>.
- [22] TANEJA, I.J., Selfie Numbers – I, RGMIA Research Report Collection, 18(2015), pp. 1-94, <http://rgmia.org/papers/v18/v18a141.pdf>.
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