

Simultaneous Representations of Selfie Numbers in Terms of Fibonacci and Triangular Numbers

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Abstract

Numbers represented by their own digits by certain operations are considered as "selfie numbers". There are many ways of representing "selfie numbers". It can be represented in digit's order, reverse order of digits, increasing and/or decreasing order of digits, etc. These can be obtained by use of basis operations along with **factorial**, **square-root**, **Fibonacci sequence**, **Triangular numbers**, etc. In this work, we have written **selfie numbers** in such a way that these are simultaneously equal by use of **Fibonacci sequence** as well as **Triangular numbers**. This is done by use of **basic operations** along with **factorial** and/or **square-root**.

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1. SELFIE NUMBERS

Recently, author studied different ways of expressing numbers in such a way that both sides are with same digits. One side is with number, and another side is an expression formed by same digits with some operations. These types of numbers we call **selfie numbers**. Some times they are called as **wild narcissistic numbers**. These numbers are represented by their own digits by use of certain operations. Subsections below give different ways of writing **selfie numbers**. Examples of selfie numbers with **Fibonacci sequence**, etc. In two variables, we obtained selfie numbers with **binomial coefficients**, **S-gonal numbers** and **centered polygonal numbers**.

1.1. Selfie Numbers with Factorial.

This subsection brings **selfie numbers** with use of factorial. See below some examples:

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$$\begin{aligned}145 &= 1! + 4! + 5!. \\733 &= 7 + 3!! + 3!. \\5177 &= 5! + 17 + 7!.\end{aligned}$$

$$\begin{aligned}363239 &= 36 + 323 + 9!. \\363269 &= 363 + 26 + 9!. \\403199 &= 40319 + 9!.\end{aligned}$$

$$\begin{aligned}1463 &= -1! + 4! + 6! + 3!!. \\10077 &= -1! - 0! - 0! + 7! + 7!. \\40585 &= 4! + 0! + 5! + 8! + 5!. \\80518 &= 8! - 0! - 5! - 1! + 8!. \\317489 &= -3! - 1! - 7! - 4! - 8! + 9!. \\352797 &= -3! + 5 - 2! - 7! + 9! - 7!. \\357592 &= -3! - 5! - 7! - 5! + 9! - 2!. \\357941 &= 3! + 5! - 7! + 9! - 4! - 1!.\end{aligned}$$

$$\begin{aligned}361469 &= 3! - 6! - 1! + 4! - 6! + 9!. \\364292 &= 3!! + 6! - 4! - 2! + 9! - 2!. \\397584 &= -3!! + 9! - 7! + 5! + 8! + 4!. \\398173 &= 3! + 9! + 8! + 1! - 7! + 3!. \\408937 &= -4! + 0! + 8! + 9! + 3!! + 7!. \\715799 &= -7! - 1! + 5! - 7! + 9! + 9!. \\720599 &= -7! - 2! + 0! - 5! + 9! + 9!.\end{aligned}$$

For more details refer author's work [15].

1.2. Selfie Numbers with Factorial and Square-Root.

This subsection brings **selfie numbers** with use of factorial and/or square-root. See below some examples:

$$\begin{aligned}936 &:= (\sqrt{9})!^3 + 6! &= 6! + (3!)^{\sqrt{9}}. \\1296 &:= \sqrt{(1+2)!^9/6} &= 6^{(\sqrt{9}+2-1)}. \\2896 &:= 2 \times (8 + (\sqrt{9})!! + 6!) &= (6! + (\sqrt{9})!! + 8) \times 2. \\331779 &:= 3 + (31 - 7)^{\sqrt{7+9}} &= \sqrt{9} + (7 \times 7 - 1)^3 \times 3. \\342995 &:= (3^4 - 2 - 9)^{\sqrt{9}} - 5 &= -5 + (-9 + 9^2 - \sqrt{4})^3. \\759375 &:= (-7 + 59 - 37)^5 &= (5 + 7 + 3)^{\sqrt{9}-5+7}. \\759381 &:= 7 + (5 \times \sqrt{9})^{-3+8} - 1 &= -1 + (8 \times 3 - 9)^5 + 7.\end{aligned}$$

Examples given above are with **factorial** and **square-root** [20, 21]. First column numbers are in **digit's order** and second columns are in **reverse order of digits**. For details refer author's work [8, 9, 10, 13, 14].

1.3. Selfie Numbers with Fibonacci Sequence.

The examples given in subsections, 1.1 and 1.2 are with **factorial** and **square-root**. Still, one can have similar kind of results using **Fibonacci sequence** values. See below:

$$\begin{aligned}235 &= 2 + F(F(F(3) + 5)). &63 &= 3 \times F(F(6)). \\256 &= 2^5 \times F(6). &882 &= 2 \times F(8) \times F(8). \\4427 &= (F(4) + 4^2) \times F(F(7)). &1631 &= F(13) \times (6 + 1). \\46493 &= F(4 \times 6) + (-4 + 9)^3. &54128 &= 8 \times (F(2) + F(1 \times 4 \times 5)).\end{aligned}$$

First column values are in **digit's order** and the second columns values are in **reverse order of digits**. For more details see author's [17, 18, 19].

1.4. Selfie Numbers with Triangle Numbers.

Triangular numbers are very much famous in the literature of mathematics [5]. These are given by

$$1, 3, 6, 10, 15, 21, \dots$$

The general formula to write these numbers is given by

$$T(n) = 1 + 2 + 3 + \dots = \frac{n+1}{2} = C(n+1, 2)$$

The letter "C" represents as "**binomial coefficient**" as seen in subsection 1.7. The examples given in above subsections are with **factorial, square-root, Fibonacci sequence** numbers, etc. Still, one can have similar kind of results using **Triangular numbers**. See below:

$$1069 := T(10) - T(6) + T(T(9)).$$

$$874 := T(T(T(4))) - T(T(7) + 8).$$

$$1081 := T(1 + T(08 + 1)).$$

$$0105 := 50 + T(10).$$

$$2887 := T(T(T(T(2)))) + T(T(8) + T(8)) + T(7).$$

$$1155 := -T(T(5)) + T(51 - 1).$$

$$4965 := T(-4 + 9) + T(-T(6) + T(T(5))).$$

$$1224 := T(T(T(4)) - T(T(2))) - 2 + 1.$$

$$4999 := 49 + T(99).$$

$$2418 := T(81) - T(42).$$

$$99545 := T(9) + T(9) \times T(T(T(5) - 4)) + 5.$$

$$99632 := 2 + (3 + T(T(6) + T(9))) \times T(9).$$

$$99546 := T(9) + T(9) \times T(T(T(5) - 4)) + 6.$$

$$99633 := 3 + (3 + T(T(6) + T(9))) \times T(9).$$

First column values are in **digit's order** and the second column values are in **reverse order of digits**. For more details see author's work [24].

1.5. Selfie Numbers with Binomial Coefficients.

The examples given in subsection 1.3 and 1.5 are with **Fibonacci sequence** and **Triangular numbers** respectively. Still, one can have similar kind of examples, using **Binomial coefficients**. See below some examples written in **both ways, digit's order** and **reverse order of digits**:

$$6435 := C(C(6, 4), 3 + 5) = C(5 \times 3, \sqrt{4} + 6).$$

$$15504 := C(15 + 5, 0! + 4) = C(4 \times 05, 5 \times 1).$$

$$42504 := C(4!, \sqrt{2 \times 50/4}) = C(4!, -05 + 24).$$

$$54264 := C(5 + 4^2, C(6, 4)) = C(4! - 6/2, (\sqrt{4 + 5})!).$$

$$74613 := C(7 \times 4 - 6, 1 \times 3!) = C(3! + 16, (-4 + 7)!).$$

$$2650 := C(-1 + 26, 5 - 0!).$$

$$28 := C(8, 2).$$

$$12870 := C(1 \times 2 \times 8, 7 + 0!).$$

$$792 := C(2 \times (\sqrt{9})!, 7).$$

$$14950 := C(-1 + 4! + \sqrt{9}, 5 - 0!).$$

$$924 := C(4!/2, (\sqrt{9})!).$$

$$18564 := C(18, (5 - 6 + 4)!).$$

$$2024 := C(4!, 2 + (0 \times 2)!).$$

$$19448 := C(19 - \sqrt{4}, \sqrt{4} + 8).$$

$$4845 := C(5 \times 4, 8 - 4).$$

$$26334 := C(2 + C(6, 3), 3 + \sqrt{4}).$$

$$00378 := C(C(8, \sqrt{7 - 3}), 0! + 0!).$$

$$43758 := C(4! - 3!, 7 - 5 + 8).$$

$$00792 := C(2 \times (\sqrt{9})!, 7 - 0! - 0!).$$

$$53130 := C(5^{3-1}, 3! - 0!).$$

$$00924 := C(4!/2, \sqrt{9} \times (0! + 0!)).$$

The symbol C used for binomial coefficients is given by

$$C(m, r) = \frac{m!}{r! \times (m-r)!}, \quad m \geq r \geq 0, \quad m, r \in \mathbb{N}.$$

For more details refer author's work [22].

1.6. Selfie Numbers with S-gonal numbers.

The examples given in subsection 1.5 are with **binomial coefficients**. Still, one can have similar kind of examples, using **s-gonal numbers**. See below some examples in **digit's order** and **reverse order of digits**:

$$\begin{aligned} 4992 &:= P(4!, 9 + 9 + 2). & 8967 &:= 7 \times P(P(6, \sqrt{9}), 8). \\ 7744 &:= (P(7, 7) - 4!)^{\sqrt{4}}. & 9504 &:= 4! \times P(\sqrt{0! + 5!}, 9). \\ 7896 &:= 7 \times P(8 \times \sqrt{9}, 6). & 9744 &:= 4! \times P(4 \times 7, \sqrt{9}). \\ 65485 &:= -P(6, 5) + \sqrt{4} \times 8^5. & 49281 &:= 1 \times 8! + P(29, 4!). \\ 65943 &:= P(6, 5) \times ((\sqrt{9})!^4 - 3). & 49548 &:= -8! - P(4!, 5) + 9!/4. \\ 67977 &:= (6 + 7) \times (P(9, 7) + 7!). & 50424 &:= 4! \times P(-2 + 4!, \sqrt{0! + 5!}). \\ 72495 &:= -P(7 + 2, 4) + 9!/5. & 52895 &:= (5 + P(9, 8))^2 - 5. \\ 83544 &:= \sqrt{P(8, 3)} \times (5! - \sqrt{4})^{\sqrt{4}}. & 53995 &:= (5! - P(9, \sqrt{9})) \times 3!! - 5. \end{aligned}$$

The symbol P used for s-gonal numbers and is given by

$$P(n, s) := \frac{n(n-1)(s-2)}{2} + n, \quad s > 2.$$

For more details refer author's work [23].

1.7. Selfie Numbers with Centered Polygonal Numbers.

The examples given in subsection 1.5 and 1.6 are with **binomial coefficients** and **s-gonal numbers** respectively. Still, one can have similar kind of examples, using **centered polygonal numbers**. See below some examples in **digit's order** and **reverse order of digits**:

$$\begin{aligned} 2883 &:= K(2 \times 8, 8) \times 3. & 00938 &:= K(\sqrt{K(8, 3!)}, (\sqrt{9})!) \times (0! + 0!). \\ 2888 &:= K(2 + 8, 8) \times 8. & 01051 &:= K(15, 010). \\ 3640 &:= K(3!, 6) \times 40. & 01199 &:= K(9, \sqrt{9}) \times (1 + 10). \\ 14939 &:= -1 + (K(4!, (\sqrt{9})!) + 3) \times 9. & 59938 &:= K(8, 3!) + (\sqrt{9})!! + 9^5. \\ 14959 &:= (-1 + K(4!, (\sqrt{9})!) + 5) \times 9. & 62424 &:= 4! \times K(2 + 4!, 2 + 6). \\ 15144 &:= K(15, (-1 + 4)!) \times 4!. & 63384 &:= 4! + (K(8, 3) + 3) \times 6!. \\ 15347 &:= (-1 + 5)! \times 3!! - K(4!, 7). & 63744 &:= 4! \times (K(4!, 7) + 3 + 6!). \\ 15399 &:= K(1 \times 5!/3!, 9) \times 9. & 63973 &:= K(3! + 7, 9) \times K(3!, 6). \end{aligned}$$

The symbol K used for centered polygonal numbers and is given by

$$K(n, t) := \frac{t n(n-1)}{2} + 1, \quad t > 2.$$

For summary of author's work on numbers refer [25, 26]. For study on s-gonal numbers and centered polygonal numbers refer to [1, 3, 6, 7]. Also refer [2, 4] for historical books on numbers.

1.8. Binomial Coefficients, S-gonal, and Centered Polygonal Numbers.

There are very few selfie numbers connecting three formulas: **binomial coefficients**, **s-gonal** and **centered polygonal numbers**. In some cases the ordered in not same, it is either in digit's order or reverse.

$$13448 := 8 + (4 + 4)!/C(3, 1) = (8! + 4!)/\sqrt{P(4, 3) - 1} = K(-1 + 3!, 4)^{\sqrt{4}} \times 8.$$

$$39435 := C(5 + 3!, \sqrt{4}) \times (-\sqrt{9} + 3!!) = (3!! - \sqrt{9}) \times (4 + P(3!, 5)) = (K(5, 3) + 4!) \times (-\sqrt{9} + 3!!).$$

$$39648 := 8! - (\sqrt{4} + 6) \times C(9, 3) = -P(3 + 9, 6 \times \sqrt{4}) + 8! = K(3!, \sqrt{9}) - 6! + \sqrt{4} + 8!.$$

$$98464 := C(9 + 8, \sqrt{4}) \times (6! + 4) = (4 + 6!) \times P(4! - 8, \sqrt{9}) = (4 + 6!) \times K(\sqrt{4} + 8, \sqrt{9}).$$

From above, we observe that there is not a even a single numbers that connects above three formulas in digit's order or in reverse. Two by two there are many numbers given in [23].

The aim of this paper is to bring selfie numbers those can be written together with Fibonacci sequence and Triangular Numbers at the same time.

2. SELFIE NUMBERS WITH FIBONACCI AND TRIANGULAR NUMBERS

This section deals with **selfie numbers** written simultaneously in terms of **Fibonacci sequence** and **Triangular numbers**. The work is done in two ways: one in digit's order and second in reverse order of digits. We have divided the work following four subsections:

- (i) Basic operations: addition, subtraction, multiplication, division and potentiation;
- (ii) Basic operations with additional use of factorial;
- (iii) Basic operations with additional use of square-root;
- (iv) Basic operations with additional factorial and square-root.

In case of items (ii)-(iv), the extra operations are either in both or in sigle side of the equalities.

2.1. Basic Operations.

In this subsection, we shall bring **selfie numbers written in terms of Fibonacci sequence and Triangular numbers** at the same time. The numbers are just with used of **basic operations**, such as, **addition, subtraction, multiplication, division and potentiation**. Again, the work is divided in two subsections, one in digit's order and another in reverse order of digits.

2.1.1. Digit's Order.

$$\begin{aligned} 34 &:= F(3 \times F(4)) \\ &:= -T(T(3)) + T(T(4)). \end{aligned}$$

$$\begin{aligned} 55 &:= F(5 + 5) \\ &:= T(5 + 5). \end{aligned}$$

$$\begin{aligned} 63 &:= F(F(6)) \times 3 \\ &:= T(6) \times 3. \end{aligned}$$

$$\begin{aligned} 168 &:= 1 \times F(6) \times F(8) \\ &:= 1 \times T(6) \times 8. \end{aligned}$$

$$\begin{aligned} 233 &:= F(F(-2 + 3 \times 3)) \\ &:= 2 + T(T(3 + 3)). \end{aligned}$$

$$\begin{aligned} 234 &:= F(2) + F(F(3 + 4)) \\ &:= T(2) \times T(3 \times 4). \end{aligned}$$

$$\begin{aligned} 237 &:= F(2) + 3 + F(F(7)) \\ &:= T(T(2)) + T(3 \times 7). \end{aligned}$$

$$\begin{aligned} 245 &:= 2 + F(4)^5 \\ &:= (-T(T(2)) + T(T(4))) \times 5. \end{aligned}$$

$$\begin{aligned} 256 &:= 2^5 \times F(6) \\ &:= 25 + T(T(6)). \end{aligned}$$

$$\begin{aligned} 466 &:= F(F(4)) \times F(-F(6) + F(F(6))) \\ &:= 4 + T(T(6)) + T(T(6)). \end{aligned}$$

$$\begin{aligned} 630 &:= F(F(6)) \times 30 \\ &:= T(6) \times 30. \end{aligned}$$

$$\begin{aligned} 693 &:= F(F(6)) \times (F(9) - F(F(3))) \\ &:= (T(T(6)) \times (9/3)). \end{aligned}$$

$$\begin{aligned} 784 &:= (7 + F(8))^{F(F(4))} \\ &:= T(7)^{8/4}. \end{aligned}$$

$$\begin{aligned} 882 &:= F(8) \times F(8) \times 2 \\ &:= T(T(8)) + T(8) \times T(T(2)). \end{aligned}$$

$$\begin{aligned} 1165 &:= F(F(1 \times 1 + 6)) \times 5 \\ &:= (1 + 1 + T(T(6))) \times 5. \end{aligned}$$

$$\begin{aligned} 1364 &:= -F(13) + F(F(F(6))) - 4 \\ &:= T(T(T(1 + 3))) - T(T(6)) + T(T(4)). \end{aligned}$$

$$\begin{aligned} 1365 &:= 13 \times F(F(6)) \times 5 \\ &:= 13 \times T(6) \times 5. \end{aligned}$$

$$\begin{aligned} 1368 &:= (1 - 3 + F(F(F(6))))/8 \\ &:= T(1 \times 3 \times 6) \times 8. \end{aligned}$$

$$\begin{aligned} 1429 &:= 1 + 42 \times F(9) \\ &:= -1 - T(T(4)) + T(T(T(2)) \times 9). \end{aligned}$$

$$\begin{aligned} 1487 &:= -F(14) + 8 \times F(F(7)) \\ &:= T(T(1 \times 4) + T(8)) + T(T(7)). \end{aligned}$$

$$\begin{aligned} 1525 &:= F(15)/2 \times 5 \\ &:= -15 + T(T(2 \times 5)). \end{aligned}$$

$$\begin{aligned} 1575 &:= F(F(1 + 5)) \times 75 \\ &:= T(1 + 5) \times 75. \end{aligned}$$

$$\begin{aligned} 1576 &:= F(-1 + 5 + F(7)) - F(F(6)) \\ &:= 1 + T(5) \times T(-7 + T(6)). \end{aligned}$$

$$\begin{aligned} 1593 &:= 1 - 5 + F(F(9)/F(3)) \\ &:= T(1 + T(T(-5 + 9))) - 3. \end{aligned}$$

$$\begin{aligned} 1594 &:= (1 + 5) \times 9 + T(T(T(4))) \\ &:= F(F(1 + 5) + 9) - F(4). \end{aligned}$$

$$\begin{aligned} 1596 &:= -1^5 + F(9 + F(6)) \\ &:= T(1 \times 5 + T(9) + 6). \end{aligned}$$

$$\begin{aligned} 1617 &:= -1 + F(F(6)) + F(17) \\ &:= 1 \times T(T(6)) \times 1 \times 7. \end{aligned}$$

$$\begin{aligned} 1618 &:= F(16 + 1) + F(8) \\ &:= 1 + T(T(6)) \times (-1 + 8). \end{aligned}$$

$$\begin{aligned} 1645 &:= F(16)/F(4) \times 5 \\ &:= (-1 + 6 \times T(T(4))) \times 5. \end{aligned}$$

$$\begin{aligned} 1680 &:= 1 \times F(F(6)) \times 80 \\ &:= T(-1 + T(6)) \times 8 + 0. \end{aligned}$$

$$\begin{aligned} 1684 &:= -1 + F(F(F(6))) - F(8)^{F(4)} \\ &:= T(-1 + T(6)) \times 8 + 4. \end{aligned}$$

$$\begin{aligned} 1687 &:= (F(F(1 + 6)) + 8) \times 7 \\ &:= T(-1 + T(6)) \times 8 + 7. \end{aligned}$$

$$\begin{aligned} 1763 &:= -1 + (7 \times 6)^{F(3)} \\ &:= -1 + T(7) \times 63. \end{aligned}$$

$$\begin{aligned} 1764 &:= 1 \times (7 \times 6)^{F(F(4))} \\ &:= T(-1 + 7) \times T(6) \times 4. \end{aligned}$$

$$\begin{aligned} 1778 &:= 1 \times 7 \times (F(F(7)) + F(8)) \\ &:= T(1 + T(T(7))/7) + 8. \end{aligned}$$

$$\begin{aligned} 1785 &:= F(1 + 7) \times 85 \\ &:= (-1 + T(7 + 8)) \times T(5). \end{aligned}$$

$$\begin{aligned} 1824 &:= (-1 + F(F(8))/2)/F(4) \\ &:= T(18) + T(2 + T(T(4))). \end{aligned}$$

$$\begin{aligned} 1847 &:= -1 - 8 \times (F(F(4)) - F(F(7))) \\ &:= -1 + 8 \times T(T(T(-4 + 7))). \end{aligned}$$

$$\begin{aligned} 1848 &:= (1 + F(8)) \times 4 \times F(8) \\ &:= T(T(T(1 + 8/4))) \times 8. \end{aligned}$$

$$\begin{aligned} 1864 &:= (1 + T(T(8) - 6)) \times 4 \\ &:= F(F(-1 + 8)) \times (6 + F(F(4))). \end{aligned}$$

$$\begin{aligned} 1925 &:= (1 + F(9)) \times F(2 \times 5) \\ &:= -T(T(1 + 9)) + T(T(T(T(2)))) \times T(5). \end{aligned}$$

$$\begin{aligned} 1995 &:= F(-1 + 9) \times 95 \\ &:= 19 \times T(9 + 5). \end{aligned}$$

$$\begin{aligned} 2079 &:= (-2 + F(F(07))) \times 9 \\ &:= T(T(2) \times 07) \times 9. \end{aligned}$$

$$\begin{aligned} 2529 &:= -F(2 \times 5) + F(2 \times 9) \\ &:= T(T(T(2))) \times T(5 \times T(2)) + 9. \end{aligned}$$

$$\begin{aligned} 2563 &:= F(F(2 + 5)) \times (F(6) + 3) \\ &:= -2 + T(5) \times T(6 \times 3). \end{aligned}$$

$$\begin{aligned} 2577 &:= F(25 - 7) - 7 \\ &:= T(T(T(2))) + T(T(5) + T(7) + T(7)). \end{aligned}$$

$$\begin{aligned} 2582 &:= F(2 \times 5 + 8) - 2 \\ &:= 2 \times (-5 + T(8)^2). \end{aligned}$$

$$\begin{aligned}
2583 &:= -F(2) + F(-5 + F(8) + F(3)) \\
&:= (T(2) + T(T(5))) \times T(T(8)/T(3)). \\
2584 &:= F(2 \times (5 + 8 - 4)) \\
&:= T(T(T(T(2)))) - 5 \times (-T(8) + T(T(4))). \\
2585 &:= F(2) + F(5 + 8 + 5) \\
&:= T(25) \times 8 - T(5). \\
2586 &:= 2 + F((-5 + 8) \times 6) \\
&:= -T(T(T(T(2)))) \times 5 + T(86). \\
2597 &:= F(F(-2 + 5) \times 9) + F(7) \\
&:= T(2 + T(T(5)) - T(9)) - T(T(7)). \\
2646 &:= 2 \times F(F(6)) \times F(4) \times F(F(6)) \\
&:= T(T(2) + T(T(6) - T(4))) + T(T(6)). \\
2648 &:= 2^6 + F(-F(4) + F(8)) \\
&:= (T(T(2)) + T(T(6) + 4)) \times 8. \\
2688 &:= 2 \times F(6) \times F(8) \times 8 \\
&:= 2 \times T(6) \times 8 \times 8. \\
2736 &:= (2 \times 7)^3 - F(6) \\
&:= T(T(2)) \times T(T(7)) + T(3 + T(6)). \\
2742 &:= (2 \times 7)^{F(4)} - 2 \\
&:= 2 \times (-7 + T(T(T(4)) - T(2))). \\
2744 &:= (-2 + F(7) + F(4))^{F(4)} \\
&:= -T(T(T(2))) + T(74) - T(4). \\
2754 &:= -2^{F(7)} + F(F(5 + F(4))) \\
&:= -T(T(T(2))) + T(T(7 + 5) - 4). \\
2772 &:= (-2 + F(F(7))) \times (F(7) - F(2)) \\
&:= -T(2) + T(77 - T(2)). \\
2784 &:= (-F(2) + F(F(7))) \times (8 + 4) \\
&:= (2 + T(7)) + T(T(8)) \times 4. \\
2794 &:= -2 + F(F(7)) \times (9 + F(4)) \\
&:= -T(T(2)) + T(7) \times (T(9) + T(T(4))). \\
2796 &:= F(2) \times F(F(7)) \times (-9 + F(F(6))) \\
&:= T(2 \times (T(7) + 9)) + T(6). \\
2937 &:= (-F(2) + F(9)) \times F(-F(3) + F(7)) \\
&:= T(2) \times T(T(9)) - T(3) \times T(7). \\
3382 &:= (-F(F(3)) + F(-F(F(3)) + F(8)))/2 \\
&:= -T(3 + 3) + T(82). \\
3384 &:= (3 + F(-F(F(3)) + F(8)))/F(F(4)) \\
&:= 3 \times T(T(T(3)) + T(8) - T(4)). \\
3495 &:= 3 \times F(4 + 9) \times 5 \\
&:= T(3 \times 4) \times T(9) - T(5). \\
3528 &:= F(3 + 5)^2 \times 8 \\
&:= (T(3) + T(5))^2 \times 8. \\
3575 &:= F(F(3) \times 5) \times F(7) \times 5 \\
&:= T(T(3) + T(5 + 7)) + 5. \\
3584 &:= (F(3) + 5) \times 8^{F(4)} \\
&:= -T(T(3)) + 5 \times (T(T(8)) + T(T(4))). \\
3645 &:= (3 + 6)^{F(4)} \times 5 \\
&:= -3^6 \times (T(4) - T(5)). \\
3648 &:= (-F(3) + F(F(F(6))))/F(-4 + 8) \\
&:= T(3) \times (T(6) + T(T(4))) \times 8. \\
3649 &:= (3 \times F(F(F(6))) + F(4))/9 \\
&:= -T(3) + T(-6 + T(4 + 9)). \\
3738 &:= F(3) \times F(F(7) - F(3)) \times F(8) \\
&:= T(3 \times T(7)) + T(T(3)) \times 8. \\
3773 &:= (-F(3) + F(7)) \times 7^3 \\
&:= T(T(T(3))) - T(7) + T(T(7) \times 3). \\
3784 &:= 3^7 + F(F(8) - 4) \\
&:= T(37) + T(T(8 + 4)). \\
3786 &:= (F(F(3) + F(7)) + F(8)) \times 6 \\
&:= T(T(T(3)) - 7) \times T(8) + 6. \\
3948 &:= F(3) \times 94 \times F(8) \\
&:= T(3) \times (T(9 \times 4) - 8). \\
3966 &:= -3 + 9 \times F(F(6)) \times F(F(6)) \\
&:= -3 + 9 \times T(6) \times T(6). \\
3968 &:= (-F(F(3)) + 9 \times F(F(6))) \times F(8) \\
&:= T((T(T(T(3))) - T(9))/6) \times 8. \\
3969 &:= F(F(-3 + 9)) \times F(F(6)) \times 9 \\
&:= T(-3 + 9) \times T(6) \times 9. \\
4176 &:= -4 - 1 + F(F(7) + 6) \\
&:= -T(4) + T(T(-1 - 7 + T(6))). \\
4182 &:= F(F(4 - 1)) + F(F(8) - 2) \\
&:= -4 + T(T(-1 + 8 + T(T(2)))).
\end{aligned}$$

$$\begin{aligned} 4183 &:= F(F(4)) + 1 \times F(F(8) - F(3)) \\ &:= T(T(4 + 1 + 8)) - 3. \end{aligned}$$

$$\begin{aligned} 4277 &:= (F(F(F(4))) + F(2 + F(7))) \times 7 \\ &:= T(4) \times (T(T(T(2))) + T(T(7))) + 7. \end{aligned}$$

$$\begin{aligned} 4386 &:= F(F(F(4))) - 3^8 + F(F(F(6))) \\ &:= (-T(4) + T(38)) \times 6. \end{aligned}$$

$$\begin{aligned} 4388 &:= F(4) - 3^8 + F(F(8)) \\ &:= -T(T(T(4))) + T(38) \times 8. \end{aligned}$$

$$\begin{aligned} 4427 &:= (F(4) + 4^2) \times F(F(7)) \\ &:= (T(T(T(4))) - T(T(4))) \times T(2) - T(7). \end{aligned}$$

$$\begin{aligned} 4455 &:= F(4)^4 \times 55 \\ &:= T(T(4)) \times (T(-4 + T(5)) + T(5)). \end{aligned}$$

$$\begin{aligned} 4536 &:= (F(F(F(4))) + 5)^3 \times F(F(6)) \\ &:= (T(4 \times 5) + T(3)) \times T(6). \end{aligned}$$

$$\begin{aligned} 4624 &:= (4 + F(6)^2)^{F(F(4))} \\ &:= T(4) \times T(T(6)) \times 2 + 4. \end{aligned}$$

$$\begin{aligned} 4632 &:= (F(4) + F(F(6))^3)/2 \\ &:= (T(4) \times T(T(6)) + T(3)) \times 2. \end{aligned}$$

$$\begin{aligned} 4746 &:= (-4 + F(F(7)) - F(4)) \times F(F(6)) \\ &:= (T(T(4)) + T(T(7) - T(4))) \times T(6). \end{aligned}$$

$$\begin{aligned} 4788 &:= (F(4) + F(F(7)) - 8) \times F(8) \\ &:= (T(T(4)) + 78) \times T(8). \end{aligned}$$

$$\begin{aligned} 4847 &:= -4 - F(8) \times (F(F(4)) - F(F(7))) \\ &:= -4 + T(T(8) + T(T(4)) + 7). \end{aligned}$$

$$\begin{aligned} 4871 &:= -F(F(F(4))) + F(8) \times (F(F(7)) - 1) \\ &:= (4 + 8) \times T(T(7)) - 1. \end{aligned}$$

$$\begin{aligned} 4872 &:= F(F(F(4))) \times F(8) \times (F(F(7)) - F(2)) \\ &:= T(T(T(4)) + T(8) + 7) + T(T(T(2))). \end{aligned}$$

$$\begin{aligned} 4889 &:= -4 + F(8) \times F(-F(8) + F(9)) \\ &:= T(T(T(4)) + T(8)) + T(-8 + T(9)). \end{aligned}$$

$$\begin{aligned} 4892 &:= -F(F(F(4))) + F(8) \times F(F(9) - 2)) \\ &:= T(T(4)) \times 89 - T(2). \end{aligned}$$

$$\begin{aligned} 4935 &:= F(4 + 9 + 3) \times 5 \\ &:= -T(-4 + 9) + T(-T(T(3)) + T(T(5))). \end{aligned}$$

$$\begin{aligned} 5497 &:= F(5 \times F(4)) \times 9 + 7 \\ &:= -T(5) + 4 \times T(T(9) + 7). \end{aligned}$$

$$\begin{aligned} 6300 &:= F(F(6)) \times 300 \\ &:= T(6) \times 300. \end{aligned}$$

$$\begin{aligned} 6615 &:= F(F(6)) \times F(F(6)) \times 15 \\ &:= T(6) \times T(6) \times 15. \end{aligned}$$

$$\begin{aligned} 6744 &:= -F(F(6)) + F(F(7) + F(4) + 4) \\ &:= 6 \times (-T(T(7)) - T(4) + T(T(T(4))))). \end{aligned}$$

$$\begin{aligned} 6762 &:= -F(F(6))/7 + F(F(F(6)) - F(2)) \\ &:= (T(T(6)) + T(7 + 6)) \times T(T(T(2))). \end{aligned}$$

$$\begin{aligned} 6933 &:= 6 \times F(9)^{F(3)} - 3 \\ &:= T(T(6)) \times (9 + T(T(3))) + 3. \end{aligned}$$

$$\begin{aligned} 6934 &:= 6 \times F(9)^{F(3)} - F(F(4)) \\ &:= T(T(6)) \times (9 + T(T(3))) + 4. \end{aligned}$$

$$\begin{aligned} 6936 &:= 6 \times F(9) \times F(3 + 6) \\ &:= T(T(6)) \times (9 + T(T(3))) + 6. \end{aligned}$$

$$\begin{aligned} 6954 &:= 6 \times (T(T(9)) + T(T(5)) + 4) \\ &:= F(F(6)) \times 9 + F(5 \times 4). \end{aligned}$$

$$\begin{aligned} 6993 &:= F(F(6)) \times 9 \times (F(9) + 3) \\ &:= T(6) \times (-T(9) + T(9 \times 3)). \end{aligned}$$

$$\begin{aligned} 7392 &:= (F(F(7)) - F(3)) \times (F(9) - 2) \\ &:= T(7) \times (T(3) \times T(9)) - T(T(2)). \end{aligned}$$

$$\begin{aligned} 7883 &:= -F(7) + 8 \times F(8 \times F(3)) \\ &:= (T(7 \times 8) + T(T(9))) \times 3. \end{aligned}$$

$$\begin{aligned} 7924 &:= F(F(7)) \times F(9) - 2 + 4 \\ &:= 7 \times (T(T(9) + 2) + 4). \end{aligned}$$

$$\begin{aligned} 8294 &:= (F(F(8) - 2) - F(9)) \times F(F(4)) \\ &:= 8 \times (T(2) + T(T(9))) - T(4). \end{aligned}$$

$$\begin{aligned} 8352 &:= (F(F(8) - F(3)) - 5) \times 2 \\ &:= T(8) \times T(T(T(3))) + T(5 + T(2)). \end{aligned}$$

$$\begin{aligned} 8364 &:= F(F(8)) + F(3) - F(6 \times F(4)) \\ &:= -T(T(8)) + T(T(T(3)) + T(6)) \times T(4). \end{aligned}$$

$$\begin{aligned} 8464 &:= (84 + F(6))^{F(F(4))} \\ &:= T(8) \times (4 + T(T(6))) + 4. \end{aligned}$$

$$\begin{aligned} 9248 &:= F(9)^{-2+4} \times 8 \\ &:= (9 - T(2)) \times T(T(T(4))) + 9. \end{aligned}$$

$$\begin{aligned} 9586 &:= -F(9) \times 5 \times 8 + F(F(F(6))) \\ &:= T(9) \times T(T(5)) + T(T(-8 + T(6))). \end{aligned}$$

$$\begin{aligned} 9837 &:= 98^{F(3)} + F(F(7)) \\ &:= 9 \times (T(T(8)) + T(T(3)) + T(T(7))). \end{aligned}$$

2.1.2. Reverse Order of Digits.

$$\begin{aligned} 34 &:= F(F(4)^{F(3)}) \\ &:= T(T(4)) - T(T(3)). \end{aligned}$$

$$\begin{aligned} 36 &:= 6^{F(3)} \\ &:= 6 \times T(3). \end{aligned}$$

$$\begin{aligned} 55 &:= F(5 + 5) \\ &:= T(5 + 5). \end{aligned}$$

$$\begin{aligned} 63 &:= 3 \times F(F(6)) \\ &:= 3 \times T(6). \end{aligned}$$

$$\begin{aligned} 168 &:= F(8) \times F(6) \times 1 \\ &:= 8 \times T(6 \times 1). \end{aligned}$$

$$\begin{aligned} 231 &:= F(13) - 2 \\ &:= T(T(1 \times 3 \times 2)). \end{aligned}$$

$$\begin{aligned} 233 &:= F(F(3 \times 3 - 2)) \\ &:= T(T(3 + 3)) + 2. \end{aligned}$$

$$\begin{aligned} 234 &:= F(F(4 + 3)) + F(2) \\ &:= T(4 \times 3) \times T(2). \end{aligned}$$

$$\begin{aligned} 237 &:= F(F(7)) + F(3) + 2 \\ &:= T(7 \times 3) + T(T(2)). \end{aligned}$$

$$\begin{aligned} 243 &:= 3^{F(4)+2} \\ &:= 3^4 \times T(2). \end{aligned}$$

$$\begin{aligned} 256 &:= (F(F(6)) - 5)^2 \\ &:= (T(6) - 5)^2. \end{aligned}$$

$$\begin{aligned} 466 &:= F(-F(6) + F(F(6))) \times F(F(4)) \\ &:= T(T(6)) + T(T(6)) + 4. \end{aligned}$$

$$\begin{aligned} 693 &:= (-F(F(3)) + F(9)) \times F(F(6)) \\ &:= (-T(3) + 9) \times T(T(6)). \end{aligned}$$

$$\begin{aligned} 882 &:= 2 \times F(8) \times F(8) \\ &:= T(T(2)) \times T(8) + T(T(8)). \end{aligned}$$

$$\begin{aligned} 0105 &:= 50 + F(10) \\ &:= 50 + T(10). \end{aligned}$$

$$\begin{aligned} 0127 &:= 72 + F(10) \\ &:= 72 + T(10). \end{aligned}$$

$$\begin{aligned} 0136 &:= -F(6) + F(F(3) + 10) \\ &:= T(6) \times T(3) + 10. \end{aligned}$$

$$\begin{aligned} 0137 &:= -7 + F(F(3) + 10) \\ &:= -T(7) + 3 \times T(10). \end{aligned}$$

$$\begin{aligned} 0138 &:= 83 + F(10) \\ &:= 83 + T(10). \end{aligned}$$

$$\begin{aligned} 0143 &:= F(3 \times 4) - 1 + 0 \\ &:= T(T(T(3)) - 4) - 10. \end{aligned}$$

$$\begin{aligned} 0149 &:= 94 + F(10) \\ &:= 94 + T(10). \end{aligned}$$

$$\begin{aligned} 0165 &:= (-5 + F(6)) \times F(10) \\ &:= T(5) \times (T(6) - 10). \end{aligned}$$

$$\begin{aligned} 0168 &:= F(8) \times F(6 \times 1 + 0) \\ &:= -8 + T(T(6)) - T(10). \end{aligned}$$

$$\begin{aligned} 0186 &:= 6 \times (F(8) + 10) \\ &:= T(T(6)) - T(8 + 1 + 0). \end{aligned}$$

$$\begin{aligned} 0231 &:= T(1^3 + 20) \\ &:= F(13) - 2 + 0. \end{aligned}$$

$$\begin{aligned} 0253 &:= F(F(F(3) + 5)) + 20 \\ &:= T(-3 + 5 + 20). \end{aligned}$$

$$\begin{aligned} 0256 &:= (F(F(6)) - 5)^{2+0} \\ &:= T(T(6)) + 5 + 20. \end{aligned}$$

$$\begin{aligned} 0376 &:= F(F(F(6)) - 7) - F(F(3 + 0)) \\ &:= T(T(6) + 7) - 30. \end{aligned}$$

$$\begin{aligned} 0378 &:= F(F(8) - 7) + F(F(3 + 0)) \\ &:= -87 + T(30). \end{aligned}$$

$$\begin{aligned} 0417 &:= F(F(7) + 1) + 40 \\ &:= T(T(7)) - 9 + 3 \times 0. \end{aligned}$$

$$\begin{aligned} 0568 &:= 8 \times (F(F(6)) + 50) \\ &:= 8 \times (T(6) + 50). \end{aligned}$$

$$\begin{aligned} 1165 &:= 5 \times F(F(6 \times 1 + 1)) \\ &:= 5 \times (T(T(6)) + 1 + 1). \end{aligned}$$

$$\begin{aligned} 1536 &:= F(6)^3 \times F(5 - 1) \\ &:= T(T(6)) - T(T(3)) + T(51). \end{aligned}$$

$$\begin{aligned} 1546 &:= F(F(F(6)) - 4) - 51 \\ &:= 6 + T(4 + 51). \end{aligned}$$

$$\begin{aligned} 1576 &:= F(F(6)) \times 75 + 1 \\ &:= T(6) \times 75 + 1. \end{aligned}$$

$$\begin{aligned} 1594 &:= -F(4) + F(9 + F(5 + 1)) \\ &:= T(T(T(4))) + 9 \times (5 + 1). \end{aligned}$$

$$\begin{aligned} 1596 &:= 6 \times T(9) + T(51) \\ &:= F(F(6) + 9) - F(F(F(5 - 1))). \end{aligned}$$

$$\begin{aligned} 1618 &:= F(8) + F(16 + 1) \\ &:= (8 - 1) \times T(T(6)) + 1. \end{aligned}$$

$$\begin{aligned} 1684 &:= F(F(4)) \times F(F(8))/F(6 + 1) \\ &:= 4 + 8 \times T(T(6) - 1). \end{aligned}$$

$$\begin{aligned} 1687 &:= (F(F(7)) + 8) \times (6 + 1) \\ &:= 7 + 8 \times T(T(6) - 1). \end{aligned}$$

$$\begin{aligned} 1764 &:= 4 \times F(F(6)) \times F(7 + 1) \\ &:= 4 \times T(6) \times T(7 - 1). \end{aligned}$$

$$\begin{aligned} 1778 &:= (F(8) + F(F(7))) \times 7 \times 1 \\ &:= 8 + T(T(T(7)))/7 + 1. \end{aligned}$$

$$\begin{aligned} 1847 &:= (F(F(7)) - F(F(4))) \times 8 - 1 \\ &:= T(T(T(7 - 4))) \times 8 - 1. \end{aligned}$$

$$\begin{aligned} 1848 &:= 84 \times (F(8) + 1) \\ &:= 8 \times T(T(T(-4 + 8 - 1))). \end{aligned}$$

$$\begin{aligned} 1864 &:= (F(F(4)) + 6) \times F(F(8 - 1)) \\ &:= 4 \times (T(-6 + T(8)) + 1). \end{aligned}$$

$$\begin{aligned} 1925 &:= F(5 \times 2) \times (F(9) + 1) \\ &:= T(5) \times T(T(T(T(2)))) - T(T(9 + 1)). \end{aligned}$$

$$\begin{aligned} 2079 &:= 9 \times (F(F(7)) - 02) \\ &:= 9 \times T(7 \times T(02)). \end{aligned}$$

$$\begin{aligned} 2478 &:= -8 + T(T(7)) + T(4^{T(2)}) \\ &:= F(8) \times (F(F(7)) + F(4))/2. \end{aligned}$$

$$\begin{aligned} 2529 &:= 9 + T(T(T(2))) \times T(5 \times T(2)) \\ &:= F(9 \times 2) - F(5 \times 2). \end{aligned}$$

$$\begin{aligned} 2563 &:= (3 + F(6)) \times F(F(5 + 2)) \\ &:= T(3 \times 6) \times T(5) - 2. \end{aligned}$$

$$\begin{aligned} 2577 &:= -7 + F(-7 + 5^2) \\ &:= T(-7 + T(7 + 5)) + T(T(T(2))). \end{aligned}$$

$$\begin{aligned} 2583 &:= F(-3 + F(8)) - F(F(5 - 2)) \\ &:= 3 \times T(T(8) + T(5))/T(2). \end{aligned}$$

$$\begin{aligned} 2584 &:= F((-4 + 8) \times 5 - 2) \\ &:= 4 \times (T(T(8)) - T(T(5))/T(T(2))). \end{aligned}$$

$$\begin{aligned} 2585 &:= F(5 + 8 + 5) + F(2) \\ &:= -T(5) + 8 \times T(5^2). \end{aligned}$$

$$\begin{aligned} 2586 &:= F(6 \times (8 - 5)) + 2 \\ &:= T(68) + T(T(5)) \times 2. \end{aligned}$$

$$\begin{aligned} 2592 &:= F(2 \times 9) + F(5 + F(2)) \\ &:= T(T(2))^{9-5} \times 2. \end{aligned}$$

$$\begin{aligned} 2597 &:= F(7) + F(9 \times F(5 - 2)) \\ &:= -T(T(7)) + T(-T(9) + T(T(5)) + 2). \end{aligned}$$

$$\begin{aligned} 2646 &:= F(6 \times F(4)) + 62 \\ &:= T(T(6 - 4)) \times T(6)^2. \end{aligned}$$

$$\begin{aligned} 2648 &:= F(F(8) - F(4)) + F(6)^2 \\ &:= (T(T(8)) - 4) \times (6 - 2). \end{aligned}$$

$$\begin{aligned} 2667 &:= (F(F(7)) + F(F(6))) \times F(F(6))/2 \\ &:= 7 \times (T(T(6) + 6) + T(2)). \end{aligned}$$

$$\begin{aligned} 2688 &:= 8 \times F(8) \times F(6) \times 2 \\ &:= 8 \times 8 \times T(6) \times 2. \end{aligned}$$

$$\begin{aligned} 2736 &:= (F(F(6)) - F(3)) \times F(F(7) - F(2)) \\ &:= (T(T(6) + 3) + T(T(7)) \times T(T(2))). \end{aligned}$$

$$\begin{aligned} 2772 &:= (-2 + F(F(7))) \times (F(7) - F(2)) \\ &:= -T(2) + T(77 - T(2)). \end{aligned}$$

$$\begin{aligned} 2784 &:= (4 + 8) \times (F(F(7)) - F(2)) \\ &:= 4 \times T(T(8)) + T(T(7 - 2)). \end{aligned}$$

$$\begin{aligned} 2794 &:= (F(4) + 9) \times F(F(7)) - 2 \\ &:= (T(T(4)) + T(9)) \times T(7) - T(T(2)). \end{aligned}$$

$$\begin{aligned} 2796 &:= (F(F(6)) - 9) \times F(F(7) \times F(2)) \\ &:= T(6) + T((9 + T(7)) \times 2). \end{aligned}$$

$$\begin{aligned} 2937 &:= (F(F(7) - F(3))) \times (F(9) - F(2)) \\ &:= -T(7) \times T(3) + T(T(9)) \times T(2). \end{aligned}$$

$$3087 := 7 \times F(8)^{F(03)}$$

$$:= T(78) + T(03).$$

$$3136 := (F(F(6) + F(3)) + 1)^{F(3)}$$

$$:= T(T(6 + T(3))) + T(T(1 + 3)).$$

$$3249 := (F(9 + F(F(F(4)))) + 2)^{F(3)}$$

$$:= 9 + T(T(4) \times 2^3).$$

$$3372 := (2 + F(7))^3 - 3$$

$$:= T(-2 + 7)^3 - 3.$$

$$3384 := (F(4) + F(F(8) - F(F(3))))/F(3)$$

$$:= T(T(T(4)) - 8) \times (-3 + T(3)).$$

$$3385 := (5 + F(F(8) - F(F(3))))/F(3)$$

$$:= 5 \times (T(T(8)) + T(T(T(3)))/T(T(3))).$$

$$3495 := 5 \times F(9 + 4) \times 3$$

$$:= -T(5) + T(9) \times T(4 \times 3).$$

$$3528 := F(8)^2 \times (5 + 3)$$

$$:= T(82) + 5^3.$$

$$3575 := 5 \times F(7) \times F(5 \times F(3))$$

$$:= 5 + T(T(7) \times T(5 - 3)).$$

$$3628 := -F(8) + (F(2) + F(F(F(6))))/3$$

$$:= T(82) + T(T(6)) - T(3).$$

$$3645 := 5 \times (F(4) + 6)^3$$

$$:= 5 \times T(-4 + 6)^{T(3)}.$$

$$3647 := (-7 + F(F(4)) + F(F(F(6))))/3$$

$$:= -T(7) + T(T(T(4)) - 6) \times 3.$$

$$3648 := (F(F(8)) - F(F(4)))/(6 - 3)$$

$$:= T(84) + T(6 + T(3)).$$

$$3649 := (F(F(9/F(4))) + F(F(F(6))))/3$$

$$:= T(T(9 + 4) - 6) - T(3).$$

$$3652 := (2 \times 5 + F(F(F(6))))/3$$

$$:= T(T(-2 + T(5)) - 6) - 3.$$

$$3728 := 8 \times F(F(2) \times F(7)) \times F(3)$$

$$:= T(82) + T(T(7) - 3).$$

$$3736 := F(6) \times (F(3) \times F(F(7)) + F(F(3)))$$

$$:= T(T(6 + 3)) + T(73).$$

$$3738 := 8 \times T(T(3)) + T(T(7) \times 3)$$

$$:= F(8) \times F(3) \times F(F(7) - F(3)).$$

$$3773 := (-F(3) + F(7)) \times 7^3$$

$$:= T(T(T(3))) - T(7) + T(T(7) \times 3).$$

$$3786 := 6 \times (F(8) + F(F(7) + F(3)))$$

$$:= 6 + T(8) \times T(-7 + T(T(3))).$$

$$3789 := 9 \times F(F(8))/(F(7) \times F(3))$$

$$:= 9 + T(8) \times T(-7 + T(T(3))).$$

$$3864 := -4 \times (F(F(6)) - F(8 \times F(3)))$$

$$:= -(T(T(4)) - T(T(6)) - 8) \times T(T(3)).$$

$$3927 := (F(F(7)) - 2) \times F(9)/F(3)$$

$$:= 7 \times T((2 + 9) \times 3).$$

$$3948 := F(F(8) - F(F(4))) - F(F(9 - F(3)))$$

$$:= T(84) + T(9 \times 3).$$

$$3966 := F(F(6)) \times F(F(6)) \times 9 - 3$$

$$:= T(6) \times T(6) \times 9 - 3.$$

$$3968 := F(8) \times F(F(6)) \times 9 - F(F(3))$$

$$:= 8 \times T((T(T(6)) - T(9))/T(3)).$$

$$3969 := (9 \times 6 + 9)^{F(3)}$$

$$:= 9 \times T(6) \times T(9 - 3).$$

$$4147 := (7 + 4) \times F(14)$$

$$:= 7 + 4 \times T(T(-1 + T(4))).$$

$$4176 := F(6 + F(7)) - 1 - 4$$

$$:= T(T(6 + 7)) - T(1 \times 4).$$

$$4182 := F(2) + F(F(8) + 1 - F(4))$$

$$:= T(T(T(T(2)) + 8 - 1)) - 4.$$

$$4183 := F(3) + F(F(8) + 1 - F(4))$$

$$:= -3 + T(T(8 + 1 + 4)).$$

$$4277 := 7 \times (F(F(7) + 2) + F(F(F(4))))$$

$$:= 7 + (T(T(7)) + T(T(T(2)))) \times T(4).$$

$$4356 := (65 + F(F(3)))^{F(F(4))}$$

$$:= T(6 + 5)^{T(3)-4}.$$

$$4378 := (-8 + F(7)^3) \times F(F(4))$$

$$:= (-8 + T(T(7))) \times (T(T(3)) - T(4)).$$

$$4427 := F(F(7)) \times (-2 + F(4 + 4))$$

$$:= -T(7) + T(2)^4 \times T(T(4)).$$

$$4455 := 55 \times F(4)^4$$

$$:= (T(5)/5)^4 \times T(T(4)).$$

$$4536 := 6^3 \times F(5 + F(4)) \\ := T(6) \times (T(3) + T(5 \times 4)).$$

$$4624 := (4 + 2^6)^{F(F(4))} \\ := 4 + T(2) \times T(T(6 + 4)).$$

$$4746 := F(F(6)) \times (-F(4) + F(F(7)) - 4) \\ := T(6) \times (T(T(4)) + T(T(7) - T(4))).$$

$$4788 := F(8) \times (-8 + F(F(7)) + F(4)) \\ := (-8 + T(8)) \times T(T(7) - T(4)).$$

$$4847 := (F(F(7)) - F(F(4))) \times F(8) - 4 \\ := T(7 + T(T(4)) + T(8)) - 4.$$

$$4871 := (-1 + F(F(7))) \times F(8) - F(F(F(4))) \\ := -1 + T(T(7)) \times (8 + 4).$$

$$4872 := (-F(2) + F(F(7))) \times F(8) \times F(F(F(4))) \\ := T(2) \times T(T(7)) \times (8 - 4).$$

$$4889 := F(F(9) - F(8)) \times F(8) - 4 \\ := T(T(9) - 8) + T(T(8) + T(T(4))).$$

$$4892 := F(F(-2 + 9)) \times F(8) - F(F(F(4))) \\ := (-T(T(T(T(2)))) + T(T(9))) \times 8 - T(T(T(4))).$$

$$4896 := 6 \times F(9) \times 8 \times F(4) \\ := T(6 + T(9)) + T(84).$$

$$4935 := 5 \times F(3 + 9 + 4) \\ := (T(T(5)) + T(T(3))) \times (T(9) - T(4)).$$

$$4956 := F(F(6)) \times 59 \times 4 \\ := 6 + T(5 + 94).$$

$$4987 := F(F(7)) \times F(8) + 94 \\ := 7 \times (T(T(8)) + T(9)) + T(4).$$

$$5376 := F(F(6)) \times (F(7) + 3^5) \\ := T(T(6)) + 7^3 \times T(5).$$

$$5497 := 7 + 9 \times F(F(4) \times 5) \\ := T(7 + T(9)) \times 4 - T(5).$$

$$6327 := -F(F(7)) - F(2) + 3^{F(6)} \\ := 7 \times T(2 \times T(T(3))) + 6.$$

$$6456 := -F(F(6)) \times 5 + F(4)^{F(6)} \\ := 6 \times (-5 + T(46)).$$

$$6472 := -F(-2 + F(7)) + F(4)^{F(6)} \\ := T(T(T(T(2)))) \times T(7) + T(4) - 6.$$

$$6489 := -9 \times 8 + F(4)^{F(6)} \\ := 9 \times (T(T(8)) + T(4 + 6)).$$

$$6744 := F(F(4)^{F(4)} - 7) - F(F(6)) \\ := (-4 + T(47)) \times 6.$$

$$6936 := 6 + (T(T(3)) + 9) \times T(T(6)) \\ := F(6 + 3) \times F(9) \times 6.$$

$$6954 := F(4 \times 5) + 9 \times F(F(6)) \\ := (4 + T(T(5)) + T(T(9))) \times 6.$$

$$6993 := (3 + F(9)) \times 9 \times F(F(6)) \\ := (T(3 \times 9) - T(9)) \times T(6).$$

$$7223 := (32 - F(2)) \times F(F(7)) \\ := (T(T(T(3))) + 2) \times (T(2) + T(7)).$$

$$7392 := (-2 + F(9)) \times (-F(3) + F(F(7))) \\ := (T(T(2)) \times T(9) - T(3)) \times T(7).$$

$$7776 := 6^{F(7) - F(-7 + F(7))} \\ := 6^{(T(7) + 7)^7}.$$

$$7896 := F(6) \times 987 \\ := T(-6 + T(9) + 8) \times 7.$$

$$7924 := (4 + T(2 + T(9))) \times 7 \\ := F(F(4)) + F(2) \times F(9) \times F(F(7)).$$

$$8294 := F(F(4)) \times (-F(9) + F(-2 + F(8))) \\ := -T(4) + (T(T(9)) + T(2)) \times 8.$$

$$8352 := 2 \times (-5 + F(-F(3) + F(8))) \\ := (T(T(2)) - 5 + T(T(T(3)))) \times T(8).$$

$$8364 := F(F(4)) - F(6 \times 3) + F(F(8)) \\ := T(4) \times T(T(6) + T(T(3))) - T(T(8)).$$

$$9248 := F(8)^{F(4)} - F(-2 + 9) \\ := 8 + T(T(T(4))) \times (-T(2) + 9).$$

$$9586 := F(F(F(6))) - 8 \times 5 \times F(9) \\ := T(T(T(6) - 8)) + T(T(5)) \times T(9).$$

2.2. With Factorial.

In this subsection, we shall bring **selfie numbers written in terms of Fibonacci sequence and Triangular numbers** at the same time. The numbers are with used of basic operations and factorial. Again, the work is divided in two subsections, one in digit's order and another in reverse order of digits.

2.2.1. Digit's Order.

$$\begin{aligned}
 5760 &:= (-5 + F(7)) \times 6! + 0 = (T(5) - 7) \times 6! + 0. \\
 5761 &:= (-5 + F(7)) \times 6! + 1 = (T(5) - 7) \times 6! + 1. \\
 5762 &:= (-5 + F(7)) \times 6! + 2 = (T(5) - 7) \times 6! + 2. \\
 5763 &:= (-5 + F(7)) \times 6! + 3 = (T(5) - 7) \times 6! + 3. \\
 5764 &:= (-5 + F(7)) \times 6! + 4 = (T(5) - 7) \times 6! + 4. \\
 5765 &:= (-5 + F(7)) \times 6! + 5 = (T(5) - 7) \times 6! + 5. \\
 5766 &:= (-5 + F(7)) \times 6! + 6 = (T(5) - 7) \times 6! + 6. \\
 5767 &:= (-5 + F(7)) \times 6! + 7 = (T(5) - 7) \times 6! + 7. \\
 5768 &:= (-5 + F(7)) \times 6! + 8 = (T(5) - 7) \times 6! + 8. \\
 5769 &:= (-5 + F(7)) \times 6! + 9 = (T(5) - 7) \times 6! + 9.
 \end{aligned}$$

$$\begin{aligned}
 6480 &:= 6! + F(4)!! \times 8 + 0 = 6!/4 \times T(8) + 0. \\
 6481 &:= 6! + F(4)!! \times 8 + 1 = 6!/4 \times T(8) + 1. \\
 6482 &:= 6! + F(4)!! \times 8 + 2 = 6!/4 \times T(8) + 2. \\
 6483 &:= 6! + F(4)!! \times 8 + 3 = 6!/4 \times T(8) + 3. \\
 6484 &:= 6! + F(4)!! \times 8 + 4 = 6!/4 \times T(8) + 4. \\
 6485 &:= 6! + F(4)!! \times 8 + 5 = 6!/4 \times T(8) + 5. \\
 6486 &:= 6! + F(4)!! \times 8 + 6 = 6!/4 \times T(8) + 6. \\
 6487 &:= 6! + F(4)!! \times 8 + 7 = 6!/4 \times T(8) + 7. \\
 6488 &:= 6! + F(4)!! \times 8 + 8 = 6!/4 \times T(8) + 8. \\
 6489 &:= 6! + F(4)!! \times 8 + 9 = 6!/4 \times T(8) + 9.
 \end{aligned}$$

$$\begin{aligned}
 6720 &:= (F(6))!/(7 - F(2)) + 0 = 6! \times T(7)/T(2) + 0. \\
 6721 &:= (F(6))!/(7 - F(2)) + 1 = 6! \times T(7)/T(2) + 1. \\
 6722 &:= (F(6))!/(7 - F(2)) + 2 = 6! \times T(7)/T(2) + 2. \\
 6723 &:= (F(6))!/(7 - F(2)) + 3 = 6! \times T(7)/T(2) + 3. \\
 6724 &:= (F(6))!/(7 - F(2)) + 4 = 6! \times T(7)/T(2) + 4.
 \end{aligned}$$

$$\begin{aligned}
 21 &:= F(F((2 + 1)!)) \\
 &:= T(T(2 + 1)).
 \end{aligned}$$

$$\begin{aligned}
 23 &:= 2 + F(F(3!)) \\
 &:= 2 + T(T(3)).
 \end{aligned}$$

$$\begin{aligned}
 123 &:= F(12) - F(F(3!)) \\
 &:= (-1 + T(T(2)))! + 3.
 \end{aligned}$$

$$\begin{aligned}
 126 &:= (1 + 2)! \times F(F(6)) \\
 &:= T(1 + 2) \times T(6).
 \end{aligned}$$

$$\begin{aligned}
 6725 &:= (F(6))!/(7 - F(2)) + 5 = 6! \times T(7)/T(2) + 5. \\
 6726 &:= (F(6))!/(7 - F(2)) + 6 = 6! \times T(7)/T(2) + 6. \\
 6727 &:= (F(6))!/(7 - F(2)) + 7 = 6! \times T(7)/T(2) + 7. \\
 6728 &:= (F(6))!/(7 - F(2)) + 8 = 6! \times T(7)/T(2) + 8. \\
 6729 &:= (F(6))!/(7 - F(2)) + 9 = 6! \times T(7)/T(2) + 9.
 \end{aligned}$$

$$\begin{aligned}
 6840 &:= (6! + 8!)/F(4)! + 0 = (6! - T(8)) \times T(4) + 0. \\
 6841 &:= (6! + 8!)/F(4)! + 1 = (6! - T(8)) \times T(4) + 1. \\
 6842 &:= (6! + 8!)/F(4)! + 2 = (6! - T(8)) \times T(4) + 2. \\
 6843 &:= (6! + 8!)/F(4)! + 3 = (6! - T(8)) \times T(4) + 3. \\
 6844 &:= (6! + 8!)/F(4)! + 4 = (6! - T(8)) \times T(4) + 4. \\
 6845 &:= (6! + 8!)/F(4)! + 5 = (6! - T(8)) \times T(4) + 5. \\
 6846 &:= (6! + 8!)/F(4)! + 6 = (6! - T(8)) \times T(4) + 6. \\
 6847 &:= (6! + 8!)/F(4)! + 7 = (6! - T(8)) \times T(4) + 7. \\
 6848 &:= (6! + 8!)/F(4)! + 8 = (6! - T(8)) \times T(4) + 8. \\
 6849 &:= (6! + 8!)/F(4)! + 9 = (6! - T(8)) \times T(4) + 9.
 \end{aligned}$$

$$\begin{aligned}
 7560 &:= 7! + 5! \times F(F(6)) + 0 = 7! + 5! \times T(6) + 0. \\
 7561 &:= 7! + 5! \times F(F(6)) + 1 = 7! + 5! \times T(6) + 1. \\
 7562 &:= 7! + 5! \times F(F(6)) + 2 = 7! + 5! \times T(6) + 2. \\
 7563 &:= 7! + 5! \times F(F(6)) + 3 = 7! + 5! \times T(6) + 3. \\
 7564 &:= 7! + 5! \times F(F(6)) + 4 = 7! + 5! \times T(6) + 4. \\
 7565 &:= 7! + 5! \times F(F(6)) + 5 = 7! + 5! \times T(6) + 5. \\
 7566 &:= 7! + 5! \times F(F(6)) + 6 = 7! + 5! \times T(6) + 6. \\
 7567 &:= 7! + 5! \times F(F(6)) + 7 = 7! + 5! \times T(6) + 7. \\
 7568 &:= 7! + 5! \times F(F(6)) + 8 = 7! + 5! \times T(6) + 8. \\
 7569 &:= 7! + 5! \times F(F(6)) + 9 = 7! + 5! \times T(6) + 9.
 \end{aligned}$$

$$\begin{aligned}
 143 &:= -1 + F(4 \times 3) \\
 &:= -1 + 4! \times T(3).
 \end{aligned}$$

$$\begin{aligned}
 147 &:= 1 \times F(F(F(4)!)) \times 7 \\
 &:= T(T(-1 + 4)) \times 7.
 \end{aligned}$$

$$\begin{aligned}
 227 &:= -F(2 + 2)! + F(F(7)) \\
 &:= T(T(T(T(2)))) + T(2) - 7.
 \end{aligned}$$

$$\begin{aligned}
 231 &:= -2 + F(F(3! + 1)) \\
 &:= T(T(2 \times 3 \times 1)).
 \end{aligned}$$

$$\begin{aligned} 232 &:= -F(2) + F(F(3! + F(2))) \\ &:= T(2) + T(T(T(3))) - 2. \end{aligned}$$

$$\begin{aligned} 235 &:= 2 + F(F(F(3) + 5)) \\ &:= T(T(2))!/3 - 5. \end{aligned}$$

$$\begin{aligned} 248 &:= 2^{F(F(4)!)} - 8 \\ &:= (T(T(T(2))) + T(4)) \times 8. \end{aligned}$$

$$\begin{aligned} 254 &:= F(F(2 + 5)) + F(F(F(4)!)) \\ &:= -T(T(T(2))) + 5 \times T(T(4)). \end{aligned}$$

$$\begin{aligned} 264 &:= 2^{F(6)} + F(F(4)!) \\ &:= -T(2 + 6) + T(4!). \end{aligned}$$

$$\begin{aligned} 273 &:= F(2) \times F(7) \times F(F(3!)) \\ &:= T(2) \times T(7 + T(3)). \end{aligned}$$

$$\begin{aligned} 274 &:= F(2) + F(7) \times F(F(F(4)!)) \\ &:= 2 - T(7) + T(4!). \end{aligned}$$

$$\begin{aligned} 315 &:= F(F(3!)) \times 15 \\ &:= 3 \times T(-1 + T(5)). \end{aligned}$$

$$\begin{aligned} 336 &:= F(3) \times F(3!) \times F(F(6)) \\ &:= T(3 \times T(T(3)))/6. \end{aligned}$$

$$\begin{aligned} 354 &:= (-F(3) + 5!) \times F(4) \\ &:= -T(3) + T(5) \times 4!. \end{aligned}$$

$$\begin{aligned} 384 &:= F(3) \times 8 \times 4! \\ &:= T(3)! - T(8) - T(4!). \end{aligned}$$

$$\begin{aligned} 420 &:= F(F(F(4)!)) \times 20 \\ &:= T(4!) + (T(T(2)) - 0!)!. \end{aligned}$$

$$\begin{aligned} 432 &:= F(4) \times F(3! \times 2) \\ &:= 4! \times T(3) \times T(2). \end{aligned}$$

$$\begin{aligned} 433 &:= -F(F(4)!) + F(F(3!))^{F(3)} \\ &:= T(T(4)) + T(3^3). \end{aligned}$$

$$\begin{aligned} 445 &:= F(F(4) + F(F(4)!)) \times 5 \\ &:= T(4) + T(4! + 5). \end{aligned}$$

$$\begin{aligned} 462 &:= F(F(F(4)!)) \times (F(F(6)) + F(2)) \\ &:= 4 \times T(T(6))/2. \end{aligned}$$

$$\begin{aligned} 472 &:= (F(4) + F(F(7))) \times 2 \\ &:= -4! + T(T(7) + T(2)). \end{aligned}$$

$$\begin{aligned} 504 &:= F(F(5 + 0!)) \times 4! \\ &:= T(5 + 0!) \times 4!. \end{aligned}$$

$$\begin{aligned} 546 &:= (5 + F(F(F(4)!))) \times F(F(6)) \\ &:= T(5) + T(4!) + T(T(6)). \end{aligned}$$

$$\begin{aligned} 564 &:= (5! + F(F(6))) \times 4 \\ &:= (5! + T(6)) \times 4. \end{aligned}$$

$$\begin{aligned} 724 &:= (7 - F(2))! + 4 \\ &:= T(7) + T(T(2))! - 4!. \end{aligned}$$

$$\begin{aligned} 727 &:= (7 - F(2))! + 7 \\ &:= 7 + T(T(T(T(2))))/7!. \end{aligned}$$

$$\begin{aligned} 733 &:= 7 + T(3) + T(3!) \\ &:= F(7) + (3 + 3)!. \end{aligned}$$

$$\begin{aligned} 735 &:= 7 \times F(F(3!)) \times 5 \\ &:= (T(7) + T(T(3))) \times T(5). \end{aligned}$$

$$\begin{aligned} 748 &:= 7 + F(4)!! + F(8) \\ &:= T(7) + T(4!/8)!. \end{aligned}$$

$$\begin{aligned} 842 &:= F(F(8))/F(F(4)!) + F(2) \\ &:= T(T(8)) - T(T(4)) + T(T(T(T(2)))). \end{aligned}$$

$$\begin{aligned} 1024 &:= (1 + 0!)^{2+F(F(4)!)} \\ &:= (1 \times 02)^{T(4)}. \end{aligned}$$

$$\begin{aligned} 1035 &:= F(10) \times F(F((3)!)) - 5! \\ &:= T(10 + 35). \end{aligned}$$

$$\begin{aligned} 1042 &:= F(10) + F(4^2) \\ &:= (1 + T(T(-0! + T(4)))) + T(T(2)). \end{aligned}$$

$$\begin{aligned} 1045 &:= F(10) \times (4! - 5) \\ &:= 10 + T(45). \end{aligned}$$

$$\begin{aligned} 1175 &:= (1 + 1 + F(F(7))) \times 5 \\ &:= -1 + T((-1 + 7)!/T(5)). \end{aligned}$$

$$\begin{aligned} 1260 &:= F(F((1 + 2)!)) \times 60 \\ &:= T(1 + 2) \times T(T(6) - 0!). \end{aligned}$$

$$\begin{aligned} 1296 &:= (1 + T(2))! \times 9 \times 6 \\ &:= F(12) \times 9!/(F(6))!. \end{aligned}$$

$$\begin{aligned} 1323 &:= (-1 + F(3!)^2) \times F(F(3!)) \\ &:= T(T(1 \times 3)) \times T(2) \times T(T(3)). \end{aligned}$$

$$\begin{aligned} 1324 &:= 1 + F(F(3!))^2 \times F(4) \\ &:= T((1 + 3)!) + 2^{T(4)}. \end{aligned}$$

$$\begin{aligned} 1343 &:= -1 + F(3)!/(4! + 3!) \\ &:= -1 + T(T(3)) \times 4^3. \end{aligned}$$

$$1344 := (1 + F(3! + 4)) \times 4! \\ := T(1 + T(3)) \times (4! + 4!).$$

$$1345 := 1 + F(3!)/(F(4)! \times 5) \\ := T(-1 \times T(3) + T(T(4))) + 5!.$$

$$1374 := (-1 - 3 + F(F(7))) \times F(4)! \\ := -1 - 3 + T(T(7) + 4!).$$

$$1378 := 1 + 3! \times F(F(7)) - F(8) \\ := T(-1 - 3 + 7 \times 8).$$

$$1404 := (1 + F(F(F(4)! + 0!))) \times F(4)! \\ := T(1 + 4! + 0!) \times 4.$$

$$1427 := 1 \times F(4)! \times 2 - F(7) \\ := 1 + T(4!) + T(T(2))! + T(T(7)).$$

$$1434 := (1 - 4 + 3!) \times F(F(4)) \\ := (-1 + T(T(4))) \times T(T(3)) + T(4!).$$

$$1435 := (-1 + F(4)) \times 3!! - 5 \\ := T(-1 + 4)! + T(3)! - 5.$$

$$1436 := (1 - F(4)) \times (F(3) - 6!) \\ := -1 \times 4 + T(3)! + 6!.$$

$$1440 := (-1 + F(4)) \times (F(4 + 0))! \\ := T(-1 + 4)! + T(4 - 0)!.$$

$$1444 := (14 + 4!)^{F(F(4))} \\ := T(T(T(1 \times 4))) - 4! \times 4.$$

$$1445 := (-1 + F(4)) \times F(4)! + 5 \\ := (-1 + T(4)) - T(4) \times 5.$$

$$1446 := (-1 + F(4)) \times (F(4) + 6!) \\ := (1 + 4! \times T(4)) \times 6.$$

$$1448 := -1 + F(4!)/(4 \times 8) \\ := -1 + T(T(T(4))) - T(T(4)) - T(8).$$

$$1456 := F(1 + F(4!)) \times (5! - F(6)) \\ := (1 + T(T(4))) \times (5 + T(6)).$$

$$1457 := 1 + (-F(F(4)!)) + 5! \times F(7) \\ := T(-T(1 + T(4)) + 5!) - T(7).$$

$$1462 := 1 + F(F(F(4)!)) + 6! \times 2 \\ := (1 + T(4) + 6!) \times 2.$$

$$1463 := -1 + 4! + 6! \times F(3) \\ := -1 + 4! + 6! + T(3)!.$$

$$1464 := (-1 + F(4)) \times 6! + 4! \\ := (1 + T(4) \times 6) \times 4!.$$

$$1470 := 1 \times F(F(F(4)!)) \times 70 \\ := T(T(-1 + 4)) \times 70.$$

$$1483 := 1 + F(F(4)) \times (F(8) + 3!) \\ := -1 + T(T(T(4))) - 8!/T(3)!.$$

$$1484 := (1 + F(4)! + F(8)) \times F(F(4)) \\ := -1 + T(T(4 + 8) - 4!).$$

$$1493 := (-1 + (F(F(4)!))!)/9/3 \\ := 1 + T(T(T(4))) - T(9) - 3.$$

$$1536 := (1 + 5) \times F(3)^{F(6)} \\ := T(1 + T(5)) \times T(3) + 6!.$$

$$1560 := 1 \times 5! \times F(F(6) - 0!) \\ := T(T(T(-1 + 5))) + T(6) - 0!.$$

$$1572 := (1 + 5!) \times F(7) - F(2) \\ := -(-1 + 5)! + T(T(7) \times 2).$$

$$1637 := -1 + F(F(6)) \times 3! \times F(7) \\ := -1 + (T(T(6)) + 3) \times 7.$$

$$1664 := -16 + (F(6))!/4! \\ := -T(16) + 6 \times T(4)!.$$

$$1686 := F(16) - F(8) + 6! \\ := (T(-1 + T(6))) \times 8 + 6.$$

$$1734 := 17^{F(3)} \times F(4)! \\ := -1 + 7!/3 + T(T(4)).$$

$$1745 := 1 + F(F(7)) \times F(F(4)!)) - 5! \\ := T(1 + T(7)) \times 4 + 5.$$

$$1823 := -1 + (F(F(8)) - 2)/3! \\ := -1 + 8 \times (-T(2) + T(T(T(3)))).$$

$$1920 := (-1 + 9)!/F(F((2 + 0)!)) \\ := (-1 + 9)!/T(T(T(2 + 0))).$$

$$2016 := F((2 + 0)!)/(-1 + F(F(6))) \\ := T(T(2) \times T(0 \times 1 + 6)).$$

$$2048 := 2^{F(04)+8} \\ := (T(2) + 0!)^4 \times 8.$$

$$2097 := (2 \times 0 + 9) \times F(F(7)) \\ := T(T(2))! - 0! + T(T(9) + 7).$$

$$\begin{aligned} 2136 &:= (2 + 1) \times (3!! - F(6)) \\ &:= T(2) \times (-1 + T(3)!) - T(6). \end{aligned}$$

$$\begin{aligned} 2145 &:= (2 + 1) \times (F(4)!! - 5) \\ &:= T((T(2) + T(1 \times 4)) \times 5). \end{aligned}$$

$$\begin{aligned} 2147 &:= (2 + 1)!! \times F(4) - F(7) \\ &:= 2 + T(-1 + T(4 + 7)). \end{aligned}$$

$$\begin{aligned} 2154 &:= (-2 + (1 + 5)!) \times F(4) \\ &:= T(T(2)) \times (-1 + T(5) \times 4!). \end{aligned}$$

$$\begin{aligned} 2184 &:= ((2 + 1)!! + 8) \times F(4) \\ &:= T(21 - 8) \times 4!. \end{aligned}$$

$$\begin{aligned} 2208 &:= F((2 + 2)!)/F(08) \\ &:= T(T(2) + 20) \times 8. \end{aligned}$$

$$\begin{aligned} 2214 &:= (F(22) + 1)/F(F(4)!) \\ &:= T(2) + T(T(2 - 1 + T(4))). \end{aligned}$$

$$\begin{aligned} 2274 &:= (2 + F(2 \times 7)) \times F(4)! \\ &:= T(T(2)) \times (-T(2) + T(T(7)) - 4!). \end{aligned}$$

$$\begin{aligned} 2310 &:= 2 \times F(F(3!)) \times F(10) \\ &:= 2 \times T(T(3)) \times T(10). \end{aligned}$$

$$\begin{aligned} 2312 &:= 2 \times F(F(3!) + 1)^2 \\ &:= 2 + T(T(T(3))) \times T(1 + T(2)). \end{aligned}$$

$$\begin{aligned} 2317 &:= (2 \times 3)! + F(17) \\ &:= T(T(T(T(2)))) \times T(3 + 1) + 7. \end{aligned}$$

$$\begin{aligned} 2330 &:= (2 + F(3!)) \times F(F(3! + 0!)) \\ &:= (2 + T(T(T(3)))) \times T(3 + 0!). \end{aligned}$$

$$\begin{aligned} 2373 &:= ((2 + 3)! - 7) \times F(F(3!)) \\ &:= ((2 + 3)! - 7) \times T(T(3)). \end{aligned}$$

$$\begin{aligned} 2375 &:= 2 + F(F(3!)) \times (-7 + 5!) \\ &:= 2 - T(T(3)) \times (7 - 5!). \end{aligned}$$

$$\begin{aligned} 2376 &:= (2^{3!} + F(F(7))) \times F(6) \\ &:= (-T(-2 + T(3)) + T(T(7))) \times 6. \end{aligned}$$

$$\begin{aligned} 2439 &:= -F(2) + 4 \times F(3! + 9) \\ &:= T(T(2) \times 4!) - T(T(3)) \times 9. \end{aligned}$$

$$\begin{aligned} 2444 &:= (F(2) + F(F(F(F(4)!)) - F(4)!)) \times 4 \\ &:= (T(T(2 \times 4)) - T(T(4))) \times 4. \end{aligned}$$

$$\begin{aligned} 2448 &:= F(2 \times F(4)!) \times (-4 + F(8)) \\ &:= (T(2) \times 4! - 4) \times T(8). \end{aligned}$$

$$\begin{aligned} 2449 &:= F(2) + 4! \times F(4) \times F(9) \\ &:= -2 - 4! + T(T(4)) \times T(9). \end{aligned}$$

$$\begin{aligned} 2464 &:= -(F(2) + 4)! + F(-6 + 4!) \\ &:= T(-2 + 4!) + T(T(T(6) - T(4))). \end{aligned}$$

$$\begin{aligned} 2465 &:= F(2) + F(4! - 6) - 5! \\ &:= (-T(2) + T(T(4) + T(6))) \times 5. \end{aligned}$$

$$\begin{aligned} 2474 &:= 2 \times F(4! - 7) - F(4)!! \\ &:= T(T(2))! \times 4 - T(7 \times 4). \end{aligned}$$

$$\begin{aligned} 2519 &:= -F(2) + 5! \times F(-1 + 9) \\ &:= T(T(2))! \times 5 - T(1 + T(9)). \end{aligned}$$

$$\begin{aligned} 2540 &:= (F(2) + 5!) \times F(F(F(4)!)) - 0! \\ &:= T(T(T(T(2)))) \times (T(5) - 4) - 0!. \end{aligned}$$

$$\begin{aligned} 2541 &:= (F(2) + 5!) \times F(F((4 - 1)!)) \\ &:= T(T(T(2))) \times (5 \times 4! + 1). \end{aligned}$$

$$\begin{aligned} 2542 &:= (F(2) + 5!) \times F(F(F(4)!)) + F(2) \\ &:= T(T(T(2))) \times 5! + 4! - 2. \end{aligned}$$

$$\begin{aligned} 2544 &:= (2 + 5)!/F(F(4)) + 4! \\ &:= (T(T(2 + 5)) - T(4!)) \times 4!. \end{aligned}$$

$$\begin{aligned} 2545 &:= 25 + F(F(F(4)!)) \times 5! \\ &:= 2 \times T(5 \times T(4)) - 5. \end{aligned}$$

$$\begin{aligned} 2561 &:= (2 + 5!) \times F(F(6)) - 1 \\ &:= (2 + 5!) \times T(6) - 1. \end{aligned}$$

$$\begin{aligned} 2562 &:= (2 + 5!) \times F(6 + 2) \\ &:= (2 + 5!) \times T(T(6/2)). \end{aligned}$$

$$\begin{aligned} 2583 &:= -F(2) + F((-5 + 8) \times 3!) \\ &:= (T(2) + 5!) \times T(T(8)/T(3)). \end{aligned}$$

$$\begin{aligned} 2634 &:= 2 \times (F(F(6)) + 3!^4) \\ &:= 2 \times (T(6) + T(3)^4). \end{aligned}$$

$$\begin{aligned} 2638 &:= -2 + 6! + F(3)!/F(8) \\ &:= T(T(2)) \times T(6) \times T(T(3)) - 8. \end{aligned}$$

$$\begin{aligned} 2640 &:= (F(2) + F(F(6))) \times (4 + 0!)! \\ &:= T(T(T(2))) \times T(T(6)) - T(T(T(4) + 0!)). \end{aligned}$$

$$\begin{aligned} 2644 &:= -2 + F(F(6))^{F(F(4))} \times F(4)! \\ &:= T(T(2)) + T(6!/T(4)) + T(4). \end{aligned}$$

$$\begin{aligned} 2735 &:= -F(2) - 7! + 3!^5 \\ &:= T(T(2))! + (T(T(7)) - 3) \times 5. \end{aligned}$$

$$\begin{aligned} 2747 &:= -2^{F(7)} + F(F(F(F(4)!))) - 7 \\ &:= T(T(2) \times T(7) - T(4)) - T(7). \end{aligned}$$

$$\begin{aligned} 2748 &:= -2^{F(7)} - F(4)! + F(F(8)) \\ &:= 2 \times T(T(7) + 4!) - 8. \end{aligned}$$

$$\begin{aligned} 2753 &:= F(F(2) \times F(7)) + 5! \times F(F(3!)) \\ &:= T(2) + T(T(7)) \times 5 + T(3)!. \end{aligned}$$

$$\begin{aligned} 2795 &:= (-F(2) + 7!/9) \times 5 \\ &:= T(T(2))! + (T(T(7)) + 9) \times 5. \end{aligned}$$

$$\begin{aligned} 2844 &:= (-F(2) - 8 + F(4)!) \times 4 \\ &:= T(T(2))! + T(8) \times (4 + T(T(4))). \end{aligned}$$

$$\begin{aligned} 2846 &:= -F(F(2) + 8) + 4 \times 6! \\ &:= 2 - T(8) + 4 \times 6!. \end{aligned}$$

$$\begin{aligned} 2856 &:= (2^8 - 5!) \times F(F(6)) \\ &:= (2^8 - 5!) \times T(6). \end{aligned}$$

$$\begin{aligned} 2878 &:= -2 + 8!/(-7 + F(8)) \\ &:= T(28) \times 7 + T(8). \end{aligned}$$

$$\begin{aligned} 2946 &:= (2^9 - F(F(F(4)!))) \times 6 \\ &:= T(2 + 9) + 4 \times 6!. \end{aligned}$$

$$\begin{aligned} 2964 &:= (F(-F(2) + 9) + 6!) \times 4 \\ &:= T(T(2)) \times (9!/6! - T(4)). \end{aligned}$$

$$\begin{aligned} 3024 &:= F(F(3!)) \times F((0! + 2) \times 4) \\ &:= T(T(3)) \times T(T(02)) \times 4!. \end{aligned}$$

$$\begin{aligned} 3045 &:= F(F(3!)) \times (0! + 4! + 5!) \\ &:= T(T(3)) \times (0! + 4! + 5!). \end{aligned}$$

$$\begin{aligned} 3150 &:= F(F(3!)) \times 150 \\ &:= T(T(3)) \times 150. \end{aligned}$$

$$\begin{aligned} 3159 &:= (3! - 1)^5 + F(9) \\ &:= T(31 - 5) \times 9. \end{aligned}$$

$$\begin{aligned} 3165 &:= (-T(T(3)) + 1 + T(T(6))) \times T(5) \\ &:= F(F(F(3!)) - 1) - 6! \times 5. \end{aligned}$$

$$\begin{aligned} 3240 &:= 3!!/2 \times (F(F(4)!)) + 0! \\ &:= T(T(3))/T(2) \times 40. \end{aligned}$$

$$\begin{aligned} 3249 &:= (3!! + 2)/F(F(4)) \times 9 \\ &:= 3 \times (T(2) + 4! \times T(9)). \end{aligned}$$

$$\begin{aligned} 3264 &:= (F(3! \times 2) - F(6)) \times 4! \\ &:= (T(3) - 2)! \times T(6 + T(4)). \end{aligned}$$

$$\begin{aligned} 3276 &:= 3! \times 2 \times F(7) \times F(F(6)) \\ &:= T(3)^2 \times T(7 + 6). \end{aligned}$$

$$\begin{aligned} 3303 &:= F(3 \times 3!) - 0! + 3!! \\ &:= T(T(T(T(3))))/3 + T((0! + 3)!). \end{aligned}$$

$$\begin{aligned} 3304 &:= 3!! + F(3! \times F(04)) \\ &:= T(T(T(T(3))))/3 + 0! + T(4!). \end{aligned}$$

$$\begin{aligned} 3312 &:= (F(3) + F(F(3!))) \times F(12) \\ &:= T(T(3 + 3)) + T(T(12)). \end{aligned}$$

$$\begin{aligned} 3325 &:= (3!! - F(F(3!) + 2)) \times 5 \\ &:= (T(3)! - T(T(T(3) - 2))) \times 5. \end{aligned}$$

$$\begin{aligned} 3333 &:= 3! \times 3!! - F(F(3) \times F(3!)) \\ &:= T(T(T(3))) + (T(T(3))) + T(T(T(3) + T(3))). \end{aligned}$$

$$\begin{aligned} 3339 &:= (-3! + F(3! + F(3!))) \times 9 \\ &:= 3^{T(3)} \times T(3) - T(T(9)). \end{aligned}$$

$$\begin{aligned} 3344 &:= F(3) \times (F(3!)/4! - F(F(4)!)) \\ &:= T(3)! + T(3 \times 4!) - 4. \end{aligned}$$

$$\begin{aligned} 3357 &:= (3!! - F(3)) \times 5 - F(F(7)) \\ &:= -3 + T(3 \times 5) \times T(7). \end{aligned}$$

$$\begin{aligned} 3360 &:= (F(3!))!/(F(3) \times 6) + 0 \\ &:= T(3)!/T(3) \times T(6 + 0!). \end{aligned}$$

$$\begin{aligned} 3374 &:= -F(F(3)) + (F(3) + F(7))^{F(4)} \\ &:= 3 \times (T(3)! + T(T(7))) - 4. \end{aligned}$$

$$\begin{aligned} 3375 &:= 3 \times (-F(3!) + F(F(7))) \times 5 \\ &:= T(3 \times 3) \times 75. \end{aligned}$$

$$\begin{aligned} 3376 &:= F(3!)^{-3+7} - 6! \\ &:= -T(3)! + (-3 + 7)^6. \end{aligned}$$

$$\begin{aligned} 3384 &:= F(3!) - 3!! + 8^4 \\ &:= (T(T(3)) + (-3 + 8)!) \times 4!. \end{aligned}$$

$$\begin{aligned} 3396 &:= 3! \times (3!! - F(9)) - 6! \\ &:= T(3^3) \times 9 - 6. \end{aligned}$$

$$\begin{aligned} 3429 &:= (F(F(3!)) + F(4)!/2) \times 9 \\ &:= (3 + T(4! + T(2))) \times 9. \end{aligned}$$

$$\begin{aligned} 3435 &:= -F(F(3!)) + 4! \times 3!!/5 \\ &:= T(3^4) - T(3) + 5!. \end{aligned}$$

$$\begin{aligned} 3437 &:= -3!! - 4! + F(3! + F(7)) \\ &:= T(T(3)) \times T(T(4)) \times 3 - T(7). \end{aligned}$$

$$\begin{aligned}
3448 &:= F(3 \times 4) \times 4! - 8 \\
&:= T(3) \times 4! \times 4! - 8. \\
3451 &:= (F(F(3!)) + F(F(4)!)) \times (5! - 1) \\
&:= T(T(T(3)) \times 4) - 5! + 1. \\
3452 &:= -F(F(F(3!))) - F(F(4)) + 5!^2 \\
&:= T(T(T(3)) \times 4) - 5! + 2. \\
3454 &:= -F(3) + (4! + 5!) \times 4! \\
&:= T(T(T(3)) \times 4) - 5! + 4. \\
3456 &:= 3 \times (4! + 5!) \times F(6) \\
&:= T(3) \times (-4! + 5!) \times 6. \\
3457 &:= F(F(3)) + 4! \times F(5 + 7) \\
&:= T(T(T(3)) \times 4) - 5! + 7. \\
3463 &:= -3!! + F(F(4)) + F(F(F(6))) - F(3) \\
&:= T(T(3 + T(4))) - 6! - 3. \\
3464 &:= F(3!) + 4! \times 6 \times 4! \\
&:= T(T(T(3))) \times 4! - T(64). \\
3466 &:= F(3) + 4 \times F(F(F(6))) - F(6)! \\
&:= T(T(3 + 4 + 6)) - 6!. \\
3474 &:= -3!! + F(4) \times F(F(7)) \times F(4)! \\
&:= T(3^4) + T(-7 + 4!). \\
3483 &:= 3 \times (F(4)!! + F(8)^{F(3)}) \\
&:= T(T(3)) - 4! + T(83). \\
3486 &:= F(3!)^4 - F(F(8)) - 6 \\
&:= T(3^4 + 8 - 6). \\
3487 &:= -F(3!) - (F(4)! - F(8)) \times F(F(7)) \\
&:= T(-3 \times (T(4) - T(8))) + T(T(7)). \\
3492 &:= 3 \times (F(F(4)!) + F(9)^2) \\
&:= T(3^4) + T(9 \times 2). \\
3497 &:= F(3) + (4! - 9) \times F(F(7)) \\
&:= -3 - T(T(4) + T(9)) + 7!. \\
3498 &:= F(F(F(3!))) \times 4 + F(9) - 8! \\
&:= T(T(T(3)) - T(4)) \times (T(9) + 8). \\
3525 &:= (F(F(3!)) + 5!) \times 25 \\
&:= (T(T(3)) + 5!) \times 25. \\
3534 &:= (F(3 \times 5) - F(F(3!))) \times F(4)! \\
&:= (-T(3) + 5!) \times (T(T(3)) + T(4)). \\
3544 &:= F(3!) \times 5! + F(F(4) \times F(4)!) \\
&:= T(T(T(3))) \times T(5) + T(T(4)) + 4!. \\
3545 &:= (3!! - 5 - F(4)!) \times 5 \\
&:= (T(3)! - T(5) + 4) \times 5. \\
3549 &:= F(F(3!)) \times (5! + 49) \\
&:= T(T(3)) \times (5! + 49). \\
3567 &:= F(3) + 5 \times (6! - 7) \\
&:= -3 + T(56 + T(7)). \\
3568 &:= F(3!) + 5 \times (6! - 8) \\
&:= (T(T(3)) - 5) \times (T(T(6)) - 8). \\
3573 &:= 3 + T(T(5 + 7) + T(3)) \\
&:= F(3!) + 5 \times (-7 + 3!!). \\
3594 &:= -3! + 5! \times (F(9) - 4) \\
&:= T(T(3) \times (5 + 9)) + 4!. \\
3597 &:= 3!! \times 5 - F(-9 + F(7)) \\
&:= T(3)! \times 5 - T(9 - 7). \\
3602 &:= F(3) + 60^2 \\
&:= T(3)! \times (6 - 0!) + 2. \\
3603 &:= 3 + 60^{F(3)} \\
&:= 3 - 6! \times (0! - T(3)). \\
3605 &:= (F(3) + 6! - 0!) \times 5 \\
&:= (T(3)! + (6 \times 0!)) \times 5. \\
3624 &:= 3!! \times (6 - F(2)) + 4! \\
&:= (3 + T(T(6) \times 2)) \times 4. \\
3627 &:= (3!! - (F(F(6)))^2) \times F(7) \\
&:= T(3)! + 6! + T(2)^7. \\
3635 &:= (3^6 - F(3)) \times 5 \\
&:= (T(3)! + T(6)/3) \times 5. \\
3643 &:= (-F(3!) + F(F(F(6))))/F(4) - 3 \\
&:= -3 + 6! + T(T(T(4)) + T(T(3))). \\
3646 &:= (-F(3!) + F(F(F(6))))/(4!/F(6)) \\
&:= T(3)! + T(T(6) + T(4 + 6)). \\
3647 &:= 3! \times F(F(F(6))) - F(4)! - F(7) \\
&:= 3 \times T(-6 + T(T(4))) - T(7). \\
3648 &:= (-F(3) + F(F(6))) \times 4! \times 8 \\
&:= (-3 + T(T(6))) \times (4! - 8).
\end{aligned}$$

$$\begin{aligned} 3658 &:= -F(3) + 6 \times F(5!/8) \\ &:= 3 + T(-6 + T(5 + 8)). \end{aligned}$$

$$\begin{aligned} 3672 &:= 3! \times (F(F(6) + 7)) + 2 \\ &:= 3 \times T(T(6) + T(7)) - T(2). \end{aligned}$$

$$\begin{aligned} 3675 &:= (F(3) + 6! + F(7)) \times 5 \\ &:= 3 \times T(6 + T(7) + T(5)). \end{aligned}$$

$$\begin{aligned} 3705 &:= (3!! + F(7 + 0!)) \times 5 \\ &:= T(37 + 0!) \times 5. \end{aligned}$$

$$\begin{aligned} 3720 &:= F(3!) \times (F(F(7)) \times 2 - 0!) \\ &:= (3 + T(7)) \times (T(T(2)) - 0!)!. \end{aligned}$$

$$\begin{aligned} 3732 &:= (F(3!) \times F(F(7)) + F(3)) \times 2 \\ &:= T(3) \times (T(T(7)) + T(3)^{T(2)}). \end{aligned}$$

$$\begin{aligned} 3734 &:= (F(3!) \times F(F(7)) + 3) \times F(F(4)) \\ &:= T(T(T(3))) + 7! + 3 - T(T(T(4))). \end{aligned}$$

$$\begin{aligned} 3744 &:= 3 \times F(7) \times 4 \times 4! \\ &:= 3 \times (T(7) + 4!) \times 4!. \end{aligned}$$

$$\begin{aligned} 3746 &:= 3!! \times (-7 - F(4)) + F(F(F(6))) \\ &:= T(3 \times T(7)) - T(T(4)) + T(T(6)). \end{aligned}$$

$$\begin{aligned} 3835 &:= F(3!)/F(8) \times F(3) - 5 \\ &:= T(T(T(T(3)) - 8)) - T(T(T(3)) + 5). \end{aligned}$$

$$\begin{aligned} 3842 &:= (F(3!)/F(8) \times F(F(4)) + 2 \\ &:= T(T(3)!/8) - T(4! - 2). \end{aligned}$$

$$\begin{aligned} 3844 &:= F(3!)/F(8) \times F(F(4)) + 4 \\ &:= T(3)! - T(8) + T(T(T(4)) + 4!). \end{aligned}$$

$$\begin{aligned} 3856 &:= F(3)^8 + 5 \times 6! \\ &:= -T(T(T(3))) - 8 + T(T(5) \times 6). \end{aligned}$$

$$\begin{aligned} 3882 &:= (F(F(3!)) + 8!/F(8)) \times 2 \\ &:= 3 \times (T(8) \times T(8) - 2). \end{aligned}$$

$$\begin{aligned} 3927 &:= (F(3!) + 9) \times (-2 + F(F(7))) \\ &:= T(3 \times (9 + 2)) \times 7. \end{aligned}$$

$$\begin{aligned} 3945 &:= F(F(3)) + F(9) \times (-4 + 5!) \\ &:= (T(3)! + T(9) + 4!) \times 5. \end{aligned}$$

$$\begin{aligned} 3954 &:= 3! \times (F(9) + 5^4) \\ &:= -T(3) + (T(9) + 5!) \times 4!. \end{aligned}$$

$$\begin{aligned} 3960 &:= -(F(F(3)) - F(9)) \times (6 - 0!)! \\ &:= ((T(T(3)) + T(9)) \times 60). \end{aligned}$$

$$\begin{aligned} 3961 &:= (F(3!) + 9) \times F(F(6 + 1)) \\ &:= T(T(3)!/9) + 6! + 1. \end{aligned}$$

$$\begin{aligned} 3967 &:= 3! + (9 + F(6)) \times F(F(7)) \\ &:= T(T(3)!/9) + 6! + 7. \end{aligned}$$

$$\begin{aligned} 3968 &:= F(3!) \times (9!/6! - 8) \\ &:= T(T(3)!/9) + 6! + 8. \end{aligned}$$

$$\begin{aligned} 4032 &:= F(F(4)!)/(0! + 3^2) \\ &:= 4! \times T(0! + T(3)) \times T(T(2)). \end{aligned}$$

$$\begin{aligned} 4059 &:= -F(F(F(4)!)) \times 0! + 5! \times F(9) \\ &:= (T(4) - 0!)!/5! + T(T(9)). \end{aligned}$$

$$\begin{aligned} 4094 &:= -F(F(4)) + (0! - 9)^4 \\ &:= -(4 \times 0)! + T(9 \times T(4)). \end{aligned}$$

$$\begin{aligned} 4147 &:= -F(F(F(4)! + 1)) + F(F(4)! + F(7)) \\ &:= 4 \times T(T(-1 + T(4))) + 7. \end{aligned}$$

$$\begin{aligned} 4173 &:= -T(41) + 7! - T(3) \\ &:= F((4 - 1)! + F(7)) - F(3!). \end{aligned}$$

$$\begin{aligned} 4175 &:= -F(4)! + F(1 + F(7) + 5) \\ &:= -T(4) - 1 + T(T(T(7) - T(5))). \end{aligned}$$

$$\begin{aligned} 4190 &:= F(F(4)!) + F(19) + 0! \\ &:= 4 + T(1 + 90). \end{aligned}$$

$$\begin{aligned} 4196 &:= -F(4)! + F(19) + F(F(6)) \\ &:= T(4) + T(T(19 - 6)). \end{aligned}$$

$$\begin{aligned} 4200 &:= F(F(F(4)!)) \times 200 \\ &:= T(4!) \times (T(T(T(2)) - 0!) - 0!). \end{aligned}$$

$$\begin{aligned} 4223 &:= 42 + F(-2 + F(F(3!))) \\ &:= -T(T(4)) + T(T(2 + T(T(T(2))))/3). \end{aligned}$$

$$\begin{aligned} 4224 &:= F(F(4)!) \times 22 \times 4! \\ &:= T(42) + T(T(2)^4). \end{aligned}$$

$$\begin{aligned} 4232 &:= T(T(4)) \times T(T(T(T(2))))/3 - T(2) \\ &:= F(F(4)!) \times 23^2. \end{aligned}$$

$$\begin{aligned} 4236 &:= F(F(F(4)!) + 2) + F(-F(3) + F(F(6))) \\ &:= -T(4!) + T(T(2))^3 \times T(6). \end{aligned}$$

$$\begin{aligned} 4237 &:= F(F(F(F(4)!)) - 2) + F(3!) \times 7 \\ &:= -T(T(4)) + T(T(2)) \times T(3)! - T(7). \end{aligned}$$

$$\begin{aligned} 4239 &:= 4! + F(-2 + F(F(3!))) + F(9) \\ &:= (T(4!) + T(T(2) \times T(3))) \times 9. \end{aligned}$$

$$4244 := F(F(F(F(4)!)) - 2) + F(4) \times F(F(F(4)!)) \\ := (T(4) + T(T(T(T(2)))) \times 4! - T(T(T(4)))).$$

$$4245 := (F(F(4)!))^2 + F(4! - 5) \\ := -T(4!) + (T(2) + T(4!)) \times T(5).$$

$$4266 := (-F(4)^2 + 6!) \times 6 \\ := (4! - T(T(2))) \times (6 + T(T(6))).$$

$$4272 := 4! \times 2 \times F(F(7) - 2) \\ := (T(4!) + T(T(2)) + T(T(7))) \times T(T(2)).$$

$$4284 := F(F(4)^2) \times F(8) \times F(4)! \\ := T(4!) \times T(T(T(2))) - T(8 + T(T(4))).$$

$$4293 := (F(4)!! \times 2 - 9) \times 3 \\ := T(4! + 29) \times 3.$$

$$4302 := (-F(4) + 3!!) \times (0! + 2!) \\ := (-4 + T(3)! + 0!) \times T(T(2)).$$

$$4306 := F(4)! \times (3!! - 0!) - F(6) \\ := T(T(T(4) + 3)) + (-0! + 6)!.$$

$$4310 := F(4)! \times 3!! - 10 \\ := -T(4) + T(3)! \times T(T(1 + 0!)).$$

$$4314 := F(4)! \times 3!! - 1 \times F(4)! \\ := 4! \times (T(3)! - 1)/4.$$

$$4320 := F(4)! \times 3!! + F(2) \times 0 \\ := 4! \times T(3)! / (T(2) + 0!).$$

$$4321 := F(4)! \times 3!! + F(2) \times 1 \\ := T(T(-4 + T(3))) \times T(T(2))! + 1.$$

$$4322 := F(4)! \times 3!! + F(2) \times 2 \\ := 4 + T(3)! \times T(T(2)) - 2.$$

$$4323 := F(4)! \times 3!! + F(2) \times 3 \\ := (4 + T(3)!) \times T(T(2)) - T(T(3)).$$

$$4324 := F(4)! \times 3!! + F(2) \times 4 \\ := 4 + T(3) \times (2 + 4)!.$$

$$4325 := F(4)! \times 3!! + F(2) \times 5 \\ := T(4) + T(3)! \times T(T(2)) - 5.$$

$$4326 := F(4)! \times 3!! + F(2) \times 6 \\ := 4! - T(3) \times (T(2) - 6!).$$

$$4327 := F(4)! \times 3!! + F(2) \times 7 \\ := 4^{T(3)} + T(T(2) \times 7).$$

$$4328 := F(4)! \times 3!! + F(2) \times 8 \\ := T(T(-4 + T(3))) \times T(T(2))! + 8.$$

$$4329 := F(4)! \times 3!! + F(2) \times 9 \\ := T(T(-4 + T(3))) \times T(T(2))! + 9.$$

$$4331 := (F(F(4)) + 3!!) \times 3! - 1 \\ := T(4) + T(3) \times T(3)! + 1.$$

$$4332 := F(4)! \times (F(3) + (3 \times 2)!) \\ := T(4) + T(3) \times T(3)! + 2.$$

$$4333 := (F(F(4)) + 3!!) \times 3! + F(F(3)) \\ := T(4) + T(3) \times T(3)! + 3.$$

$$4334 := (F(F(4)) + 3!!) \times 3! + F(F(4)) \\ := T(4) + T(3) \times T(3)! + 4.$$

$$4335 := F(4)! \times 3!! + 3 \times 5 \\ := T(4) + T(3) \times T(3)! + 5.$$

$$4336 := 4^{F(3)} + 3! \times 6! \\ := T(4) + T(3) \times T(3)! + 6.$$

$$4337 := (4 + 3)! - T(37) \\ := 4^{3!} + F(3!) + F(F(7)).$$

$$4338 := (F(4) + 3!!) \times (-F(3) + 8) \\ := T(4) + T(3)! \times T(3) + 8.$$

$$4343 := (4 + 3!!) \times F(4)! - F(F(3)) \\ := -4 + (T(T(T(3))) - 4!) \times T(T(3)).$$

$$4347 := -4! + T(3 \times (4! + 7)) \\ := F(4) \times 3!! + F(4)^7.$$

$$4348 := (F(4)! + 3!!) \times F(4)! - 8 \\ := 4 \times (T(3) + T(T(4) + T(8))).$$

$$4350 := F(4)! \times (3!! + 5) + 0 \\ := T(4) \times T(T(3) \times 5 - 0!).$$

$$4356 := F(4)! \times (3!! + 5) + 6 \\ := -T(4!) + T(T(3) \times T(5) + 6).$$

$$4357 := F(4)! \times (3!! + 5) + 7 \\ := T(4! - T(3)) + T(T(-T(5) + T(7))).$$

$$4362 := F(4)! \times (3^6 - 2) \\ := 4! + T(3) \times (6! + T(2)).$$

$$4365 := F(4)!! + 3^6 \times 5 \\ := (T(4!) - 3 - 6) \times T(5).$$

$$\begin{aligned}
4366 &:= F(4)^{3!} \times 6 - F(6) \\
&:= T(4) + (T(3) + 6!) \times 6. \\
4374 &:= F(4)^{3!} \times (7 - 4)! \\
&:= -T(T(4!/3)) + (T(7)/4)!. \\
4378 &:= -F(4)^{F(3!)} - 7 + F(F(8)) \\
&:= 4!/T(3) + 7! - T(T(8)). \\
4379 &:= -4 + (3!! - F(F(7))) \times 9 \\
&:= -T(4) + T(T(T(3))) \times (T(7) - 9). \\
4383 &:= F(4)! \times 3!! + F(8) \times 3 \\
&:= (-4! + T(T(3)! - T(T(8)))) \times 3. \\
4384 &:= F(4)! \times 3!! + 8^{F(F(4))} \\
&:= (4 + 3)! - T(T(8)) + T(4). \\
4385 &:= -F(4)^{F(3!)} + F(F(F((8 - 5)!))) \\
&:= T(4) + T(3)! + T(85). \\
4395 &:= (-F(4)!! + F(3!)/9) - 5 \\
&:= T(4!) + T((-3 + 9) \times T(5)). \\
4399 &:= (-F(4)!! + F(3)! - 9)/9 \\
&:= (T(T(4)) \times T(3)! - 9)/9. \\
4410 &:= F(F(F(4)!))^{F(F(4))} \times 10 \\
&:= T(4! - 4) \times T(T(T(1 + 0!))). \\
4416 &:= 4! \times (4! - 1) \times F(6) \\
&:= (-4! + T(4!)) \times 16. \\
4424 &:= F(4!)/F(F(F(4)!)) \times 2 + F(F(4)!) \\
&:= 4 + 4 \times T(T(2))! + T(T(T(4))). \\
4428 &:= (F(4!) - F(F(F(4)!))) + 2)/8 \\
&:= T(T(T(4))) + 4 \times T(T(2))! + 8. \\
4432 &:= (F(F(4)!) + F(4!)/F(F(3!))) \times 2 \\
&:= T(T(T(4))) + 4 \times (T(3)! + T(2)). \\
4434 &:= (F(4)!! - F(F(4)) + F(F(3!))) \times F(4)! \\
&:= T(4! - 4) \times T(T(3)) + 4!. \\
4440 &:= F(4)! \times F(4)!! + (4 + 0)! \\
&:= (T(4!) - 4) \times T(4 + 0!). \\
4443 &:= (4! + F(4)!!) \times F(4)! - F(F(3!)) \\
&:= (T(T(T(4))) - 4 - T(T(4))) \times 3. \\
4446 &:= F(4)! \times (F(4 + 4) + 6!) \\
&:= T(4! \times 4) - T(4) \times T(6). \\
4448 &:= F(F(4)) + F(4)! \times (F(4)!! + F(8)) \\
&:= (T(4!) + 4^4) \times 8. \\
4459 &:= -F(F(F(4)!)) + (F(4) + 5)!/9 \\
&:= 4 + T(4!) \times T(5) - T(9). \\
4462 &:= F(4)! \times (4! + 6!) - 2 \\
&:= T(T(4) \times T(4) - 6) - T(2). \\
4463 &:= F(4)! \times (4! + 6!) - F(F(3)) \\
&:= T(T(T(4))) + T(T(T(4)) + T(6)) - 3. \\
4466 &:= F(F(4)) + (4! + 6!) \times 6 \\
&:= T(4! + 4) \times T(T(6))/T(6). \\
4467 &:= F(4)! \times F(4)!! + F(F(6)) \times 7 \\
&:= T(T(4!)/4) + T(T(6)) \times 7. \\
4469 &:= -F(4) - F(F(4)!) + F(6)!/9 \\
&:= 4 + T(T(T(4)) - 6 + T(9)). \\
4473 &:= 4^{F(4)!} + F(7 \times F(3)) \\
&:= (4 \times T(T(4)) - 7) \times T(T(3)). \\
4474 &:= -4! \times 4! + 7! + T(4) \\
&:= F(F(4)!!)/(-4 + F(7)) - F(4)!. \\
4475 &:= F(F(4)!)/(-4 + F(7)) - 5 \\
&:= -T(4) \times T(T(4)) + 7! - T(5). \\
4476 &:= F(4)! \times (F(F(4)) \times F(7) + 6!) \\
&:= T(4!) - T(4) + T(T(7 + 6)). \\
4483 &:= (F(F(4)!))!/(F(F(F(4)))) + 8) + 3 \\
&:= T(4!) + T(T(T(4)) + T(8)) - 3. \\
4485 &:= (F(F(4)!))!/(F(F(F(4)))) + 8) + 5 \\
&:= (T(T(4!/4)) + T(T(8))) \times 5. \\
4486 &:= (F(F(4)!))!/(F(F(F(4)))) + 8) + 6 \\
&:= T(4!) + T(T(T(4) + T(8 - 6))). \\
4496 &:= F(F(4)!) + (F(F(4)!))!/9 + F(6) \\
&:= -4 + T(4!) \times (9 + 6). \\
4498 &:= -F(4) + (F(F(4)!))!/9 + F(8) \\
&:= T(4) + T(4! + 9) \times 8. \\
4536 &:= F(4)! \times (5! + 3!) \times 6 \\
&:= T(4!) \times T(5) + 36. \\
4560 &:= -4 \times 5! + (F(6) - 0)! \\
&:= T(4!) \times T(5) + 60.
\end{aligned}$$

$$4563 := F(4)^5 + 6! \times 3! \\ := T(4!) \times T(5) + 63.$$

$$4567 := F(F(4)!) \times (-5! + 6!) - F(F(7)) \\ := T(4!) \times T(5) + 67.$$

$$4569 := F(F(4)! + 5) + (F(6))!/9 \\ := T(4!) \times T(5) + 69.$$

$$4574 := (F(F(4)) + 5)! - F(F(7)) \times F(F(4)) \\ := T(4!) \times T(5) + 74.$$

$$4576 := 4 \times (5 \times F(F(7)) - F(F(6))) \\ := T(4!) \times T(5) + 76.$$

$$4578 := (-F(4) \times 5 + F(F(7))) \times F(8) \\ := T(4!) \times T(5) + 78.$$

$$4596 := (-F(4)! + 5!) \times F(9) + 6! \\ := T(4!) \times T(5) + 96.$$

$$4599 := F(F(F(4)!)) \times (5! + 99) \\ := T(4!) \times T(5) + 99.$$

$$4634 := (F(-4 + F(F(6))) + 3!!) \times F(F(4)) \\ := T(4)!/6! - T(T(3 + 4)).$$

$$4636 := (F(4!) - F(6))/(F(3) + F(6)) \\ := T(T(4) + T(6 + T(3))) + 6!.$$

$$4637 := -F(F(4))^{F(6)} + F(F(3!)) \times F(F(7)) \\ := T(4)!/6! + 3 - T(T(7)).$$

$$4644 := (F(4)!! + (F(F(6)))^{F(F(4))}) \times 4 \\ := T(T(4)) \times T(6) \times 4 + 4!.$$

$$4656 := F(4)! \times (6! + 56) \\ := T(4 \times (6 \times 5 - 6)).$$

$$4672 := -4! \times 6! + T(7)^{T(2)} \\ := -F(F(4)!) + 6! \times F(7)/2.$$

$$4674 := -F(4)! + 6! \times F(7)/F(F(4)) \\ := -T(-T(4) + T(6)) + 7! - T(4!).$$

$$4687 := 4! - F(6 + 8) + 7! \\ := 4 + T(6) + T(T(8)) \times 7.$$

$$4688 := -4! + F(-6 + F(8)) \times 8 \\ := 4! \times (T(T(6)) - T(8)) + 8.$$

$$4689 := F(4)!! + F(F(6)) \times F(8) \times 9 \\ := 4! \times (T(T(6)) - T(8)) + 9.$$

$$4697 := (-4 + 6! - T(9)) \times 7 \\ := -F(F(4)!) + F(6) + F(9) + 7!.$$

$$4704 := 4! \times (F(7) + 0!)^{F(F(4))} \\ := T(47 + 0!) \times 4.$$

$$4720 := (F(4) + F(F(7))) \times 20 \\ := -T(4!) + 7! - 20.$$

$$4725 := (-F(F(4)!) + F(F(7))) \times F(F(F(2) + 5)) \\ := T(4) + 7! - T(25).$$

$$4727 := -4! \times F(7) - F(2) + 7! \\ := -T(4!) - 7 - T(T(2)) + 7!.$$

$$4728 := -4! \times F(7) + (-F(2) + 8)! \\ := T(4!) \times 7 + T(2 \times T(8)).$$

$$4733 := F(F(4)!) + (F(F(7)) - F(3!)) \times F(F(3!)) \\ := -T(T(4)) + T(7) \times T(3 \times T(3)).$$

$$4735 := (-F(4)! + F(F(7)) + 3!!) \times 5 \\ := T(T(4)) + 7! - 3 \times 5!.$$

$$4736 := (-F(F(4))^7 + 3!!) \times F(6) \\ := T(4) + T(T(7)) + T(3) \times 6!.$$

$$4740 := (4 + F(F(7))) \times (F(F(F(4)!)) - 0!) \\ := -T(4!) + 7! \times (4 \times 0)!.$$

$$4743 := (-4! + F(F(7)) - F(4)!) \times F(F(3!)) \\ := 4! + 7! - T(4!) - T(T(3)).$$

$$4744 := (F(4)!! + F(F(7)) \times F(F(4))) \times 4 \\ := 4 + (T(7)/4)! - T(4!).$$

$$4745 := (F(4)!! + F(F(7)) - 4) \times 5 \\ := -T(4) + 7! - T(4!) + T(5).$$

$$4749 := -4 + T(T(7) + 4!) + T(9) \\ := F(F(F(4)!)) \times F(F(7)) - F(F(4) + 9).$$

$$4753 := -F(4)!! + F(F(F(7) - 5))/F(3) \\ := T(-4 \times 7 + 5^3).$$

$$4763 := -4 + (F(F(7)) - 6) \times F(F(3!)) \\ := T(4) + T(T(7 + 6) + T(3)).$$

$$4764 := (-F(4)! + F(F(7))) \times F(F(6)) - F(4) \\ := 4! + 7! - T(6 \times 4).$$

$$4773 := -F(F(4) + F(7)) + 7! + 3!! \\ := T(4) \times T(T(7)) - 7 + T(3)!.$$

$$4776 := 4! \times F(7) \times F(7) + 6! \\ := -4! + 7! - 7!/T(6).$$

$$4778 := -F(F(4)!) - F(F(7)) + 7! - F(8) \\ := -T(4) + 7! - 7 \times T(8).$$

$$4779 := F(4)! - F(F(7)) + 7! - F(9) \\ := (T(4!) + T(-7 + T(7))) \times 9.$$

$$4780 := (F(4)! + F(F(7))) \times (F(8) - 0!) \\ := T(T(4)) \times T(7) + T(80).$$

$$4783 := -4! - F(F(7)) + (F(8)/3)! \\ := T(4) + 7! - T(8) - T(T(T(3))).$$

$$4784 := F(4!) \times F(7)/(F(8) \times F(4)!) \\ := T(T(4)) \times T(7) + T(80).$$

$$4794 := 47 \times F(9) \times F(4) \\ := (-T(4!) + T(T(7))) \times T(9) + 4!.$$

$$4796 := -F(4)! + 7 \times (-F(9) + 6!) \\ := -4 + 7! - 9 - T(T(6)).$$

$$4797 := (-T(T(4)) + T(7)) \times 9 + 7! \\ := -F(4)^7/9 + 7!.$$

$$4800 := F(4)! \times 800 \\ := T(4!) \times 8 \times (0! + 0!).$$

$$4827 := -4! + F(8) \times (-2 + F(F(7))) \\ := -4! + T((8 + T(T(2))) \times 7).$$

$$4837 := (F(4)!! - F(8) - F(3)!) \times 7 \\ := (4 + T(T(8)) + T(T(3))) \times 7.$$

$$4848 := F(4)!! + (8! + F(4!))/F(8) \\ := 4 \times (T(8) + T(48)).$$

$$4857 := -F(4) \times F(8) - 5! + 7! \\ := T(4!) + (T(T(8)) - T(5)) \times 7.$$

$$4859 := F(F(F(4)!)) \times F(8 + 5) - F(9) \\ := -T(T(4)) + (T(T(8)) - 5!) \times 9.$$

$$4863 := -F(-F(4)! + F(8)) + F(F(F(6)))/F(3) \\ := 4 + 8 + T(T(6)) \times T(T(3)).$$

$$4870 := -4! + F(8) \times F(F(7)) + 0! \\ := -T((T(4) + 8)) + 7! + 0!.$$

$$4874 := -F(F(4)!) \times F(8) + 7! + F(F(4)) \\ := -T(T(T(4)) - T(8)) + 7! + 4!.$$

$$4882 := F(-F(4)! + F(8)) \times 8 + 2 \\ := (-T(T(4)) + T(T(8))) \times 8 - T(T(2)).$$

$$4884 := 4 + 8 \times F(F(8) - F(4)!) \\ := (-T(T(4)) + T(T(8))) \times 8 - 4.$$

$$4886 := F(-F(4)! + (F(8))) \times 8 + 6 \\ := -T(T(T(4))) + T(T(8)) + 8 \times 6!.$$

$$4887 := F(-F(4)! + (F(8))) \times 8 + 7 \\ := -T(T(4! - 8)/8) + 7!.$$

$$4888 := F(-F(4)! + (F(8))) \times 8 + 8 \\ := T(4! - 8) \times T(8) - 8.$$

$$4904 := -4 \times F(9) + (0! + F(4)!)! \\ := (T(49) + 0!) \times 4.$$

$$4927 := -4! - F(9 + 2) + 7! \\ := T(T(4)) + (9 + T(2)) \times T(T(7)).$$

$$4937 := -F(4) \times F(9) - F(F(3)) + 7! \\ := -T(4) - 93 + 7!.$$

$$4944 := (F(4)! \times F(9) + F(F(4))) \times 4! \\ := (4! \times 9 - T(4)) \times 4!.$$

$$4947 := (F(4) - F(9)) \times F(4) + 7! \\ := -4! - T(9) - 4! + 7!.$$

$$4957 := F(4) + F(9) - 5! + 7! \\ := T(4 + 95) + 7.$$

$$4960 := -F(4)!!/9 + (F(6) - 0!)! \\ := T(4) \times T(9 + T(6) + 0!).$$

$$4967 := -F(F(F(4))) - 9 \times F(6) + 7! \\ := -T(4) - (9 - 6!) \times 7.$$

$$4968 := -F(F(4)!) \times 9 + (F(6)!)! / 8 \\ := 4! \times (-9 + 6 \times T(8)).$$

$$4970 := (-F(F(4)) + 9)! - 70 \\ := -4! - T(9) + 7! - 0!.$$

$$4971 := -4! - T(9) + 7! \times 1 \\ := -F(F(4)) \times F(9) + 7! - 1.$$

$$4973 := -F(F(4)) \times F(9) + 7! + F(F(3)) \\ := -T(T(4)) - 9 + 7! - 3.$$

$$4974 := (4! \times F(9) + F(7)) \times F(4)! \\ := 4! + T(9 \times (7 + 4)).$$

$$\begin{aligned} 4975 &:= F(-4! + F(9)) + 7! - 5! \\ &:= T(4) + T(9) + 7! - 5!. \end{aligned}$$

$$\begin{aligned} 4976 &:= -4! - F(9) + 7! - 6 \\ &:= -T(T(4)) - 9 + 7 \times 6!. \end{aligned}$$

$$\begin{aligned} 4977 &:= -F(4) \times (F(9) - F(7)) + 7! \\ &:= T(4) - T(9) + 7! - T(7). \end{aligned}$$

$$\begin{aligned} 5027 &:= (5 + 02)! - F(7) \\ &:= -T(5) + 02 + 7!. \end{aligned}$$

$$\begin{aligned} 5032 &:= -F(5 + 0!) + (3! + F(2))! \\ &:= -5 + (0! + T(3))! - T(2). \end{aligned}$$

$$\begin{aligned} 5035 &:= -5 + (F(03) + 5)! \\ &:= ((5 \times 0)! + T(3))! - 5. \end{aligned}$$

$$\begin{aligned} 5045 &:= (5 - 0! + F(4))! + 5 \\ &:= 5 + (0! + T(T(T(4)/5)))!. \end{aligned}$$

$$\begin{aligned} 5046 &:= (5 - 0! + F(4))! + 6 \\ &:= 5 + 0! + T(4)!/6!. \end{aligned}$$

$$\begin{aligned} 5061 &:= F(F(5 + 0!)) + (6 + 1)! \\ &:= T(5 + 0!) + (6 + 1)!. \end{aligned}$$

$$\begin{aligned} 5066 &:= 5 + (0! + 6)! + F(F(6)) \\ &:= 5 + (0! + 6)! + T(6). \end{aligned}$$

$$\begin{aligned} 5067 &:= 5 + 0! + F(F(6)) + 7! \\ &:= 5 + 0! + T(6) + 7!. \end{aligned}$$

$$\begin{aligned} 5079 &:= 5 + 07! + F(9) \\ &:= -5 - 0! + 7! + T(9). \end{aligned}$$

$$\begin{aligned} 5082 &:= (5! + 0!) \times (T(8) + T(T(2))) \\ &:= (5! + 0!) \times F(8) \times 2. \end{aligned}$$

$$\begin{aligned} 5272 &:= F(F(5 + 2)) + 7! - F(2) \\ &:= (T(5) - 2) \times T(T(7)) - T(T(2)). \end{aligned}$$

$$\begin{aligned} 5273 &:= (5 + 2)! + F(7 + 3!) \\ &:= 5 - T(2) + 7! + T(T(T(3))). \end{aligned}$$

$$\begin{aligned} 5334 &:= (F(F(5 + F(3))) + F(F(3!))) \times F(F(F(4)!)) \\ &:= -T(5!/T(3)) + T(T(T(3))) \times 4!. \end{aligned}$$

$$\begin{aligned} 5337 &:= (5! - F(F(3!))) \times 3 + 7! \\ &:= (5! - T(T(3))) \times 3 + 7!. \end{aligned}$$

$$\begin{aligned} 5376 &:= (5! + F(3!)) \times 7 \times 6 \\ &:= T(5) \times T(T(3)) + 7! + T(6). \end{aligned}$$

$$\begin{aligned} 5409 &:= (-5! + F(4)!! + 0!) \times 9 \\ &:= 5! \times T(T(4) - 0!) + 9. \end{aligned}$$

$$\begin{aligned} 5433 &:= -5!/F(4) + F(F(F(3!)))/F(3) \\ &:= 5! + (T(T(T(4))) + T(T(T(3)))) \times 3. \end{aligned}$$

$$\begin{aligned} 5434 &:= (-5! + F(F(F(F(4)!)))/F(3) + F(F(F(4)!)) \\ &:= -5! + 4! \times T(T(T(3))) + T(4). \end{aligned}$$

$$\begin{aligned} 5443 &:= (-5!/F(F(4)) + F(F(F(F(4)!)))/F(3) \\ &:= -5 + 4! \times (-4 + T(T(T(3)))). \end{aligned}$$

$$\begin{aligned} 5448 &:= 5! - F(4)!! + F(4!) - 8! \\ &:= (T(5) + T(T(4 + 4))) \times 8. \end{aligned}$$

$$\begin{aligned} 5472 &:= -5! + 4! \times F(F(7) \times F(2)) \\ &:= T(5 + 4!) + 7! - T(2). \end{aligned}$$

$$\begin{aligned} 5473 &:= F(F(5 - 4 + 7))/F(3) \\ &:= T(-T(5) + 4 \times T(7)) + T(3)!. \end{aligned}$$

$$\begin{aligned} 5487 &:= (-5 + F(4)!!) \times 8 - F(F(7)) \\ &:= T(5) \times T(T(4)) + T(T(8)) \times 7. \end{aligned}$$

$$\begin{aligned} 5488 &:= (5! + 4 \times F(F(8)))/8 \\ &:= (5 \times 4 + T(T(8))) \times 8. \end{aligned}$$

$$\begin{aligned} 5535 &:= (5! + F(-5 + F(F(3!)))) \times 5 \\ &:= (5! \times 5 - T(T(T(3)))) \times T(5). \end{aligned}$$

$$\begin{aligned} 5544 &:= (5! + 5! + 4!) \times F(F(F(4)!)) \\ &:= T(5 \times 5 - 4) \times 4!. \end{aligned}$$

$$\begin{aligned} 5597 &:= 5 + (-5 + 9)! \times F(F(7)) \\ &:= (5! + 5) \times T(9) - T(7). \end{aligned}$$

$$\begin{aligned} 5634 &:= -5! + (F(6) \times 3!! - F(4)!) \\ &:= -T(T(5) + T(6)) + T(T(3)) \times T(4)!. \end{aligned}$$

$$\begin{aligned} 5640 &:= -5! + F(6) \times F(4)!! + 0 \\ &:= (5! + T(6)) \times 40. \end{aligned}$$

$$\begin{aligned} 5643 &:= -5! + F(6) \times F(4)!! + 3 \\ &:= (5 + T(T(6))) \times 4! - T(T(3)). \end{aligned}$$

$$\begin{aligned} 5646 &:= -5! + F(6) \times F(4)!! + 6 \\ &:= T(5! - T(6)) - 4! + 6!. \end{aligned}$$

$$\begin{aligned} 5664 &:= -5! + F(6) \times 6! + 4! \\ &:= (5 + T(T(6))) \times 6 \times 4. \end{aligned}$$

$$\begin{aligned} 5697 &:= 5 \times 6! + 9 \times F(F(7)) \\ &:= T(T(5) + T(6)) - 9 + 7!. \end{aligned}$$

$$\begin{aligned} 5733 &:= 5! + F(F(7)) \times F(F((3)!)) + 3!! \\ &:= (-T(5) + T(7)) \times T(T(3)) \times T(T(3)). \end{aligned}$$

$$\begin{aligned} 5736 &:= (-5 + F(7)) \times (-3 + 6!) \\ &:= (T(5) - 7) \times (-3 + 6!). \end{aligned}$$

$$\begin{aligned} 5738 &:= 5 + F(7) \times F(F(3!)) \times F(8) \\ &:= -T(5) - 7 + T(3!) \times 8. \end{aligned}$$

$$\begin{aligned} 5747 &:= (-5 + F(7)) \times F(4)!! - F(7) \\ &:= T(5) \times 7 \times T(T(4)) - T(7). \end{aligned}$$

$$\begin{aligned} 5748 &:= -5 - 7 + F(4)!! \times 8 \\ &:= T(57) + T(T(4)!/8!). \end{aligned}$$

$$\begin{aligned} 5773 &:= -5! - F(7) - 7! + F(F(F(3!))) \\ &:= -T(5) + 7! + T(7) + T(3)!. \end{aligned}$$

$$\begin{aligned} 5783 &:= -5! - 7! + F(F(8)) - 3 \\ &:= T(5) + 7! + 8 + T(3)!. \end{aligned}$$

$$\begin{aligned} 5784 &:= -5! + 7! + T(8) \times 4! \\ &:= -5! - 7! + F(F(8)) - F(F(4)). \end{aligned}$$

$$\begin{aligned} 5894 &:= -5! - 8! - F(9) + F(4!) \\ &:= (-5 + T(T(8))) \times 9 - T(T(4)). \end{aligned}$$

$$\begin{aligned} 6027 &:= F(F(6) \times 02) + 7! \\ &:= T(T(6) - 0! + T(T(T(2)))) \times 7. \end{aligned}$$

$$\begin{aligned} 6048 &:= F(6 \times 04) - 8! \\ &:= (6 + 0!) \times 4! \times T(8). \end{aligned}$$

$$\begin{aligned} 6174 &:= F(F(6)) \times (1 + F(7)) \times F(F(F(4)!)) \\ &:= T(6) \times (1 - 7 + T(4!)). \end{aligned}$$

$$\begin{aligned} 6237 &:= F(F(6)) \times (2^{3!} + F(F(7))) \\ &:= T(T(6)) \times (2 - 3 + T(7)). \end{aligned}$$

$$\begin{aligned} 6264 &:= (F(6) + F(2)) \times (6! - 4!) \\ &:= (6!/T(2) + T(6)) \times 4!. \end{aligned}$$

$$\begin{aligned} 6324 &:= -F(F(6))^{F(3)} + F(-F(2) + F(F(F(4)!))) \\ &:= T(T(T(6))/3) + T(T(2)^4). \end{aligned}$$

$$\begin{aligned} 6336 &:= 6^{3!} - (F(3) + 6!) \\ &:= T(63) + T(3) \times 6!. \end{aligned}$$

$$\begin{aligned} 6384 &:= F(F(6)) \times 38 \times F(F(4)!) \\ &:= T(6) \times (T(3 \times 8) + 4). \end{aligned}$$

$$\begin{aligned} 6426 &:= (6! - F(4)!) \times (F(2) + F(6)) \\ &:= T(T(6) - 4) \times 2 \times T(6). \end{aligned}$$

$$\begin{aligned} 6432 &:= (6! + 4!)/(F(F(3!)))! / 2 \\ &:= (6 + T(4!)) \times T(T(3)) + T(T(2)). \end{aligned}$$

$$\begin{aligned} 6435 &:= F(6 + 4) \times (-3 + 5!) \\ &:= T(6 + 4) \times (-3 + 5!). \end{aligned}$$

$$\begin{aligned} 6444 &:= (6! - 4) \times F(4) \times F(4) \\ &:= T(T(6)) \times (4! + 4) - 4!. \end{aligned}$$

$$\begin{aligned} 6447 &:= (F(6))!/F(4)! - F(F(F(4)!)) \times F(7) \\ &:= T(T(6)) + T(4! + 4!) + 7!. \end{aligned}$$

$$\begin{aligned} 6459 &:= -F(F(6)) + F(4)! \times 5! \times 9 \\ &:= -T(6) + (4! + 5!) \times T(9). \end{aligned}$$

$$\begin{aligned} 6469 &:= -F(6) - F(4) + 6! \times 9 \\ &:= -T(6) + T(4) + 6! \times 9. \end{aligned}$$

$$\begin{aligned} 6472 &:= F(6) \times (F(4)!! + F(F(7) - 2)) \\ &:= -6 + T(4) + T(7) \times T(T(T(2))). \end{aligned}$$

$$\begin{aligned} 6473 &:= F(6) \times F(4)!! - 7 + 3!! \\ &:= 6! \times T(4) - 7 - T(3)!. \end{aligned}$$

$$\begin{aligned} 6490 &:= (6! + F(F(F(4)))) \times 9 + 0! \\ &:= T(6) \times (T(4!) + 9) + 0!. \end{aligned}$$

$$\begin{aligned} 6496 &:= -F(6) + 4! + 9 \times 6! \\ &:= 6 + T(4) + 9 \times 6!. \end{aligned}$$

$$\begin{aligned} 6497 &:= (6! - 4!) \times 9 + F(F(7)) \\ &:= 6! \times T(4) - T(9 + T(7)). \end{aligned}$$

$$\begin{aligned} 6498 &:= (6! + F(F(4))) \times 9!/8! \\ &:= T(6) \times 4! + 9 \times T(T(8)). \end{aligned}$$

$$\begin{aligned} 6594 &:= -6 + 5! \times F(F(9) - 4!) \\ &:= -6 + 5! \times (T(9) + T(4)). \end{aligned}$$

$$\begin{aligned} 6624 &:= -6! \times 6 - 2 + F(F(F(F(4)!))) \\ &:= T(T(6) + 6/T(2)) \times 4!. \end{aligned}$$

$$\begin{aligned} 6644 &:= F(F(F(6))) + (-6! + F(4)) \times F(4)! \\ &:= -6 + (6! - T(T(4))) \times T(4). \end{aligned}$$

$$\begin{aligned} 6648 &:= 6! + (F(F(6)) + F(4)!) \times 8 \\ &:= -6 - 6 + T(4) \times T(T(8)). \end{aligned}$$

$$\begin{aligned} 6660 &:= (F(6))!/6 - 60 \\ &:= 6 \times (-6! + T(60)). \end{aligned}$$

$$\begin{aligned} 6744 &:= (6 + 7!/F(4)) \times 4 \\ &:= T(T(6)) \times T(7) + T(4!) - 4!. \end{aligned}$$

$$\begin{aligned} 6834 &:= (6! + 8!)/3! - F(4)! \\ &:= -6 + (-T(8) + T(3)!) \times T(4). \end{aligned}$$

$$\begin{aligned} 6867 &:= (-6 + F(8 + F(6))) \times 7 \\ &:= T(T(6)) \times 8 - T(6) + 7!. \end{aligned}$$

$$\begin{aligned} 6930 &:= 6 \times (F(9)^{F(3)} - 0!) \\ &:= 6 \times T(T(9)) + T(3 + 0)!. \end{aligned}$$

$$\begin{aligned} 7203 &:= 7^{2+0!} \times F(F(3!)) \\ &:= 7^{T(2)+0!} \times 3. \end{aligned}$$

$$\begin{aligned} 7227 &:= 7! + F(2 + 2)^7 \\ &:= 7! + (T(T(2))/2)^7. \end{aligned}$$

$$\begin{aligned} 7237 &:= (F(7) \times F(2))^3 + 7! \\ &:= (7 + T(T(2)))^3 + 7!. \end{aligned}$$

$$\begin{aligned} 7246 &:= 7! - 2 + F(4!)/F(F(6)) \\ &:= (7! - T(T(2))! + T(T(T(4)) + T(6))). \end{aligned}$$

$$\begin{aligned} 7344 &:= -T(T(7)) + (T(3)! + T(T(4))) \times T(4) \\ &:= 7! + (F(3) \times 4!)^{F(F(4))}. \end{aligned}$$

$$\begin{aligned} 7353 &:= 7 + F(F(F(3!))) - 5 \times 3!! \\ &:= (T(T(7)) \times T(3) + T(5)) \times 3. \end{aligned}$$

$$\begin{aligned} 7365 &:= -F(F(7)) \times 3 + (F(6))!/5 \\ &:= 7 \times T(T(3 + 6)) + 5!. \end{aligned}$$

$$\begin{aligned} 7413 &:= (F(F(7)) + (4 + 1)!) \times F(F(3!)) \\ &:= (T(7) + T(4! + 1)) \times T(T(3)). \end{aligned}$$

$$\begin{aligned} 7434 &:= (7!/4 - F(F(3!))) \times F(4)! \\ &:= -T(T(7)) + T(T(T(4))) + T(T(3)) \times T(4)!. \end{aligned}$$

$$\begin{aligned} 7441 &:= 7^4 + (F(4)! + 1)! \\ &:= 7! + T(T(T(4))) + T(41). \end{aligned}$$

$$\begin{aligned} 7443 &:= -(F(7) + F(F(F(F(4)!)))) \times F(4) + F(3)! \\ &:= (T(7 \times T(4)) - 4) \times 3. \end{aligned}$$

$$\begin{aligned} 7455 &:= 7! + F(F(F(4)!)) \times (5! - 5) \\ &:= 7! + T(T(45)/T(5)). \end{aligned}$$

$$\begin{aligned} 7456 &:= F(F(7)) \times (-4! + 56) \\ &:= T(T(7)) - T(4) \times (T(5) - 6!). \end{aligned}$$

$$\begin{aligned} 7476 &:= (7^{F(4)} + F(7)) \times F(F(6)) \\ &:= 7! + T(4 \times 7) \times 6. \end{aligned}$$

$$\begin{aligned} 7495 &:= -F(F(7)) + F(4!)/(F(9 - 5))! \\ &:= 7! + T(T(T(4))) + T(T(9)) - 5!. \end{aligned}$$

$$\begin{aligned} 7584 &:= 7! + 5! \times F(8) + 4! \\ &:= 7! - 5! + T(T(8)) \times 4. \end{aligned}$$

$$\begin{aligned} 7637 &:= F(7) + F(6 \times 3) + 7! \\ &:= -T(T(7)) + T(T(T(6))/3) + 7!. \end{aligned}$$

$$\begin{aligned} 7644 &:= F(7) \times F(F(6)) \times (4! + 4) \\ &:= T(7) \times T(T(6)) + T(4! + 4)!. \end{aligned}$$

$$\begin{aligned} 7689 &:= F(F(7)) \times (-F(6)/8 + F(9)) \\ &:= 7! + T(6) + T(8 \times 9). \end{aligned}$$

$$\begin{aligned} 7694 &:= (F(F(7)) - 6) \times F(9) - 4! \\ &:= -T(T(7)) + 6! \times T(9)/4. \end{aligned}$$

$$\begin{aligned} 7874 &:= (F(F(7)) + F(8)) \times (7 + 4!) \\ &:= 7! - T(T(8)) + 7! - T(T(T(4))). \end{aligned}$$

$$\begin{aligned} 7920 &:= F(F(7)) \times F(9) - 2 + 0 \\ &:= -7! + (9!/T(T(T(2)) + 0!)). \end{aligned}$$

$$\begin{aligned} 7923 &:= F(F(7)) \times F(9) - 2 + 3 \\ &:= 7 \times (T(T(9)) - T(T(2))) + T(3)!. \end{aligned}$$

$$\begin{aligned} 7926 &:= F(F(7)) \times F(9) - 2 + 6 \\ &:= (T(T(7)) + T(T(9))) \times T(T(2)) - 6!. \end{aligned}$$

$$\begin{aligned} 7937 &:= 7 \times T(T(9)) + T(3)! - T(7) \\ &:= F(7) \times F(9 + 3!) + 7. \end{aligned}$$

$$\begin{aligned} 7942 &:= (T(T(7)) - T(9)) \times (4! - 2) \\ &:= F(F(7)) \times F(9) + F(F(F(4)!)) - F(2). \end{aligned}$$

$$\begin{aligned} 8043 &:= 8!/(0! + 4) - F(F(3!)) \\ &:= 8!/(0! + 4) - T(T(3)). \end{aligned}$$

$$\begin{aligned} 8085 &:= F(8) + 08!/5 \\ &:= (T(8) - 0!) \times T(T(8) - T(5)). \end{aligned}$$

$$\begin{aligned} 8317 &:= 8!/3! + F(17) \\ &:= T(8) \times T(T(T(3))) + 1^7. \end{aligned}$$

$$\begin{aligned} 8344 &:= 8 \times 3!! + F(F(4) \times F(4)!) \\ &:= T(8) \times T(T(T(3))) + 4! + 4. \end{aligned}$$

$$\begin{aligned} 8445 &:= 8!/4! + F(4 \times 5) \\ &:= T(T(8)) \times T(4!)/4! + 5!. \end{aligned}$$

$$\begin{aligned} 8642 &:= F(F(8)) - (F(6) \times F(4)!)^2 \\ &:= (8 + T(6)) \times (T(4!) - 2). \end{aligned}$$

$$\begin{aligned} 8694 &:= F(8) \times 69 \times F(4)! \\ &:= T(8) \times T(69)/T(4). \end{aligned}$$

$$\begin{aligned} 8784 &:= 8!/(F(7) - 8) + F(4)!! \\ &:= -T(8) + (-7! + 8!)/4. \end{aligned}$$

$$\begin{aligned} 8856 &:= (F(8 + 8) + 5!) \times F(6) \\ &:= T(8) \times (T(8) + 5) \times 6. \end{aligned}$$

$$\begin{aligned} 8972 &:= F(F(8)) - F(9 + 7) \times 2 \\ &:= 8 \times T(T(9)) - T(7) + (T(T(2)))!. \end{aligned}$$

$$\begin{aligned} 9243 &:= -9 \times 2 + F(F(F(4)!))^3 \\ &:= 9 \times (2^{T(4)} + 3). \end{aligned}$$

$$\begin{aligned} 9244 &:= F(9)^2 \times F(F(4)!) - 4 \\ &:= (9 - T(2)) \times T(T(T(4))) + 4. \end{aligned}$$

$$\begin{aligned} 9333 &:= 9 \times F(3!) + F(F(3!))^3 \\ &:= (T(T(9)) \times 3 + T(3)) \times 3. \end{aligned}$$

$$\begin{aligned} 9360 &:= F(9 - F(3)) \times 6! + 0 \\ &:= T(9 + 3) \times (6 - 0)!. \end{aligned}$$

$$\begin{aligned} 9407 &:= F(9) + (F(4)!! + 0!) \times F(7) \\ &:= T(T(9)) + (T(4!) - 0!) \times T(7). \end{aligned}$$

$$\begin{aligned} 9454 &:= F(9) \times (F(4)!! - 5!) - F(F(F(4)!)) \\ &:= T(9) \times T(4 \times 5) + 4. \end{aligned}$$

$$\begin{aligned} 9477 &:= 9^{-4+7} \times F(7) \\ &:= T(94) - T(7) + 7!. \end{aligned}$$

2.2.2. Reverse Order of Digits.

$$720 := 0 + (-F(2) + 7)! = 0 + T(T(T(T(2))))/7!.$$

$$721 := 1 + (-F(2) + 7)! = 1 + T(T(T(T(2))))/7!.$$

$$722 := 2 + (-F(2) + 7)! = 2 + T(T(T(T(2))))/7!.$$

$$723 := 3 + (-F(2) + 7)! = 3 + T(T(T(T(2))))/7!.$$

$$724 := 4 + (-F(2) + 7)! = 4 + T(T(T(T(2))))/7!.$$

$$725 := 5 + (-F(2) + 7)! = 5 + T(T(T(T(2))))/7!.$$

$$726 := 6 + (-F(2) + 7)! = 6 + T(T(T(T(2))))/7!.$$

$$727 := 7 + (-F(2) + 7)! = 7 + T(T(T(T(2))))/7!.$$

$$728 := 8 + (-F(2) + 7)! = 8 + T(T(T(T(2))))/7!.$$

$$729 := 9 + (-F(2) + 7)! = 9 + T(T(T(T(2))))/7!.$$

$$5045 := 5 + (F(4) - 0! + 5)! = 5 + T(4)!/(0! + 5)!.$$

$$5046 := 6 + (F(4) - 0! + 5)! = 6 + T(4)!/(0! + 5)!.$$

$$5047 := 7 + (F(4) - 0! + 5)! = 7 + T(4)!/(0! + 5)!.$$

$$5048 := 8 + (F(4) - 0! + 5)! = 8 + T(4)!/(0! + 5)!.$$

$$5049 := 9 + (F(4) - 0! + 5)! = 9 + T(4)!/(0! + 5)!.$$

$$4320 := 0 + 2 \times 3!! \times F(4) = 0 - T(T(2))! + (3 + 4)!.$$

$$4321 := 1 + 2 \times 3!! \times F(4) = 1 - T(T(2))! + (3 + 4)!.$$

$$4322 := 2 + 2 \times 3!! \times F(4) = 2 - T(T(2))! + (3 + 4)!.$$

$$4323 := 3 + 2 \times 3!! \times F(4) = 3 - T(T(2))! + (3 + 4)!.$$

$$4324 := 4 + 2 \times 3!! \times F(4) = 4 - T(T(2))! + (3 + 4)!.$$

$$4325 := 5 + 2 \times 3!! \times F(4) = 5 - T(T(2))! + (3 + 4)!.$$

$$4326 := 6 + 2 \times 3!! \times F(4) = 6 - T(T(2))! + (3 + 4)!.$$

$$4327 := 7 + 2 \times 3!! \times F(4) = 7 - T(T(2))! + (3 + 4)!.$$

$$4328 := 8 + 2 \times 3!! \times F(4) = 8 - T(T(2))! + (3 + 4)!.$$

$$4329 := 9 + 2 \times 3!! \times F(4) = 9 - T(T(2))! + (3 + 4)!.$$

$$5760 := 0 + 6! \times (F(7) - 5) = 0 + 6! \times (-7 + T(5)).$$

$$5761 := 1 + 6! \times (F(7) - 5) = 1 + 6! \times (-7 + T(5)).$$

$$5762 := 2 + 6! \times (F(7) - 5) = 2 + 6! \times (-7 + T(5)).$$

$$5763 := 3 + 6! \times (F(7) - 5) = 3 + 6! \times (-7 + T(5)).$$

$$5764 := 4 + 6! \times (F(7) - 5) = 4 + 6! \times (-7 + T(5)).$$

$$5765 := 5 + 6! \times (F(7) - 5) = 5 + 6! \times (-7 + T(5)).$$

$$5766 := 6 + 6! \times (F(7) - 5) = 6 + 6! \times (-7 + T(5)).$$

$$5767 := 7 + 6! \times (F(7) - 5) = 7 + 6! \times (-7 + T(5)).$$

$$5768 := 8 + 6! \times (F(7) - 5) = 8 + 6! \times (-7 + T(5)).$$

$$5769 := 9 + 6! \times (F(7) - 5) = 9 + 6! \times (-7 + T(5)).$$

$$6480 := 0 + (8 + F(F(F(4)))) \times 6! = 1 + T(8)/4 \times 6!.$$

$$6481 := 1 + (8 + F(F(F(4)))) \times 6! = 1 + T(8)/4 \times 6!.$$

$$6482 := 2 + (8 + F(F(F(4)))) \times 6! = 2 + T(8)/4 \times 6!.$$

$$6483 := 3 + (8 + F(F(F(4)))) \times 6! = 3 + T(8)/4 \times 6!.$$

$$6484 := 4 + (8 + F(F(F(4)))) \times 6! = 4 + T(8)/4 \times 6!.$$

$$6485 := 5 + (8 + F(F(F(4)))) \times 6! = 5 + T(8)/4 \times 6!.$$

$$6486 := 6 + (8 + F(F(F(4)))) \times 6! = 6 + T(8)/4 \times 6!.$$

$$6487 := 7 + (8 + F(F(F(4)))) \times 6! = 7 + T(8)/4 \times 6!.$$

$$6488 := 8 + (8 + F(F(F(4)))) \times 6! = 8 + T(8)/4 \times 6!.$$

$$6489 := 9 + (8 + F(F(F(4)))) \times 6! = 9 + T(8)/4 \times 6!.$$

$$5040 := 0 + (F(4) - 0! + 5)! = 1 + T(4)!/(0! + 5)!.$$

$$5041 := 1 + (F(4) - 0! + 5)! = 1 + T(4)!/(0! + 5)!.$$

$$5042 := 2 + (F(4) - 0! + 5)! = 2 + T(4)!/(0! + 5)!.$$

$$5043 := 3 + (F(4) - 0! + 5)! = 3 + T(4)!/(0! + 5)!.$$

$$5044 := 4 + (F(4) - 0! + 5)! = 4 + T(4)!/(0! + 5)!.$$

$$\begin{aligned}
6840 &:= 0 + (F(4)!! + 8!)/6 = 0 - T(4) \times (T(8) - 6!). \\
6841 &:= 1 + (F(4)!! + 8!)/6 = 1 - T(4) \times (T(8) - 6!). \\
6842 &:= 2 + (F(4)!! + 8!)/6 = 2 - T(4) \times (T(8) - 6!). \\
6843 &:= 3 + (F(4)!! + 8!)/6 = 3 - T(4) \times (T(8) - 6!). \\
6844 &:= 4 + (F(4)!! + 8!)/6 = 4 - T(4) \times (T(8) - 6!). \\
6845 &:= 5 + (F(4)!! + 8!)/6 = 5 - T(4) \times (T(8) - 6!). \\
6846 &:= 6 + (F(4)!! + 8!)/6 = 6 - T(4) \times (T(8) - 6!). \\
6847 &:= 7 + (F(4)!! + 8!)/6 = 7 - T(4) \times (T(8) - 6!). \\
6848 &:= 8 + (F(4)!! + 8!)/6 = 8 - T(4) \times (T(8) - 6!). \\
6849 &:= 9 + (F(4)!! + 8!)/6 = 9 - T(4) \times (T(8) - 6!).
\end{aligned}$$

$$\begin{aligned}
21 &:= F(F((1 + 2)!)) \\
&:= T(T(1 + 2)).
\end{aligned}$$

$$\begin{aligned}
23 &:= F(F(3!)) + 2 \\
&:= T(T(3)) + 2.
\end{aligned}$$

$$\begin{aligned}
143 &:= T(3) \times 4! - 1 \\
&:= F(3 \times 4) - 1.
\end{aligned}$$

$$\begin{aligned}
144 &:= 4! \times T(4 - 1) \\
&:= F(4 \times (4 - 1)).
\end{aligned}$$

$$\begin{aligned}
147 &:= 7 \times F(F((4 - 1)!)) \\
&:= 7 \times T(T(4 - 1)).
\end{aligned}$$

$$\begin{aligned}
227 &:= F(F(7)) - F(2 + 2)! \\
&:= -7 + T(T(T(T(2)))) + T(2).
\end{aligned}$$

$$\begin{aligned}
232 &:= -F(2) + F(F(3! + F(2))) \\
&:= T(2) + T(T(T(3))) - 2.
\end{aligned}$$

$$\begin{aligned}
235 &:= F(F(5 + F(3))) + 2 \\
&:= (-T(5) + T(3!))/T(2).
\end{aligned}$$

$$\begin{aligned}
247 &:= F(7) \times (F(F(4)!)) - 2 \\
&:= T(T(7) + T(4))/T(2).
\end{aligned}$$

$$\begin{aligned}
254 &:= F(F(F(4)!)) + F(F(5 + 2)) \\
&:= T(T(4)) \times 5 - T(T(T(2))).
\end{aligned}$$

$$\begin{aligned}
273 &:= F(F(3!)) \times F(7) \times F(2) \\
&:= T(T(3) + 7) \times T(2).
\end{aligned}$$

$$\begin{aligned}
274 &:= F(F(F(4)!)) \times F(7) + F(2) \\
&:= T(4!) - T(7) + 2.
\end{aligned}$$

$$\begin{aligned}
336 &:= F(6)!/(F(3) + 3)! \\
&:= T(63)/T(3).
\end{aligned}$$

$$\begin{aligned}
354 &:= F(4) \times (5!) - 3! \\
&:= 4! \times T(5) - T(3).
\end{aligned}$$

$$\begin{aligned}
7560 &:= 0 + F(F(6)) \times 5! + 7! = 0 + T(6) \times 5! + 7!. \\
7561 &:= 1 + F(F(6)) \times 5! + 7! = 1 + T(6) \times 5! + 7!. \\
7562 &:= 2 + F(F(6)) \times 5! + 7! = 2 + T(6) \times 5! + 7!. \\
7563 &:= 3 + F(F(6)) \times 5! + 7! = 3 + T(6) \times 5! + 7!. \\
7564 &:= 4 + F(F(6)) \times 5! + 7! = 4 + T(6) \times 5! + 7!. \\
7565 &:= 5 + F(F(6)) \times 5! + 7! = 5 + T(6) \times 5! + 7!. \\
7566 &:= 6 + F(F(6)) \times 5! + 7! = 6 + T(6) \times 5! + 7!. \\
7567 &:= 7 + F(F(6)) \times 5! + 7! = 7 + T(6) \times 5! + 7!. \\
7568 &:= 8 + F(F(6)) \times 5! + 7! = 8 + T(6) \times 5! + 7!. \\
7569 &:= 9 + F(F(6)) \times 5! + 7! = 9 + T(6) \times 5! + 7!.
\end{aligned}$$

$$\begin{aligned}
364 &:= 4 + 6!/F(3) \\
&:= T(T(T(4)) - T(6)) - T(T(T(3))).
\end{aligned}$$

$$\begin{aligned}
369 &:= 9 + 6!/F(3) \\
&:= T(T(9)) - T(6 \times T(3)).
\end{aligned}$$

$$\begin{aligned}
384 &:= 4! \times 8 \times F(3) \\
&:= -T(4!) - T(8) + T(3)!.
\end{aligned}$$

$$\begin{aligned}
432 &:= 2 \times 3!^{F(4)} \\
&:= T(2) \times T(3) \times 4!.
\end{aligned}$$

$$\begin{aligned}
433 &:= F(F(3!))^{F(3)} - F(F(4)!) \\
&:= T(3^3) + T(T(4)).
\end{aligned}$$

$$\begin{aligned}
445 &:= 5 \times F(F(4) + F(F(4)!)) \\
&:= T(5 + 4!) + T(4).
\end{aligned}$$

$$\begin{aligned}
462 &:= (F(2) + F(F(6))) \times F(F(F(4)!)) \\
&:= -T(2) + T(6!/4!).
\end{aligned}$$

$$\begin{aligned}
472 &:= 2 \times F(F(7)) + F(4)! \\
&:= T(T(2) + T(7)) - 4!.
\end{aligned}$$

$$\begin{aligned}
497 &:= (-7! + 9!)/F(4)! \\
&:= T(T(7)) + T(9 + 4).
\end{aligned}$$

$$\begin{aligned}
504 &:= 4! \times F(F(0! + 5)) \\
&:= 4! \times T(0! + 5).
\end{aligned}$$

$$\begin{aligned}
546 &:= F(F(6)) \times (F(F(F(4)!)) + 5) \\
&:= T(T(6)) + T(4!) + T(5).
\end{aligned}$$

$$\begin{aligned}
564 &:= 4 \times (F(F(6)) + 5!) \\
&:= 4 \times (T(6) + 5!).
\end{aligned}$$

$$\begin{aligned}
576 &:= 6! - F(7 + 5) \\
&:= T(T(T(6)))/7 + T(5).
\end{aligned}$$

$$\begin{aligned} 733 &:= (3 + 3)! + F(7) \\ &:= T(3)! + T(3) + 7. \end{aligned}$$

$$\begin{aligned} 735 &:= 5 \times F(F(3!)) \times 7 \\ &:= 5 \times T(T(3)) \times 7. \end{aligned}$$

$$\begin{aligned} 748 &:= F(8) + F(4)!! + 7 \\ &:= T(T(8/4))! + T(7). \end{aligned}$$

$$\begin{aligned} 846 &:= 6!/4 + T(T(8)) \\ &:= 6! + F(4)! \times F(8). \end{aligned}$$

$$\begin{aligned} 0133 &:= 3! \times (F(F(3!)) + 1) + 0! \\ &:= -3 + T(T(3) + 10). \end{aligned}$$

$$\begin{aligned} 0134 &:= 4! \times T(3) - 10 \\ &:= F(4 \times 3) - 10. \end{aligned}$$

$$\begin{aligned} 0142 &:= -2 + F(4!/(1 + 0!)) \\ &:= T(T(2)) + T(T(4 + 1) + 0!). \end{aligned}$$

$$\begin{aligned} 0147 &:= 7 \times F(4 \times (1 + 0!)) \\ &:= T(7) + (4 + 1)! - 0!. \end{aligned}$$

$$\begin{aligned} 0155 &:= -5! + 5 \times F(10) \\ &:= 5 + T(5) \times 10. \end{aligned}$$

$$\begin{aligned} 0157 &:= F(7) + F(5!/10) \\ &:= 7 + T(5) \times 10. \end{aligned}$$

$$\begin{aligned} 0169 &:= F(9) \times (6 - 1) - 0! \\ &:= (T(T(9)) - T(6))/T(T(1 + 0!)). \end{aligned}$$

$$\begin{aligned} 0176 &:= F(6) \times (F(7 + 1) + 0!) \\ &:= -T(T(6)) + T(T(7)) \times 1 + 0!. \end{aligned}$$

$$\begin{aligned} 0179 &:= F(9) + F(F(7) - 1) + 0! \\ &:= -T(9) - 7 + T(T(T(T(1 + 0!))))). \end{aligned}$$

$$\begin{aligned} 0184 &:= F(F(4!)) \times (F(8) + 1 + 0!) \\ &:= (4 \times (T(8) + 10)). \end{aligned}$$

$$\begin{aligned} 0194 &:= F(4)! \times F(9) - 10 \\ &:= 4 + T(9 + 10). \end{aligned}$$

$$\begin{aligned} 0197 &:= F(F(7)) - F(9) - 1 - 0! \\ &:= 7 + T(9 + 10). \end{aligned}$$

$$\begin{aligned} 0204 &:= F(4)! \times F(0! + F((2 + 0!)!)) \\ &:= -T(4 - 0!) + T(20). \end{aligned}$$

$$\begin{aligned} 0213 &:= F(F(3! + 1)) - 20 \\ &:= 3 + T(1 \times 20). \end{aligned}$$

$$\begin{aligned} 0233 &:= F(33 - 20) \\ &:= (T(3)! - T(T(3)))/T(2 + 0). \end{aligned}$$

$$\begin{aligned} 0234 &:= F(4 + 3^2) + 0! \\ &:= 4 \times T(3) + T(20). \end{aligned}$$

$$\begin{aligned} 0237 &:= 7 \times F(3^2) - 0! \\ &:= 7!/T(T(3)) - T(2 + 0). \end{aligned}$$

$$\begin{aligned} 0239 &:= F(9) \times (3! + F(2)) + 0! \\ &:= (9 - 3)!/T(2) - 0!. \end{aligned}$$

$$\begin{aligned} 0244 &:= F(4)^{F(4)+2} + 0! \\ &:= 4! + T(4) + T(20). \end{aligned}$$

$$\begin{aligned} 0247 &:= F(F(7)) - F(4)! + 20 \\ &:= (T(T(7) + T(4)))/T(2 + 0). \end{aligned}$$

$$\begin{aligned} 0248 &:= 8 + F(4)!!/(2 + 0!) \\ &:= 8 \times (T(4) \times T(2) + 0!). \end{aligned}$$

$$\begin{aligned} 0249 &:= 9 + F(4)!!/(2 + 0!) \\ &:= -T(9) + T(4!) - T(T(2 + 0)). \end{aligned}$$

$$\begin{aligned} 0254 &:= F(F(F(4!))) + F(F(5 + 2 + 0)) \\ &:= T(4 \times 5 + 2) + 0!. \end{aligned}$$

$$\begin{aligned} 0257 &:= F(F(7)) + 5^2 - 0! \\ &:= T(7 + T(5)) + T(2) + 0!. \end{aligned}$$

$$\begin{aligned} 0264 &:= 4! \times (F(6) + 2 + 0!) \\ &:= 4! \times (T(6 - 2) + 0!). \end{aligned}$$

$$\begin{aligned} 0265 &:= 5! + F(6 \times 2) + 0! \\ &:= T(56)/T(T(2)) - 0!. \end{aligned}$$

$$\begin{aligned} 0266 &:= -6! + F(F(6) \times 2) - 0! \\ &:= T(T(6)) + 6^2 - 0!. \end{aligned}$$

$$\begin{aligned} 0267 &:= F(F(7)) + F(F(6) + (2 \times 0)!) \\ &:= T(7) + 6!/T(2) - 0!. \end{aligned}$$

$$\begin{aligned} 0269 &:= F(9) \times F(6) - 2 - 0! \\ &:= T(9) \times 6 - (2 \times 0)!. \end{aligned}$$

$$\begin{aligned} 0273 &:= F(3!) \times F(7 + 2) + 0! \\ &:= 3 \times T(-7 + 20). \end{aligned}$$

$$\begin{aligned} 0274 &:= F(F(F(4!))) + F(F(7)) + 20 \\ &:= T(4!) - T(7) + 2 + 0. \end{aligned}$$

$$\begin{aligned} 0275 &:= (5! - T(7)) \times T(2) - 0! \\ &:= (5 \times F(((7 + 2) + (0)!))). \end{aligned}$$

$$\begin{aligned} 0276 &:= (F(F(6)) \times F(7)) + 2 + 0! \\ &:= 6 \times (T(7 + 2) + 0!). \end{aligned}$$

$$\begin{aligned} 0287 &:= 7 \times (F(8) \times 2 - 0!) \\ &:= T(T(7)) - (8 - T(2))! + 0!. \end{aligned}$$

$$\begin{aligned} 0293 &:= F(F(3!)) + F(9) \times F((2 + 0!)!) \\ &:= -T(3)! + T(T(9)) - T(T(T(2))) - 0!. \end{aligned}$$

$$\begin{aligned} 0296 &:= F(6) \times (F(9) + 2 + 0!) \\ &:= T(T(6)) + T(9) + 20. \end{aligned}$$

$$\begin{aligned} 0306 &:= F(F(6) + 0!) \times (F(3!) + 0!) \\ &:= T(60)/T(3) + 0!. \end{aligned}$$

$$\begin{aligned} 0324 &:= F(4)!^2 \times (F(3!) + 0!) \\ &:= 4 \times T(2)^{3+0!}. \end{aligned}$$

$$\begin{aligned} 0326 &:= 6!/2 - F(F(3!) + 0!) \\ &:= T(T(6) - 2 + T(3)) + 0!. \end{aligned}$$

$$\begin{aligned} 0329 &:= F(9 + F(2)) \times 3! - 0! \\ &:= (T(9) + 2) \times (T(3) + 0!). \end{aligned}$$

$$\begin{aligned} 0342 &:= (F(2) + F(4)!)^3 - 0! \\ &:= (T(2) + 4)^3 - 0!. \end{aligned}$$

$$\begin{aligned} 0344 &:= (F(4) + 4)^3 + 0! \\ &:= T(4!) + 43 + 0!. \end{aligned}$$

$$\begin{aligned} 0345 &:= 5! - F(F(4)!) + F(F(3! + 0!)) \\ &:= -5 \times 4! + T(30). \end{aligned}$$

$$\begin{aligned} 0347 &:= 7^{F(4)} + 3 + 0! \\ &:= T(T(7)) - T(4) \times T(3) + 0!. \end{aligned}$$

$$\begin{aligned} 0349 &:= (F(9) + 4!) \times 3! + 0! \\ &:= T(9) + T(4!) + 3 + 0!. \end{aligned}$$

$$\begin{aligned} 0352 &:= -F(2) + 5! + F(F(3! + 0!)) \\ &:= (-T(2) + 5!) \times 3 + 0!. \end{aligned}$$

$$\begin{aligned} 0354 &:= F(4) \times 5! - (3 + 0!) \\ &:= 4! \times T(5) - T(3 + 0). \end{aligned}$$

$$\begin{aligned} 0356 &:= F(6 + 5) \times (3 + 0!) \\ &:= T(T(6)) + 5^3 + 0. \end{aligned}$$

$$\begin{aligned} 0357 &:= F(F(7)) + 5! + 3 + 0! \\ &:= 7!/T(5) + T(T(3 + 0)). \end{aligned}$$

$$\begin{aligned} 0358 &:= 8!/5! + F(F(3!)) + 0! \\ &:= 8!/5! + T(T(3)) + 0!. \end{aligned}$$

$$\begin{aligned} 0368 &:= 8 + 6!/F(3 + 0) \\ &:= 8 \times (T(6 + 3) + 0!). \end{aligned}$$

$$\begin{aligned} 0369 &:= 9 + 6!/F(3 + 0) \\ &:= -96 + T(30). \end{aligned}$$

$$\begin{aligned} 0371 &:= F(1 + F(7)) - (3 + 0!) \\ &:= T(-1 + T(7)) - T(3) - 0!. \end{aligned}$$

$$\begin{aligned} 0374 &:= -F(4) + F(F(7) + (3 \times 0)!) \\ &:= T(4!) + 73 + 0!. \end{aligned}$$

$$\begin{aligned} 0375 &:= 5! + F(F(7)) + F(F(3!)) + 0! \\ &:= 5! \times 7 - T(30). \end{aligned}$$

$$\begin{aligned} 0377 &:= F(7 + 7) + 3 \times 0 \\ &:= T(T(7)) - T(7) - (3 \times 0)!. \end{aligned}$$

$$\begin{aligned} 0384 &:= 4! \times 8 \times F(3 + 0) \\ &:= 4! \times (T(8 - 3) + 0!). \end{aligned}$$

$$\begin{aligned} 0386 &:= F(6) + F(8 + 3!) + 0! \\ &:= -6!/T(8) + T(T(T(3) + 0!)). \end{aligned}$$

$$\begin{aligned} 0397 &:= (F(F(7)) - F(9)) \times F(3) - 0! \\ &:= T(T(7)) - 9 + 3 \times 0. \end{aligned}$$

$$\begin{aligned} 0398 &:= F(8) + F(9 + 3! - 0!) \\ &:= -8 + T(9 \times 3 + 0!). \end{aligned}$$

$$\begin{aligned} 0428 &:= F(8)^2 - F(F(4)!) + 0! \\ &:= -T(8) + T(T(2) \times T(4)) - 0!. \end{aligned}$$

$$\begin{aligned} 0429 &:= (F(9) - F(2)) \times F(F(4)!) + 0! \\ &:= (T(9) - 2) \times T(4) - 0!. \end{aligned}$$

$$\begin{aligned} 0433 &:= 3 \times F(3 \times 4) + 0! \\ &:= 3 \times T(3) \times 4! + 0!. \end{aligned}$$

$$\begin{aligned} 0435 &:= (-5 + F(F(3!)))^{F(F(4))} - 0! \\ &:= T(5) \times (T(3 + 4) + 0!). \end{aligned}$$

$$\begin{aligned} 0436 &:= F(F(6))^{F(3)} - 4 - 0! \\ &:= T(6) \times T(T(3)) - 4 - 0!. \end{aligned}$$

$$\begin{aligned} 0439 &:= F(9 + F(F(3))) \times F(F(4)!) - 0! \\ &:= T(T(9)) - T(34) - 0!. \end{aligned}$$

$$\begin{aligned} 0457 &:= (F(F(7)) - 5) \times F(F(4)) + 0! \\ &:= T(T(7)) + 5 \times T(4) + 0!. \end{aligned}$$

$$\begin{aligned} 0458 &:= -F(8) + 5! \times 4 - 0! \\ &:= -8 + T(5!/4) + 0!. \end{aligned}$$

$$\begin{aligned} 0461 &:= (1 + F(F(6))) \times F(F(F(4)!)) - 0! \\ &:= T(16) + T(4! + 0!). \end{aligned}$$

$$\begin{aligned} 0462 &:= (F(2) + F(F(6))) \times F(F(F(4 + 0)!)) \\ &:= 2 \times T(6) \times (T(4) + 0!). \end{aligned}$$

$$\begin{aligned} 0463 &:= F(F(3!)) + F(F(6))^{F(F(4))} + 0! \\ &:= -3 + T(6!/4!) + 0!. \end{aligned}$$

$$\begin{aligned} 0466 &:= F(F(6)) \times F(F(6)) + 4! + 0! \\ &:= T(6 + 6 \times 4) + 0!. \end{aligned}$$

$$\begin{aligned} 0469 &:= -F(9) + F(F(6)) \times 4! - 0! \\ &:= T(9 + T(6)) + 4 + 0. \end{aligned}$$

$$\begin{aligned} 0472 &:= 2 \times F(F(7)) + F(4 + 0)! \\ &:= T(T(2) + T(7)) - (4 + 0)!. \end{aligned}$$

$$\begin{aligned} 0473 &:= (3 + F(F(7))) \times F(F(4)) + 0! \\ &:= T(3 + T(7)) - 4! + 0!. \end{aligned}$$

$$\begin{aligned} 0476 &:= (F(F(6)) - 7) \times F(F(F(4)!)) + 0! \\ &:= -T(6) + T(7 + 4!) + 0!. \end{aligned}$$

$$\begin{aligned} 0483 &:= F(F(3)) \times F(8) \times (4! - 0!) \\ &:= T(T(3)) \times ((8 - 4)! - 0!). \end{aligned}$$

$$\begin{aligned} 0486 &:= 6! - F(F(F(8)/F(4))) - 0! \\ &:= 6 \times (8 \times T(4) + 0!). \end{aligned}$$

$$\begin{aligned} 0487 &:= -F(F(7)) + (8 - F(4) + 0)! \\ &:= T(T(7)) + 8 \times T(4) + 0!. \end{aligned}$$

$$\begin{aligned} 0488 &:= 8 \times (T(8) + 4! + 0!) \\ &:= 8 \times (F(8) + 40). \end{aligned}$$

$$\begin{aligned} 0492 &:= 2^9 - F(F(F(4)!)) + 0! \\ &:= -T(2) + T(9) \times (T(4) + 0!). \end{aligned}$$

$$\begin{aligned} 0496 &:= -F(6) + 9!/F(4 + 0)! \\ &:= T(T(6) + 9 + (4 \times 0)!). \end{aligned}$$

$$\begin{aligned} 0503 &:= F(F(3!)) \times (-0! + 5)! - 0! \\ &:= T(T(3)) \times (-0! + 5)! - 0!. \end{aligned}$$

$$\begin{aligned} 0504 &:= 4! \times F(F(0! + 5 + 0)) \\ &:= 4! \times T(0! + 5 + 0). \end{aligned}$$

$$\begin{aligned} 0512 &:= 2^{F(1+5)+0!} \\ &:= 2^{-1+T(5-0!)}. \end{aligned}$$

$$\begin{aligned} 0524 &:= F(F(F(4)!)) \times 25 - 0! \\ &:= -4 + T(2^5 + 0). \end{aligned}$$

$$\begin{aligned} 0526 &:= F(F(6)) \times 25 + 0! \\ &:= T(6) \times 25 + 0!. \end{aligned}$$

$$\begin{aligned} 0528 &:= (F(8) + F(2)) \times (5 - 0)! \\ &:= T(82 - 50). \end{aligned}$$

$$\begin{aligned} 0534 &:= F(4)! \times F(3! + 5 + 0) \\ &:= T(4!) + 3 + T(T(5 + 0!)). \end{aligned}$$

$$\begin{aligned} 0546 &:= F(F(6)) \times (-4! + 50) \\ &:= T(6) \times (T(4) + T(5) + 0!). \end{aligned}$$

$$\begin{aligned} 0564 &:= 4 \times (F(F(6)) + (5 + 0)!) \\ &:= 4 \times (T(6) + 5!) + 0. \end{aligned}$$

$$\begin{aligned} 0573 &:= -F(F(3!)) \times 7 + (5 + 0)! \\ &:= T(3!) - T(7) - 5! + 0!. \end{aligned}$$

$$\begin{aligned} 0576 &:= 6! - F(7 + 5 + 0) \\ &:= (6! + 7!)/T(5 - 0!). \end{aligned}$$

$$\begin{aligned} 0586 &:= F(-6 + F(8)) - (5 - 0)! \\ &:= T(-6 + T(8)) + 5! + 0!. \end{aligned}$$

$$\begin{aligned} 0593 &:= F(F(3!)) \times F(9) - 5! - 0! \\ &:= T(3!) + 9 - T(T(5) + 0!). \end{aligned}$$

$$\begin{aligned} 0594 &:= F(F(F(4)!)) \times F(9) - (5 + 0)! \\ &:= T(4! + T(9 - 5)) - 0!. \end{aligned}$$

$$\begin{aligned} 0615 &:= 5 + F(16 - 0!) \\ &:= -T(T(5) - 1) + 6! \times 0!. \end{aligned}$$

$$\begin{aligned} 0617 &:= 7 + F(16 - 0!) \\ &:= T(7) \times (1 + T(6)) + 0!. \end{aligned}$$

$$\begin{aligned} 0631 &:= (1 + 3!)/F(6) + 0! \\ &:= 1 + T(36 - 0!). \end{aligned}$$

$$\begin{aligned} 0634 &:= 4! + F(3! + F(6) + 0!) \\ &:= 4 + T(36 - 0!). \end{aligned}$$

$$\begin{aligned} 0635 &:= 5 \times (3! \times F(F(6)) + 0!) \\ &:= 5 \times (T(3) \times T(6) + 0!). \end{aligned}$$

$$\begin{aligned} 0637 &:= F(7) \times (3! \times F(6) + 0!) \\ &:= -T(7) \times 3 + 6! + 0!. \end{aligned}$$

$$\begin{aligned} 0639 &:= -9^{F(3)} + (6 + 0)! \\ &:= 9 + T(36 - 0!). \end{aligned}$$

$$\begin{aligned} 0644 &:= F(4!)/(F(F(4)!)) \times (F(6) + 0!) \\ &:= T(T(4 + 4)) - T(6) - 0!. \end{aligned}$$

$$\begin{aligned} 0645 &:= 5^4 + F(F(6)) - 0! \\ &:= 5^4 + T(6) - 0!. \end{aligned}$$

$$\begin{aligned} 0648 &:= 8 \times (F(F(F(4)!)) + 60) \\ &:= T(8) \times (4! - 6 + 0). \end{aligned}$$

$$\begin{aligned} 0672 &:= (F(2) + 7)!/60 \\ &:= 2 \times 7!/T(6 - 0!). \end{aligned}$$

$$\begin{aligned} 0673 &:= 3!! + F(7) - 60 \\ &:= T(T(3) \times 7) - T(T(6)) + 0!. \end{aligned}$$

$$\begin{aligned} 0684 &:= (F(4)!! + 8!)/60 \\ &:= 4! + T(T(8)) - 6 + 0. \end{aligned}$$

$$\begin{aligned} 0687 &:= -F(7) - F(8) + 6! + 0! \\ &:= -7 + T(T(8)) + T(6 + 0!). \end{aligned}$$

$$\begin{aligned} 0689 &:= -9 - F(8) + 6! - 0! \\ &:= T(9) + T(T(8)) - T(6) - 0!. \end{aligned}$$

$$\begin{aligned} 0694 &:= -F(4) \times 9 + 6! + 0! \\ &:= (4! + 9) \times T(6) + 0!. \end{aligned}$$

$$\begin{aligned} 0697 &:= -F(7) - 9 + 6! - 0! \\ &:= T(T(7) + 9) - 6 + 0. \end{aligned}$$

$$\begin{aligned} 0698 &:= -F(8) + (9 - 6)!! - 0! \\ &:= T(-8 + T(9)) - 6 + 0!. \end{aligned}$$

$$\begin{aligned} 0702 &:= (2 + 0!) \times (F(F(7)) + 0!) \\ &:= 2 \times T(-0! + T(7) - 0!). \end{aligned}$$

$$\begin{aligned} 0703 &:= 3 \times (0! + F(F(7))) + 0! \\ &:= T(30 + 7 + 0). \end{aligned}$$

$$\begin{aligned} 0732 &:= (2 \times 3)! + F(7) - 0! \\ &:= T(2) + 3^{7-0!}. \end{aligned}$$

$$\begin{aligned} 0736 &:= 6! + 3 + F(7 + 0) \\ &:= T(6 \times T(3)) + 70. \end{aligned}$$

$$\begin{aligned} 0738 &:= F(8) - 3 + (7 - 0)! \\ &:= T(8) + T(37) - 0!. \end{aligned}$$

$$\begin{aligned} 0741 &:= F(1 \times 4)!! + F(7 + 0!) \\ &:= T(T(1 \times 4) + T(7 + 0)). \end{aligned}$$

$$\begin{aligned} 0745 &:= 5^{F(F(4))} + (7 - 0)! \\ &:= T(5) + T(4) + (7 - 0)!!. \end{aligned}$$

$$\begin{aligned} 0746 &:= F(6)^{F(4)} + F(F(7)) + 0! \\ &:= 6! + T(T(4)) - T(7) - 0!. \end{aligned}$$

$$\begin{aligned} 0748 &:= F(8) + F(4)!! + 7 + 0 \\ &:= T(T(8)) + T(T(4)) + T(7) - 0!. \end{aligned}$$

$$\begin{aligned} 0753 &:= F(F(F(3!)) - 5) - F(F(7)) - 0! \\ &:= T(3)! + 5 + T(7 + 0). \end{aligned}$$

$$\begin{aligned} 0754 &:= (-F(4) + 5) \times F(F(7) + 0!) \\ &:= T(T(T(4))) - 5! - T(T(7 + 0!)). \end{aligned}$$

$$\begin{aligned} 0762 &:= 2 \times F(F(6)) + (7 - 0)! \\ &:= 2 \times T(6) + (7 - 0)!!. \end{aligned}$$

$$\begin{aligned} 0782 &:= (2 + F(F(8)))/(F(7) + 0!) \\ &:= T(T(2))! - 8 + 70. \end{aligned}$$

$$\begin{aligned} 0783 &:= 3 \times F(8) + (7 - 0)! \\ &:= T(3)! + T(8) + T(7) - 0!. \end{aligned}$$

$$\begin{aligned} 0784 &:= F(4)!! + 8 \times (7 + 0!) \\ &:= T(4 + T(8)) - T(7 + 0!). \end{aligned}$$

$$\begin{aligned} 0834 &:= -F(F(4)!) + (F(F(F(3!)))/F(8 - 0!)) \\ &:= T(T(4)) + T(3 + T(8)) - 0!. \end{aligned}$$

$$\begin{aligned} 0835 &:= 5 \times (F(3!) \times F(8) + 0!) \\ &:= T(5) + T(3 + T(8) + 0!). \end{aligned}$$

$$\begin{aligned} 0836 &:= -6 + F(F(F(3!)))/F(8 - 0!) \\ &:= T(6 \times 3) + T(T(8)) - 0!. \end{aligned}$$

$$\begin{aligned} 0839 &:= ((F(9) + 3!) \times F(8)) - 0! \\ &:= T(T(9)) - T(T(T(3))) + T(8) - 0!. \end{aligned}$$

$$\begin{aligned} 0841 &:= (-1 + F(F(F(F(4)!)))/F(8 - 0!)) \\ &:= 1 + 4! \times (T(8) - 0!). \end{aligned}$$

$$\begin{aligned} 0842 &:= F(F(2 \times 4))/F(8 - 0!) \\ &:= 2 + 4! \times (T(8) - 0!). \end{aligned}$$

$$\begin{aligned} 0843 &:= F(F(F(3!)) - F(4)!) + F(F(8 - 0!)) \\ &:= 3 + 4! \times (T(8) - 0!). \end{aligned}$$

$$\begin{aligned} 0844 &:= F(F(4)) + F(F(F(F(4)!)))/F(8 - 0!) \\ &:= 4 + 4! \times (T(8) - 0!). \end{aligned}$$

$$\begin{aligned} 0845 &:= 5 \times (F(F(4)!) \times F(8) + 0!) \\ &:= 5 + 4! \times (T(8) - 0!). \end{aligned}$$

$$\begin{aligned} 0846 &:= 6! + F(4)! \times F(8 + 0) \\ &:= 6 + 4! \times (T(8) - 0!). \end{aligned}$$

$$\begin{aligned} 0847 &:= 7!/F(4)! + 8 - 0! \\ &:= 7 + 4! \times (T(8) - 0!). \end{aligned}$$

$$\begin{aligned} 0849 &:= F(9) \times (4 + F(8)) - 0! \\ &:= 9 + 4! \times (T(8) - 0!). \end{aligned}$$

$$\begin{aligned} 0856 &:= F(6) \times (5! - F(8 - 0!)) \\ &:= 6! + T(T(5) + (8 \times 0)!). \end{aligned}$$

$$\begin{aligned} 0863 &:= F(F(3!)) + F(F(F(6)))/F(8 - 0!) \\ &:= (3 + T(6)) \times T(8) - 0!. \end{aligned}$$

$$\begin{aligned} 0864 &:= 4! \times 6!/(F(8) - 0!) \\ &:= 4 \times 6 \times T(8 + 0). \end{aligned}$$

$$\begin{aligned} 0873 &:= 3!! + F(F(7)) - 80 \\ &:= T(T(3 + 7)) - T(T(8)) - 0!. \end{aligned}$$

$$\begin{aligned} 0874 &:= F(4)!! + 7 \times (F(8) + 0!) \\ &:= T(T(4)) \times T(7) - T(T(8 + 0)). \end{aligned}$$

$$\begin{aligned} 0876 &:= 6 \times (7 \times F(8) - 0!) \\ &:= -6! + T(7 \times 8 + 0). \end{aligned}$$

$$\begin{aligned} 0932 &:= F(2 \times F(3!)) - F(9 + 0!) \\ &:= 2 \times (T(T(T(3)) + 9) + 0!). \end{aligned}$$

$$\begin{aligned} 0937 &:= F(7) \times F(3!) \times 9 + 0! \\ &:= -7 + T(T(3)) \times T(9) - 0!. \end{aligned}$$

$$\begin{aligned} 0947 &:= F(F(7)) + F(F(F(4)!)) \times F(9 + 0) \\ &:= T(7 + 4 \times 9) + 0!. \end{aligned}$$

$$\begin{aligned} 0952 &:= (-F(2) + 5!) \times (9 - 0!) \\ &:= T(T(2))! + T(T(T(5) - 9)) + 0!. \end{aligned}$$

$$\begin{aligned} 0966 &:= F(F(6) + F(6)) - F(9 - 0!) \\ &:= T(6) + T(6) \times T(9 + 0). \end{aligned}$$

$$\begin{aligned} 0974 &:= F(4)!! + F(F(7)) + F(9 - 0!) \\ &:= -T(T(4)) - 7 + T(T(9)) + 0!. \end{aligned}$$

$$\begin{aligned} 0978 &:= -8 + F(7 + 9) - 0! \\ &:= -8 \times 7 + T(T(9)) - 0!. \end{aligned}$$

$$\begin{aligned} 0984 &:= 4! \times (8 + F(9) - 0!) \\ &:= -T(4!/8) + T(T(9) - 0!). \end{aligned}$$

$$\begin{aligned} 0986 &:= -6 \times 8 + T(T(9)) - 0! \\ &:= (F(6) + F(8)) \times F(9 + 0). \end{aligned}$$

$$\begin{aligned} 1323 &:= F(F(3!)) \times (2^{3!} - 1) \\ &:= T(T(3)) \times (2^{T(3)} - 1). \end{aligned}$$

$$\begin{aligned} 1324 &:= F(F(F(4)!))^2 \times 3 + 1 \\ &:= T(4!) + 2^{T(3+1)}. \end{aligned}$$

$$\begin{aligned} 1343 &:= F(3)!/(4! + 3!) - 1 \\ &:= T(T(3)) \times 4^3 - 1. \end{aligned}$$

$$\begin{aligned} 1344 &:= 4! \times (F(4 + 3!) + 1) \\ &:= (4! + 4!) \times T(T(3) + 1). \end{aligned}$$

$$\begin{aligned} 1364 &:= (F(4!) + F(6))/F(F(3!) + 1) \\ &:= T(T(T(4))) - T(T(6)) + T(T(3 + 1)). \end{aligned}$$

$$\begin{aligned} 1365 &:= 5 \times F(F(6)) \times F(3! + 1) \\ &:= T(5) \times T(6 + T(3) + 1). \end{aligned}$$

$$\begin{aligned} 1368 &:= (F(F(8)) + 6)/F(3!) - 1 \\ &:= 8 \times T(6 \times 3 \times 1). \end{aligned}$$

$$\begin{aligned} 1374 &:= (-4 + F(F(7))) \times 3! \times 1 \\ &:= -4 + T(T(7) + (3 + 1)!). \end{aligned}$$

$$\begin{aligned} 1378 &:= -F(8) + F(F(7)) \times 3! + 1 \\ &:= T(8 \times 7 - 3 - 1). \end{aligned}$$

$$\begin{aligned} 1404 &:= F(4)! \times (0! + F(F(F(4)! + 1))) \\ &:= 4 \times T(0! + 4! + 1). \end{aligned}$$

$$\begin{aligned} 1427 &:= -F(7) + 2 \times (4 - 1)!! \\ &:= T(T(7)) + T(T(2))! + T(4!) + 1. \end{aligned}$$

$$\begin{aligned} 1429 &:= -9 + 2 \times (F(4)!! - 1) \\ &:= T(T(9) + 2) + T(4!) + 1. \end{aligned}$$

$$\begin{aligned} 1432 &:= 2 \times 3!! - F((4 - 1)!) \\ &:= 2 \times (T(3)! - 4 \times 1). \end{aligned}$$

$$\begin{aligned} 1434 &:= (-F(4) + 3!!) \times F(4 - 1) \\ &:= T(4!) + T(T(3)) \times (T(T(4)) - 1). \end{aligned}$$

$$\begin{aligned} 1436 &:= 6! \times F(3) - 4 \times 1 \\ &:= 6! + T(3)! - 4 \times 1. \end{aligned}$$

$$\begin{aligned} 1444 &:= 3 + F(F(4)) \times (4 - 1)!! \\ &:= T(T(T(4))) - 4! \times 4 \times 1. \end{aligned}$$

$$\begin{aligned} 1445 &:= 5 + F(F(4)) \times (4 - 1)!! \\ &:= 5 \times T(4!) - T(T(4 \times 1)). \end{aligned}$$

$$\begin{aligned} 1446 &:= 6 + F(F(4)) \times (4 - 1)!! \\ &:= 6 \times (4! \times T(4) + 1). \end{aligned}$$

$$\begin{aligned} 1449 &:= 9 + F(F(4)) \times (4 - 1)!! \\ &:= (T(9) + 4!) \times T(T(4 - 1)). \end{aligned}$$

$$\begin{aligned} 1456 &:= (-F(6) + 5!) \times F(F(4)! + 1) \\ &:= T(T(6)) + T(5 \times T(4) - 1). \end{aligned}$$

$$1457 := F(7) \times (5! - F(F(4)!)) + 1 \\ := -T(7) + T(54) \times 1.$$

$$1462 := 2 \times 6! + F(F(F(4)!)) + 1 \\ := 2 \times (6! + T(4) + 1).$$

$$1463 := F(3) \times 6! + 4! - 1 \\ := T(3)! + 6! + 4! - 1.$$

$$1464 := 4! + 6! \times F(4 - 1) \\ := 4! \times (6 \times T(4) + 1).$$

$$1483 := (3!! + F(8)) \times F(F(4)) + 1 \\ := -T(3)! - 8 + T(T(T(4) + 1)).$$

$$1484 := F(F(4)) \times (F(8) + F(4)!! + 1) \\ := T(T(4 + 8) - 4!) - 1.$$

$$1542 := 2 \times (F(4)!! + 51) \\ := 2 + T(4 + 51).$$

$$1547 := F(7) \times (4! \times 5 - 1) \\ := 7 + T(4 + 51).$$

$$1557 := F(7) \times 5! - F(5 - 1) \\ := T(T(T(T(7 - 5)))) + T(51).$$

$$1561 := F(1 + 6) \times 5! + 1 \\ := T(1 \times 6) + T(T(T(5 - 1))).$$

$$1572 := -F(2) + F(7) \times (5! + 1) \\ := T(2 \times T(7)) - (5 - 1)!.$$

$$1638 := F(8) \times 3! \times F(6 + 1) \\ := T(T(8)/3) \times T(6 \times 1).$$

$$1724 := F(F(F(F(4)!)) - F(2)) - 7! - 1 \\ := T(T(T(4)) + 2) + 71.$$

$$1745 := -5! + F(F(4)!) \times F(F(7)) + 1 \\ := (5 + (4 \times T((T(7) + 1))))).$$

$$1944 := F(4)!^{F(4)} \times 9 \times 1 \\ := -4! \times (T(4) - 91).$$

$$2016 := F(6)!/(10 \times 2) \\ := T(61 + 02).$$

$$2097 := T(7 + T(9)) - 0! + T(T(2))! \\ := F(F(7)) \times (9 + 0 \times 2).$$

$$2136 := (6! - F(3!)) \times (1 + 2) \\ := 6! \times 3 - (1 + T(2))!.$$

$$2145 := (-5 + F(4)!!) \times (1 + 2) \\ := T(5! - T((4 + 1) \times 2)).$$

$$2147 := -F(7) + F(4) \times ((1 + 2)!!) \\ := T(T(7 + 4) - 1) + 2.$$

$$2154 := F(4) \times ((5 + 1)! - 2) \\ := (4! \times T(5) - 1) \times T(T(2)).$$

$$2184 := F(4) \times (8 + (1 + 2)!!) \\ := (T(T(4)) + T(8)) \times (1 + T(2))!.$$

$$2205 := 5 \times F(F((0! + 2)!!))^2 \\ := (T(T(5) - 0!)) \times T(2 \times T(2)).$$

$$2274 := F(4)! \times (F(7 \times 2) + 2) \\ := (-4! + T(T(7)) - T(2)) \times T(T(2)).$$

$$2312 := 2 \times (F(1 + F(3!)))^2 \\ := T(T(2) + 1) \times T(T(T(3))) + 2.$$

$$2354 := (-F(F(4)!) + 5!) \times F(F(3!)) + 2 \\ := T(T(T(4))) + T(5!/3) - T(T(2)).$$

$$2373 := F(F(3!)) \times (-7 + (3 + 2)!) \\ := T(3)! + T(T(7 + 3) + 2).$$

$$2375 := (5! - 7) \times F(F(3!)) + 2 \\ := (5! - 7) \times T(T(3)) + 2.$$

$$2376 := F(6) \times (F(F(7)) + F(3!)^2) \\ := 6 \times (T(T(7)) - T(T(3) - 2)).$$

$$2401 := (F(10) - F(4)!)^2 \\ := (-T(T(1 + 0!)) + T(T(4)))^2.$$

$$2435 := 5 \times (3!! - F(F(F(4)!) + F(2))) \\ := -T(5) + T(-T(3) + T(T(4))) \times 2.$$

$$2439 := F(9 + 3!) \times 4 - F(2) \\ := T(T(9)) \times 3 - T(T(4 \times 2)).$$

$$2444 := 4 \times (F(F(F(F(4)!)) - F(4)!) + F(2)) \\ := (T(4!) - T(T(4))) \times T(4) - T(T(2)).$$

$$2447 := (7! + F(4!))/F(F(F(4)!)) - F(2) \\ := 7 + T(T(T(4))) + T(4!) \times T(2).$$

$$2448 := (F(8) - 4) \times F(4!/2) \\ := (8 + T(4)) \times T(4^2).$$

$$2449 := F(9) \times 4! \times F(4) + F(2) \\ := T(9) \times T(T(4)) - 4! - 2.$$

$$2456 := F(F(6)) \times (5! - F(4)) - F(2) \\ := T(6) \times 5! - 4^{T(2)}.$$

$$2457 := (7! - 5! - F(4)!)/2 \\ := T(7) \times 5! - T(42).$$

$$2464 := F(4! - 6) - (F(4) + 2)! \\ := T(T(T(4))) + T(6) + T(42).$$

$$2465 := -5! + F(-6 + 4!) + F(2) \\ := T(5) \times T(T(6)) - T(4)^{T(2)}.$$

$$2484 := -4 \times T(8) + T(4! \times T(2)) \\ := F(4)!! + (F(8) \times F(F(4)))^2.$$

$$2518 := F(8) \times 1 \times 5! - 2 \\ := 8!/(1 + T(5)) - 2.$$

$$2519 := F(9 - 1) \times 5! - F(2) \\ := -T(T(9) + 1) + 5 \times T(T(2))!.$$

$$2541 := 1 \times F(F(F(4)!)) \times (5! + F(2)) \\ := (1 + T(4)) \times T(T(T(5 - 2))).$$

$$2542 := F(2) + F(F(F(4)!)) \times (5! + F(2)) \\ := -2 + 4! + 5! \times T(T(T(2))).$$

$$2544 := 4! + (F(F(4)) + 5!)/2 \\ := (T(4!) + 4 + 5!) \times T(T(2)).$$

$$2545 := 5! \times F(F(F(4)!)) + 5^2 \\ := -5 + T(T(4) \times 5) \times 2.$$

$$2561 := -1 + F(F(6)) \times (5! + 2) \\ := -1 + T(6) \times (5! + 2).$$

$$2562 := F(2 + 6) \times (5! + 2) \\ := T(T(2) \times 6) \times T(5) - T(2).$$

$$2597 := (7! + F(9) + 5!)/2 \\ := -T(T(7)) + T(-T(9) + 5! + 2).$$

$$2634 := F(4)! \times (-F(3) + F(F(6)))^2 \\ := T(4! \times 3) + T(6/2).$$

$$2637 := 7 \times F(3! + F(6)) - 2 \\ := (7! + 3 + T(T(6)))/2.$$

$$2638 := -8 + 3! \times F(F(6))^2 \\ := -8 + T(3) \times T(6)^2.$$

$$2643 := -3 + F(4)! \times F(F(6))^2 \\ := T(3 \times 4!) + T(6) - T(T(2)).$$

$$2645 := (5! + F(4)!) \times F(F(6)) - F(2) \\ := 5 \times (T(4!) + T(T(6))) - 2.$$

$$2664 := (F(4!) - 6! - F(6)!)/2 \\ := 4!/6 \times T(6^2).$$

$$2704 := (4 \times F(07))^2 \\ := (4! + T(07))^2.$$

$$2753 := F(F(F(3) + 5)) + 7!/2 \\ := T(3)! + 5 \times T(T(7)) + T(2).$$

$$2754 := F(F(F(4)!)) \times 5! + F(F(7)) + F(2) \\ := T(4) \times T(-5 + T(7)) - T(T(2)).$$

$$2844 := 4 \times (F(4)!! - 8 - F(2)) \\ := T(T(4!)/4) - 8 + 2.$$

$$2846 := 6! \times 4 - F(8 + F(2)) \\ := 6! \times 4 - T(8) + 2.$$

$$2848 := (-8 + F(4)!!) \times 8/2 \\ := -8 + T(4! - 8) \times T(T(T(2))).$$

$$2856 := F(F(6)) \times (5! + 8 \times 2) \\ := (6 + T(5)) \times T(8 \times 2).$$

$$2878 := 8!/(-7 + F(8)) - 2 \\ := (8! - T(7))/(8 + T(T(2))).$$

$$2905 := -5! + F(0! + 9)^2 \\ := -5! + T(0! + 9)^2.$$

$$3024 := (F(4)^2)!/(-0! + 3)! \\ := 4! \times T(T(2)) \times T(T(03)).$$

$$3045 := (5! + 4! + 0!) \times F(F(3!)) \\ := T(5 + 4!) \times (0! + T(3)).$$

$$3165 := -5 \times 6! + F(-1 + F(F(3!))) \\ := T(5) \times T(T(6)) - T((1 + 3)!).$$

$$3196 := (F(F(6) + 9) + 1) \times F(3) \\ := -6! + T(91 - 3).$$

$$3249 := (F(9) + 4! - F(2))^{F(3)} \\ := (T(9) \times 4! + T(2)) \times 3.$$

$$3264 := 4! \times (-F(6) + F(2 \times 3!)) \\ := 4! \times T(T(6) - 2 - 3).$$

$$3276 := F(F(6)) \times (F(7) \times 2) \times 3! \\ := T(6 + 7) \times T(2^3).$$

$$3297 := -7 + F(9 \times 2) + 3!! \\ := (T(7 + 9) + T(T(T(2)))) \times T(T(3)).$$

$$3303 := 3!! - 0! + F(3 \times 3!) \\ := T((3 + 0!)!) + T(T(T(T(3))))/3.$$

$$3304 := F(4! - 03!) + 3!! \\ := T(4!) + 0! + T(T(T(T(3))))/3.$$

$$3325 := 5 \times (-F(2 + F(3!)) + 3!!) \\ := 5 \times (-T(T(-2 + T(3))) + T(3)!).$$

$$3327 := F(7) \times 2^{F(3!)} - F(F(3)) \\ := T(T(7) \times T(2)) - 3 + T(3).$$

$$3339 := 9 \times (-3! + F(3! + F(3!))) \\ := (T(T(9)) + T(T(3) + T(3))) \times 3.$$

$$3344 := (F(F(4)!)/4! - F(3!)) \times F(3) \\ := -4 + T(4! \times 3) + T(3)!.$$

$$3345 := -5! + T(T(4)) \times T(T(3)) \times 3 \\ := 5^{F(4)} \times F(F(3!)) + 3!!.$$

$$3348 := (8!/4! - 3!) \times F(3) \\ := T(8 + 4^3) + T(3)!.$$

$$3357 := -F(F(7)) + 5 \times (-F(3) + 3!!) \\ := T(7) \times 5! - T(3) + 3.$$

$$3376 := (F(6) + 7!/3) \times F(3) \\ := -6! + (7 - 3)^{T(3)}.$$

$$3384 := 4! + 8!/(F(3) \times 3!) \\ := 4! + 8!/(T(3) + T(3)).$$

$$3427 := F(F(7)) + 2 \times F(-4 + F(F(3!))) \\ := 7^{T(2)} \times T(4) - 3.$$

$$3437 := F(F(7) + 3!) - 4! - 3!! \\ := -T(7) + T(T(3)) \times T(T(4)) \times 3.$$

$$3448 := -8 + 4! \times F(4 \times 3) \\ := -8 + 4! \times 4! \times T(3).$$

$$3451 := (-1 + 5!) \times (F(F(4)!)) + F(F(3!)) \\ := 1 - 5! + T(4 \times T(T(3))).$$

$$3452 := -2 + 5!^{F(F(4))} - F(F(F(3!))) \\ := 2 - 5! + T(4 \times T(T(3))).$$

$$3454 := (4! + 5!) \times 4! - F(3) \\ := 4 - 5! + T(4 \times T(T(3))).$$

$$3456 := 6! \times 5 - F(4 \times 3) \\ := 6 - 5! + T(4 \times T(T(3))).$$

$$3457 := F(7 + 5) \times 4! + F(F(3)) \\ := 7 - 5! + T(4 \times T(T(3))).$$

$$3459 := 9!/(5 \times F(F(F(4)!))) + 3 \\ := 9 - 5! + T(4 \times T(T(3))).$$

$$3462 := F(2 \times 6) \times 4! + 3! \\ := T(2) \times T(6) \times T(T(4)) - 3.$$

$$3463 := F(-F(3) + F(F(6))) + F(F(4)) - 3!! \\ := -3 - 6! + T(T(T(4) + 3)).$$

$$3464 := F(4!) - F(6)! - F(4! - 3!) \\ := 4! \times T(T(6)) - T(4^3).$$

$$3466 := -F(6)! + F(F(F(6))) \times 4 + F(3) \\ := -6! + T(T(6 + 4 + 3)).$$

$$3474 := F(4) \times F(F(7)) \times F(4!) - 3!! \\ := T(T(T(4)) + T(7)) - 4 \times 3.$$

$$3478 := -F(F(8))/F(7) + F(4!) \times 3!! \\ := -8 + T(T(7) + T(4 + T(3))).$$

$$3486 := -F(-6 + F(8)) + 4^3 \\ := T(6!/8 - 4 - 3).$$

$$3497 := F(F(7)) \times (-9 + 4!) + F(3) \\ := 7! - T(T(9) + T(4)) - 3.$$

$$3498 := -8! + F(9) + 4 \times F(F(F(3!))) \\ := (8 + T(9)) \times T(-T(4) + T(T(3))).$$

$$3525 := 5^2 \times (5! + F(F(3!))) \\ := 5 \times (-T(2) \times 5 + T(3)!).$$

$$3534 := F(4!) \times (F(3 \times 5) - F(F(3!))) \\ := (T(4) + T(T(3))) \times (5! - T(3)).$$

$$3544 := F(F(4) \times F(4!)) + 5! \times F(3!) \\ := T(T(4)) + 4! + T(5) \times T(T(T(3))).$$

$$3545 := 5 \times (-F(4!) - 5 + 3!!) \\ := 5 \times (4 - T(5) + T(3)!).$$

$$3549 := (-9 + F(4)!) \times 5 - 3! \\ := (T(9) + 4 + 5!) \times T(T(3)).$$

$$3564 := F(4!) \times (6! - 5! - 3!) \\ := T(4 \times T(6)) - T(T(5 - 3)).$$

$$\begin{aligned} 3565 &:= 5 \times (6! - 5 - F(3)) \\ &:= -5 + T(6 \times T(5) - T(3)). \end{aligned}$$

$$\begin{aligned} 3568 &:= (F(8) \times F(F(6)) + 5) \times F(3!) \\ &:= (-8 + T(T(6))) \times (-5 + T(T(3))). \end{aligned}$$

$$\begin{aligned} 3573 &:= (3!! - 7) \times 5 + F(3!) \\ &:= 3 + T(T(7) \times T(5 - 3)). \end{aligned}$$

$$\begin{aligned} 3584 &:= 4 \times (-8 + 5!) \times F(3!) \\ &:= 4 \times 8! / (T(5) \times 3). \end{aligned}$$

$$\begin{aligned} 3594 &:= (-4 + F(9)) \times 5! - 3! \\ &:= 4! + T((9 + 5) \times T(3)). \end{aligned}$$

$$\begin{aligned} 3597 &:= -F(F(7) - 9) + 5 \times 3!! \\ &:= -T(-7 + 9) + 5 \times T(3)!. \end{aligned}$$

$$\begin{aligned} 3605 &:= 5 \times (-0! + 6! + F(3)) \\ &:= T(5) \times (0! + 6!) / 3. \end{aligned}$$

$$\begin{aligned} 3624 &:= 4! + (-F(2) + 6) \times 3!! \\ &:= (T(4!) + 2) \times (6 + T(3)). \end{aligned}$$

$$\begin{aligned} 3635 &:= 5 \times (3^6 + F(3)) \\ &:= 5 \times (T(3)! + T(6) / 3). \end{aligned}$$

$$\begin{aligned} 3642 &:= (F(2) - F(F(F(4)!)) + F(F(F(6)))) / 3 \\ &:= 2 \times (T(4!) \times 6 + T(T(3))). \end{aligned}$$

$$\begin{aligned} 3643 &:= (-F(F(3!)) + 4 + F(F(F(6)))) / 3 \\ &:= T(T(T(3)) + T(T(4))) + 6! - 3. \end{aligned}$$

$$\begin{aligned} 3644 &:= (-F(4)! - F(F(4)!) + F(F(F(6)))) / 3 \\ &:= -T(T(T(4))) + 4! \times 6^3. \end{aligned}$$

$$\begin{aligned} 3645 &:= 5 \times F(4)^{(6-3)!} \\ &:= 5 \times (4! - T(6))^{T(3)}. \end{aligned}$$

$$\begin{aligned} 3646 &:= (F(F(F(6))) - F(F(4)!)) / (6 - 3) \\ &:= T(T(6) + T(4 + 6)) + T(3)!. \end{aligned}$$

$$\begin{aligned} 3667 &:= 7 + 6 \times F(F(F(6)) - 3!) \\ &:= T(76) + T(6) + T(3)!. \end{aligned}$$

$$\begin{aligned} 3672 &:= (2 + F(7 + F(6))) \times 3! \\ &:= (2 + T(T(7))) \times (6 + 3). \end{aligned}$$

$$\begin{aligned} 3675 &:= 5 \times (F(7) + 6! + F(3)) \\ &:= T(T(5) + T(7) + 6) \times 3. \end{aligned}$$

$$\begin{aligned} 3699 &:= 9 \times (F(9) + F(F(6) + 3!)) \\ &:= T(9 \times 9) + T(T(6) + T(3)). \end{aligned}$$

$$\begin{aligned} 3705 &:= 5 \times ((-0! + 7)! + T(T(3))) \\ &:= 5 \times (F(0! + 7) + 3!!). \end{aligned}$$

$$\begin{aligned} 3732 &:= 2 \times (F(3!) \times F(F(7)) + F(3)) \\ &:= (T(T(2))^3 + T(T(7))) \times T(3). \end{aligned}$$

$$\begin{aligned} 3734 &:= 4^{F(3)} \times F(F(7)) + 3! \\ &:= -T(T(T(4))) + T(T(T(3))) + 7! + 3. \end{aligned}$$

$$\begin{aligned} 3744 &:= (4! + 4!) \times F(7) \times 3! \\ &:= 4! \times (4! + T(7)) \times 3. \end{aligned}$$

$$\begin{aligned} 3746 &:= -6^4 + 7! + F(3) \\ &:= T(T(6)) - T(T(4)) + T(T(7) \times 3). \end{aligned}$$

$$\begin{aligned} 3755 &:= 5^5 + 7! / F(3!) \\ &:= T(5) + 5 \times (T(7) + T(3)!). \end{aligned}$$

$$\begin{aligned} 3765 &:= (-5! + 6 \times 7!) / F(3!) \\ &:= T(5) \times T(T(6)) + T((7 - 3)!). \end{aligned}$$

$$\begin{aligned} 3774 &:= F(4)! \times (-7 \times F(7) + 3!!) \\ &:= T(4) \times (-T(7) + T(T(7))) - T(3). \end{aligned}$$

$$\begin{aligned} 3784 &:= F(F(4)!)/F(8) + F(F(7)) \times F(3!) \\ &:= 4! \times T(T(8) + (7)) / T(3). \end{aligned}$$

$$\begin{aligned} 3794 &:= F(F(F(4)!) + 9) + F(7)^3 \\ &:= -T(49) + 7! - T(T(3)). \end{aligned}$$

$$\begin{aligned} 3834 &:= F(F(4)) \times F(3)! / F(8) - 3! \\ &:= (-4! - 3 + T(T(8))) \times T(3). \end{aligned}$$

$$\begin{aligned} 3835 &:= -5 + F(3)! / F(8) \times F(3) \\ &:= -5! - T(T(T(3))) + T(T(-8 + T(T(3)))). \end{aligned}$$

$$\begin{aligned} 3844 &:= 4 + F(F(4)) \times 8! / F(F(3!)) \\ &:= T(T(T(4)) + 4!) - T(8) + T(3)!. \end{aligned}$$

$$\begin{aligned} 3864 &:= F(4)! / ((-6 + 8) \times 3!) \\ &:= T(4)! / 6! - T(8 \times T(3)). \end{aligned}$$

$$\begin{aligned} 3882 &:= 2 \times (8! / F(8) + F(F(3!))) \\ &:= T(2) \times T(8) \times T(8) - T(3). \end{aligned}$$

$$\begin{aligned} 3886 &:= (6! - 8 + F(F(8))) / 3 \\ &:= T(T(6)) + T(88 - 3). \end{aligned}$$

$$\begin{aligned} 3944 &:= F(F(4)!) \times 493 \\ &:= 4 \times (-T(T(4)) + T(T(9)) + T(3)). \end{aligned}$$

$$\begin{aligned} 3945 &:= (5! - 4) \times F(9) + F(F(3)) \\ &:= T(5! - 4!) + 9 - T(3)!. \end{aligned}$$

$$\begin{aligned} 3954 &:= -F(4)! + 5! \times (F(9) - F(F(3))) \\ &:= 4! \times (5! + T(9)) - T(3). \end{aligned}$$

$$\begin{aligned} 3961 &:= F(F(1 + 6)) \times F(9)/F(3) \\ &:= 1 + T(6!/9) + T(3)!. \end{aligned}$$

$$\begin{aligned} 3963 &:= 3 + T(6!/9) + T(3)! \\ &:= F(F(3!)) \times F(F(6)) \times 9 - 3!. \end{aligned}$$

$$\begin{aligned} 3967 &:= 7 + T(6!/9) + T(3)! \\ &:= F(F(7)) \times (F(6) + 9) + 3!. \end{aligned}$$

$$\begin{aligned} 4032 &:= 2 \times F(3)!/(-0! + F(F(F(4)!))) \\ &:= (2^3)!/T(04). \end{aligned}$$

$$\begin{aligned} 4059 &:= F(9) \times 5! - F(F(F(04)!)) \\ &:= 9!/5! + T(T(-0! + T(4))). \end{aligned}$$

$$\begin{aligned} 4072 &:= 2^{F(7)-0!} - 4! \\ &:= 2 + (T(T(7)) + 0!) \times T(4). \end{aligned}$$

$$\begin{aligned} 4094 &:= -F(F(4)) + (9 - 0!)^4 \\ &:= T(T(4) \times 9) - (0 \times 4)!. \end{aligned}$$

$$\begin{aligned} 4204 &:= 4! - 0! + F(-2 + F(F(F(4)!))) \\ &:= (T(40) + T(T(T(T(2)))) \times 4. \end{aligned}$$

$$\begin{aligned} 4223 &:= F(F(F(3!)) - 2) + 2 \times F(F(F(4)!)) \\ &:= T(T(T(T(3)) + 2)/T(2)) - T(T(4)). \end{aligned}$$

$$\begin{aligned} 4224 &:= F(F(4)!) \times 22 \times 4! \\ &:= T(42) + T(T(2)^4). \end{aligned}$$

$$\begin{aligned} 4232 &:= 23^2 \times F(F(4)!) \\ &:= -T(2) + T(T(T(3)))/T(2) \times T(T(4)). \end{aligned}$$

$$\begin{aligned} 4236 &:= (F(F(F(6)) - F(3)) + F(2 + F(F(4)!))) \\ &:= T(6) \times T(3)^{T(2)} - T(4)!. \end{aligned}$$

$$\begin{aligned} 4237 &:= 7 \times F(3!) + F(-2 + F(F(F(4)!))) \\ &:= -T(7) + T(3)! \times T(T(2)) - T(T(4)). \end{aligned}$$

$$\begin{aligned} 4244 &:= F(4) \times F(F(F(4)!)) + F(-2 + F(F(F(4)!))) \\ &:= -T(T(T(4))) + (T(4) + T(T(T(T(2)))) \times 4!. \end{aligned}$$

$$\begin{aligned} 4245 &:= F(-5 + 4!) + 2^{F(4)!} \\ &:= T(5) \times (T(4!) + T(2)) - T(4)!. \end{aligned}$$

$$\begin{aligned} 4248 &:= 8 \times F(F(F(4)!))^2 + F(4)!! \\ &:= (T(8 + T(4)) + T(T(2))) \times 4!. \end{aligned}$$

$$\begin{aligned} 4266 &:= (6! - F(6) - F(2)) \times F(4)! \\ &:= (-6 - T(T(6))) \times (T(T(2)) - 4!). \end{aligned}$$

$$\begin{aligned} 4272 &:= F(-2 + F(7)) \times 2 \times 4! \\ &:= 2 \times T(T(7)) \times T(T(2)) - T(4)!. \end{aligned}$$

$$\begin{aligned} 4284 &:= F(4)! \times ((8 - 2)! - F(4)!) \\ &:= (T(-T(4) + T(8)) + T(T(2)!)) \times 4. \end{aligned}$$

$$\begin{aligned} 4293 &:= 3 \times (-9 + 2 \times (F(4)!))! \\ &:= 3 \times T(T(9) + 2 \times 4). \end{aligned}$$

$$\begin{aligned} 4302 &:= (-2 - 0! + 3!) \times F(4)! \\ &:= T(T(2)) \times (0! + T(3)! - 4). \end{aligned}$$

$$\begin{aligned} 4306 &:= -F(6) + (-0! + 3!) \times F(4)! \\ &:= (6 - 0!)! + T(T(3 + T(4))). \end{aligned}$$

$$\begin{aligned} 4314 &:= F(4)! \times 1 \times 3!! - F(4)! \\ &:= 4! \times (-1 + T(3)!)/4. \end{aligned}$$

$$\begin{aligned} 4317 &:= (7 - 1)! \times 3! - F(4) \\ &:= 7! + 1 - T(3)! - 4. \end{aligned}$$

$$\begin{aligned} 4331 &:= (-1 + F(3) + 3!) \times F(4)! \\ &:= 1 + T(3) \times T(3)! + T(4). \end{aligned}$$

$$\begin{aligned} 4332 &:= (2 + 3!) \times (3 + F(4)) \\ &:= 2 + T(3) \times T(3)! + T(4). \end{aligned}$$

$$\begin{aligned} 4333 &:= 3! \times 3!! + F(3 + 4) \\ &:= 3 + T(3) \times T(3)! + T(4). \end{aligned}$$

$$\begin{aligned} 4334 &:= (F(F(4)) + 3!) \times 3! + F(F(4)) \\ &:= 4 + T(3) \times T(3)! + T(4). \end{aligned}$$

$$\begin{aligned} 4335 &:= (5 + 3!! + 3!) \times F(4) \\ &:= 5 + T(3) \times T(3)! + T(4). \end{aligned}$$

$$\begin{aligned} 4336 &:= (6! + F(3)) \times 3! + 4 \\ &:= 6 + T(3) \times T(3)! + T(4). \end{aligned}$$

$$\begin{aligned} 4337 &:= F(7) + 3!! \times 3! + 4 \\ &:= 7 + T(3) \times T(3)! + T(4). \end{aligned}$$

$$\begin{aligned} 4338 &:= (F(8/F(3)) + 3!) \times F(4)! \\ &:= 8 + T(3) \times T(3)! + T(4). \end{aligned}$$

$$\begin{aligned} 4343 &:= 3!! \times F(4)! - F(F(3)) + 4! \\ &:= (T(T(T(3))) - 4!) \times T(T(3)) - 4. \end{aligned}$$

$$\begin{aligned} 4344 &:= (4 + (F(4) \times F(3)!)) \times F(4)! \\ &:= (T(4) + T(4! - T(3))) \times 4!. \end{aligned}$$

$$\begin{aligned} 4347 &:= 7! + F(4) - 3!! + 4! \\ &:= T((7 + 4!) \times 3) - 4!. \end{aligned}$$

$$\begin{aligned} 4348 &:= (-8 + F(4)! + 3!!) \times F(4)! \\ &:= (T(T(8) + T(4)) + T(3)) \times 4. \end{aligned}$$

$$\begin{aligned} 4352 &:= 2 + (5 + 3!!) \times F(4)! \\ &:= 2^5 \times T(T(3) + T(4)). \end{aligned}$$

$$\begin{aligned} 4355 &:= 5 + (5 + 3!!) \times F(4)! \\ &:= T(5 + T(5)) \times T(T(3)) - T(T(4)). \end{aligned}$$

$$\begin{aligned} 4357 &:= 7 + (5 + 3!!) \times F(4)! \\ &:= T(T(T(7) - T(5))) + T(-T(3) + 4!). \end{aligned}$$

$$\begin{aligned} 4362 &:= (F(2) + 6! + 3!) \times F(4)! \\ &:= (T(2) + 6!) \times T(3) + 4!. \end{aligned}$$

$$\begin{aligned} 4366 &:= (6! + 6) \times T(3) + T(4) \\ &:= (F(6) + 6!) \times 3! - F(F(4)). \end{aligned}$$

$$\begin{aligned} 4367 &:= -7 + 6 \times 3^{F(4)!} \\ &:= -T(T(7) - 6) + 3 \times T(T(T(4))). \end{aligned}$$

$$\begin{aligned} 4368 &:= (8 + 6!) \times F(3) \times F(4) \\ &:= 8!/6! \times T(3 \times 4). \end{aligned}$$

$$\begin{aligned} 4379 &:= 9 \times (-F(F(7)) + 3!!) - 4 \\ &:= (-9 + T(7)) \times T(T(T(3))) - T(4). \end{aligned}$$

$$\begin{aligned} 4383 &:= (3!! + F(8) + 3!!) \times F(4) \\ &:= (T(T(T(3))) - 8) \times T(T(3)) - T(4!). \end{aligned}$$

$$\begin{aligned} 4384 &:= F(F(4)!) \times 8 + 3!! \times F(4)! \\ &:= T(4) - T(T(8)) + (3 + 4)!. \end{aligned}$$

$$\begin{aligned} 4386 &:= (6! + 8 + 3) \times F(4)! \\ &:= T(6!/T(8)) \times T(T(3)) - 4!. \end{aligned}$$

$$\begin{aligned} 4396 &:= F(6)!/9 - F(F(3!)) \times 4 \\ &:= T(6) + T(93) + 4. \end{aligned}$$

$$\begin{aligned} 4416 &:= F(6) \times (-1 + 4!) \times 4! \\ &:= (6! - 1) \times 4 + T(T(T(4))). \end{aligned}$$

$$\begin{aligned} 4424 &:= F(4!) \times 2/F(F(F(4)!)) + F(F(4)!) \\ &:= 4 \times T(T(2))! + 4 + T(T(T(4))). \end{aligned}$$

$$\begin{aligned} 4432 &:= 2 \times (F(3!) + F(4)!)/F(F(F(4)!)) \\ &:= (T(2) + T(3)!) \times 4 + T(T(T(4))). \end{aligned}$$

$$\begin{aligned} 4434 &:= (-F(F(4)) + F(F(3!)) + F(4)!) \times F(4)! \\ &:= 4! + T(T(3)) \times T(4! - 4). \end{aligned}$$

$$\begin{aligned} 4437 &:= F(F(7) + 3!) + 4^4 \\ &:= 7! - 3 - T(4!) - T(4!). \end{aligned}$$

$$\begin{aligned} 4443 &:= (F(F(3!)) + F(4)!) \times F(4)! - F(4) \\ &:= 3 \times (T(T(T(4)))) - 4 - T(T(4)). \end{aligned}$$

$$\begin{aligned} 4445 &:= 5^{F(4)} + F(4)! \times F(4)!! \\ &:= (5 + T(4)) \times T(4!) - T(T(4)). \end{aligned}$$

$$\begin{aligned} 4446 &:= (6! + F(4 + 4)) \times F(4)! \\ &:= 6 \times T(4! - T(4) + 4!). \end{aligned}$$

$$\begin{aligned} 4448 &:= (F(8) + F(4)!) \times F(4)! + F(F(4)) \\ &:= 8 \times (T(4!) + 4^4). \end{aligned}$$

$$\begin{aligned} 4462 &:= -2 + (6! + 4!) \times F(4)! \\ &:= -T(2) + T(T(6) \times 4 + T(4)). \end{aligned}$$

$$\begin{aligned} 4466 &:= 6 \times (6! + 4!) + F(F(4)) \\ &:= T(T(6))/T(6) \times T(4! + 4). \end{aligned}$$

$$\begin{aligned} 4467 &:= -F(7) + F(6)!/(F(4) \times F(4)) \\ &:= 7 \times T(T(6)) + T(T(4!)/4). \end{aligned}$$

$$\begin{aligned} 4474 &:= F(F(4)!)!/(F(7) - 4) - F(4)! \\ &:= T(4) + 7! - 4! \times 4!. \end{aligned}$$

$$\begin{aligned} 4476 &:= F(6)!/(F(7) - 4) - 4 \\ &:= T(T(6 + 7)) - T(4) + T(4!). \end{aligned}$$

$$\begin{aligned} 4483 &:= 3 + 8!/(F(4) \times F(4)) \\ &:= -3 + T(T(8) + T(T(4))) + T(4!). \end{aligned}$$

$$\begin{aligned} 4485 &:= 5 + 8!/(F(4) \times F(4)) \\ &:= 5 \times (T(T(8)) + T(T(4!)/4)). \end{aligned}$$

$$\begin{aligned} 4488 &:= 8 + 8!/(F(4) \times F(4)) \\ &:= 8 \times T(T(8)/4 + 4!). \end{aligned}$$

$$\begin{aligned} 4489 &:= 9 + 8!/(F(4) \times F(4)) \\ &:= (T((98 - 4)) + (4)!). \end{aligned}$$

$$\begin{aligned} 4496 &:= F(6)!/9 + 4 \times 4 \\ &:= T(6) + T(94) + T(4). \end{aligned}$$

$$\begin{aligned} 4498 &:= 8!/9 - F(4)! + 4! \\ &:= 8 \times T(9 + 4!) + T(4). \end{aligned}$$

$$\begin{aligned} 4567 &:= -F(F(7)) + (6! - 5!) \times F(F(4)!) \\ &:= 7 + T(6! - 5^4). \end{aligned}$$

$$\begin{aligned} 4574 &:= -F(F(4)) \times F(F(7)) + (5 + F(F(4)))! \\ &:= -4 + T(-T(7) + 5!) + T(4!). \end{aligned}$$

$$\begin{aligned} 4578 &:= F(8) \times (F(F(7)) - 5 \times F(4)) \\ &:= T(87 + 5) + T(4!). \end{aligned}$$

$$4594 := F(F(4)!)! / 9 + 5! - F(4)! \\ := T(4) + T(95) + 4!.$$

$$4596 := (-6 + T(T(9)) + 5!) \times 4 \\ := F(6)! / 9 + 5! - 4.$$

$$4599 := (99 + 5!) \times F(F(F(4)!)) \\ := 99 + T(5) \times T(4!).$$

$$4608 := (8 + 0!) \times F(6)^{F(4)} \\ := (8! / T(-0! + T(6))) \times 4!.$$

$$4634 := F(F(4)) \times (3!! + F(F(6)) - 4) \\ := (T(4!) - T(3)) \times T(6) - T(T(T(4))).$$

$$4644 := 4 \times (F(4)!! + F(F(6))^{F(F(4))}) \\ := T(T(4)) \times (4 \times T(6)) + 4!.$$

$$4656 := (6! + 56) \times F(4)! \\ := (6! + T(T(4))) \times 6 - 4.$$

$$4657 := F(F(7)) \times 5! / 6 - F(4) \\ := 7 + T(5 \times 6) \times T(4).$$

$$4658 := -F(F(8)) + 5^6 - F(F(F(4)!)) \\ := 8 + T(5 \times 6) \times T(4).$$

$$4674 := -F(4)! + F(7) \times 6! / F(F(4)) \\ := -T(4!) + 7! - T(T(6) - T(4)).$$

$$4676 := (6! \times F(7) - F(6)) / F(F(4)) \\ := T(6) + 7 \times (6! - T(T(4))).$$

$$4687 := 7! - F(8 + 6) + 4! \\ := 7 \times T(T(8)) + T(6) + 4.$$

$$4688 := 8 \times (F(F(8)) - 6) - 4! \\ := 8 - (T(8) - T(T(6))) \times 4!.$$

$$4689 := 9 \times F(8) \times F(F(6)) + F(4)!! \\ := 9 - (T(8) - T(T(6))) \times 4!.$$

$$4697 := 7! + (F(9) - 6!) / F(F(4)) \\ := 7 \times (-T(9) + 6! - 4).$$

$$4725 := F(F((5 - 2)!!)) \times (F(F(7)) - F(F(4)!)) \\ := -T(5^2) + 7! + T(4).$$

$$4727 := 7! - F(2) - F(7) \times 4! \\ := 7! - T(T(2)) - 7 - T(4!).$$

$$4728 := (8 - F(2))! - F(7) \times 4! \\ := (T(T(8)) + T(T(2))) \times 7 + 4!.$$

$$4735 := 5 \times (3!! + F(F(7)) - F(4)!) \\ := -T(5) \times T(T(3)) + 7! + T(4).$$

$$4736 := F(6)^{F(3)} \times 74 \\ := 6! \times T(3) + T(T(7)) + T(4).$$

$$4743 := F(F(3!)) \times (-F(4)! + F(F(7))) - 4! \\ := (T(T(3)) + T(4)) \times T(-7 + 4!).$$

$$4744 := (F(4)!! / F(F(4)) + F(F(7))) \times F(F(4)!) \\ := 4 - T(4!) + (T(7) / 4)!.$$

$$4745 := 5 \times (-4 + F(F(7)) + F(4)!!) \\ := -5 - T(4!) + 7! + T(4).$$

$$4749 := 9! - F(F(4)!)! - F(7 \times 4) \\ := 9 - T(4!) + (T(7) / 4)!.$$

$$4753 := -3!! + F(F(-5 + F(7))) / F(F(4)) \\ := T(3 \times T(5) + T(7) + 4!).$$

$$4763 := F(F(3!)) \times (-6 + F(F(7))) - 4 \\ := T(T(3) + T(6 + 7)) + T(4).$$

$$4764 := F(4)! \times (6! + 74) \\ := -T(4 \times 6) + 7! + 4!.$$

$$4765 := 5! \times (6! + F(F(7))) / 4! \\ := T(T(5 + 6) + T(7)) + T(4!).$$

$$4767 := 7 \times (6! - F(7) \times F(4)) \\ := 7! + T(T(6)) - 7! / T(4).$$

$$4773 := 3!! + 7! - F(F(7)) + F(4) \\ := T(3)! - 7 + T(T(7)) \times T(4).$$

$$4778 := -F(8) - F(F(7)) + 7! - F(F(4)!) \\ := -T(8) \times 7 + 7! - T(4).$$

$$4779 := -F(9) - F(F(7)) + 7! + F(4) \\ := 9 \times (T(-7 + T(7)) + T(4!)).$$

$$4782 := -2^8 + 7! - F(F(4)) \\ := T(T(2)) + T(8) + 7! - T(4!).$$

$$4783 := F(3)! / 8 - F(F(7)) - 4! \\ := -T(T(T(3))) - T(8) + 7! - T(4).$$

$$4789 := -F(9) \times 8 + 7! + F(F(F(4)!)) \\ := T(98) - 7 - T(T(4)).$$

$$4794 := (F(4)!! - F(9)) \times 7 - F(F(4)!) \\ := 4! + T(9) \times (T(T(7)) - T(4!)).$$

$$4796 := (6! - F(9)) \times 7 - F(4)! \\ := -T(6) \times 9 + 7! - T(T(4)).$$

$$4797 := 7! - F(9) - F(F(7)) + 4! \\ := 7! + 9 \times (T(7) - T(T(4))).$$

$$4827 := (F(F(7)) - 2) \times F(8) - 4! \\ := T(T(7)^2/8) - 4!.$$

$$4837 := 7 \times (3!! - F(8) - F(F(4)!)) \\ := 7 \times (T(T(3)) + T(T(8)) + 4).$$

$$4845 := F(5 \times 4) - 8!/F(F(F(4)!)) \\ := T(5 \times T(4)) + T(84).$$

$$4848 := -8 \times 4! + (F(8)/F(4))! \\ := (T(8) + T(48)) \times 4.$$

$$4857 := 7! - 5! - F(8) \times F(4) \\ := 7! - 5! - 8 - T(T(4)).$$

$$4859 := -F(9) + F(5 + 8) \times F(F(F(4)!)) \\ := 9 \times (-5! + T(T(8))) - T(T(4)).$$

$$4875 := -5! + 7! - F(8) - 4! \\ := T(5) \times T(-7 + 8 \times 4).$$

$$4882 := 2 + 8 \times F(F(8) - F(4)!)) \\ := -T(T(2)) + 8 \times (T(T(8)) - T(T(4))).$$

$$4884 := 4 + 8 \times F(F(8) - F(4)!)) \\ := (-T(T(4)) + T(T(8))) \times 8 - 4.$$

$$4886 := 6 + 8 \times F(F(8) - F(4)!)) \\ := 6! \times 8 + T(T(8)) - T(T(T(4))).$$

$$4887 := 7 + 8 \times F(F(8) - F(4)!)) \\ := 7! - T(8 + T(8)/4).$$

$$4888 := 8 + 8 \times F(F(8) - F(4)!)) \\ := 8 \times (T(T(8)) - T(T(8 - 4))).$$

$$4896 := 6 \times F(9) \times (8 - 4)! \\ := T(6) + T(98) + 4!.$$

$$4897 := 7! - F(-9 + F(8)) + F(F(F(4))) \\ := 7! - T(9 + 8) + T(4).$$

$$4904 := (F(4)! + 0!)! - F(9) \times 4 \\ := 4 \times (0! + T(T(9) + 4)).$$

$$4914 := F(F(F(4)!)) \times (1 + F(9 + 4)) \\ := (T(T(4)) - 1) \times T(9 + 4).$$

$$4927 := 7! - F(2 + 9) - 4! \\ := T(T(7)) \times (T(2) + 9) + T(T(4)).$$

$$4937 := 7! - F(F(3)) - F(9) \times F(4) \\ := 7! - 3 - T(9) - T(T(4)).$$

$$4944 := 4! \times (F(4)! \times F(9) + F(F(4))) \\ := 4! \times (4! \times 9 - T(4)).$$

$$4947 := 7! + (F(4) - F(9)) \times F(4) \\ := 7! - 4! - T(9) - 4!.$$

$$4957 := 7! - 5! + F(9) + F(4) \\ := 7 + T(5 + 94).$$

$$4968 := 8 \times (6! - 9) - F(4)! \\ := (T(8) \times 6 - 9) \times 4!.$$

$$4971 := -1 + 7! - F(9) \times F(F(4)) \\ := 1 \times 7! - T(9) - 4!.$$

$$4972 := F(2) \times 7! - F(9) \times F(F(4)) \\ := T(T(2))! + (T(7) + T(T(9))) \times 4.$$

$$4973 := F(F(3)) + 7! - F(9) \times F(F(4)) \\ := -3 + 7! - 9 - T(T(4)).$$

$$4974 := F(4)! \times (F(7) + F(9) \times 4!) \\ := T((4 + 7) \times 9) + 4!.$$

$$4975 := -5! + 7! + F(F(9) - 4!) \\ := -5! + 7! + T(9) + T(4).$$

$$4976 := -6 + 7! - F(9) - 4! \\ := 6! \times 7 - 9 - T(T(4)).$$

$$4977 := 7! + (F(7) - F(9)) \times F(4) \\ := 7! + T(7) - T(9 + 4).$$

$$5027 := 7! - F(2 + 05) \\ := 7! + 2 - T(05).$$

$$5032 := (F(2) + 3!)! - F(0! + 5) \\ := -T(2) + (T(3) + 0!)! - 5.$$

$$5035 := -5 + (F(3) - 0 + 5)! \\ := -5 + (T(3) + (0 \times 5)!)!$$

$$5036 := F(6)!/F(3!) + 0! - 5 \\ := (T(6)/3)! + 0! - 5.$$

$$5061 := (1 + 6)! + F(F(0! + 5)) \\ := (1 + 6)! + T(0! + 5).$$

$$\begin{aligned} 5066 &:= F(F(6)) + (F(6) - 0!) + 5 \\ &:= T(6) + (6 + 0!) + 5. \end{aligned}$$

$$\begin{aligned} 5067 &:= 7! + F(F(6)) + 0! + 5 \\ &:= 7! + T(6) + 0! + 5. \end{aligned}$$

$$\begin{aligned} 5079 &:= F(9) + 7! + 05 \\ &:= T(9) + 7! - 0! - 5. \end{aligned}$$

$$\begin{aligned} 5082 &:= 2 \times F(8) \times (0! + 5!) \\ &:= (T(T(2)) + T(8)) \times (0! + 5!). \end{aligned}$$

$$\begin{aligned} 5272 &:= -F(2) + F(F(7)) + (2 + 5)! \\ &:= -T(T(2)) + T(T(7)) \times (-2 + T(5)). \end{aligned}$$

$$\begin{aligned} 5273 &:= F(3! + 7) + (2 + 5)! \\ &:= T(T(T(3))) + 7! - T(2) + 5. \end{aligned}$$

$$\begin{aligned} 5274 &:= -F(4)! + 7! + 2 \times 5! \\ &:= (T(4!) - 7) \times (T(2) + T(5)). \end{aligned}$$

$$\begin{aligned} 5337 &:= 7! - 3 \times F(F(3!)) - 5! \\ &:= 7! - 3 \times (T(T(3)) - 5!). \end{aligned}$$

$$\begin{aligned} 5395 &:= (5! \times 9 - F(F(3))) \times 5 \\ &:= -5 + T(9) \times T(3 \times 5). \end{aligned}$$

$$\begin{aligned} 5409 &:= 9 + T(-0! + T(4)) \times 5! \\ &:= 9 \times (0! + F(4)!! - 5!). \end{aligned}$$

$$\begin{aligned} 5433 &:= 3 \times (T(T(T(3))) + T(T(T(4)))) + 5! \\ &:= F(F(F(3!)))/F(3) - F(F(4)!) \times 5. \end{aligned}$$

$$\begin{aligned} 5443 &:= (T(T(T(3))) - 4) \times 4! - 5 \\ &:= F(F(F(3!)))/F(F(4)) - F(4)! \times 5. \end{aligned}$$

$$\begin{aligned} 5448 &:= -8! - F(4)!! + F(4!) + 5! \\ &:= 8 \times T(T(4 + 4)) + 5!. \end{aligned}$$

$$\begin{aligned} 5472 &:= F(F(2) \times F(7)) \times 4! - 5! \\ &:= -T(2) + 7! + T(4! + 5). \end{aligned}$$

$$\begin{aligned} 5473 &:= F(3 \times 7)/(-F(4) + 5) \\ &:= T(3)! + T(T(7) \times 4 - T(5)). \end{aligned}$$

$$\begin{aligned} 5484 &:= F(4)! + F(F(8))/F(F(4)) + 5 \\ &:= T(4!) + T(8) \times (4! + 5!). \end{aligned}$$

$$\begin{aligned} 5487 &:= -F(F(7)) + 8 \times (F(4)!! - 5) \\ &:= 7 \times T(T(8)) + T(T(4)) \times T(5). \end{aligned}$$

$$\begin{aligned} 5535 &:= (5! + F(F(F(3!)) - 5)) \times 5 \\ &:= -T(5) \times (T(T(T(3))) - 5! \times 5). \end{aligned}$$

$$\begin{aligned} 5544 &:= F(F(F(4)!)) \times (4! + 5! + 5!) \\ &:= 4! \times T(-4 + 5 \times 5). \end{aligned}$$

$$\begin{aligned} 5597 &:= F(F(7)) \times (9 - 5)! + 5 \\ &:= -T(7) + T(9) \times (5 + 5!). \end{aligned}$$

$$\begin{aligned} 5634 &:= -F(4)! + F(3!) \times 6! - 5! \\ &:= T(4!) \times T(T(3)) - T(T(6) + T(5)). \end{aligned}$$

$$\begin{aligned} 5643 &:= 3 + F(4)!! \times F(6) - 5! \\ &:= -T(T(3)) + 4! \times T(T(6)) + 5!. \end{aligned}$$

$$\begin{aligned} 5646 &:= 6 + F(4)!! \times F(6) - 5! \\ &:= 6! - 4! + T(-T(6) + 5!). \end{aligned}$$

$$\begin{aligned} 5664 &:= (F(4) + 6!) \times F(6) - 5! \\ &:= 4 \times 6 \times T(T(6)) + 5!. \end{aligned}$$

$$\begin{aligned} 5673 &:= F(F(F(3!))) - 7! - F(F(6) + 5) \\ &:= 3 \times T(76 - T(5)). \end{aligned}$$

$$\begin{aligned} 5697 &:= F(F(7)) \times 9 + 6! \times 5 \\ &:= 7! - 9 + T(T(6) + T(5)). \end{aligned}$$

$$\begin{aligned} 5733 &:= 3!! + F(F(3!)) \times F(F(7)) + 5! \\ &:= 3 \times T(T(3)) \times T(T(7) - T(5)). \end{aligned}$$

$$\begin{aligned} 5736 &:= (6! - 3) \times (F(7) - 5) \\ &:= (6! - 3) \times (-7 + T(5)). \end{aligned}$$

$$\begin{aligned} 5738 &:= F(8)^{F(3)} \times F(7) + 5 \\ &:= 8 \times T(3)! - 7 - T(5). \end{aligned}$$

$$\begin{aligned} 5747 &:= -F(7) + F(4)!! \times (F(7) - 5) \\ &:= -T(7) + T(T(4)) \times 7 \times T(5). \end{aligned}$$

$$\begin{aligned} 5773 &:= F(F(F(3!))) - 7! - F(7) - 5! \\ &:= T(3)! + 7! + T(7) - T(5). \end{aligned}$$

$$\begin{aligned} 5783 &:= -3 + F(F(8)) - 7! + 5! \\ &:= T(3)! + 8 + 7! + T(5). \end{aligned}$$

$$\begin{aligned} 5784 &:= F(4!)/8 - 7 - 5 \\ &:= 4! \times T(8) + 7! - 5!. \end{aligned}$$

$$\begin{aligned} 5786 &:= 6! + F(8) + 7! + 5 \\ &:= T(6) + 8!/7 - 5. \end{aligned}$$

$$\begin{aligned} 5994 &:= F(4)! \times 9 \times (-9 + 5!) \\ &:= T(4 \times 9) \times T(9)/5. \end{aligned}$$

$$\begin{aligned} 6024 &:= -F(4)!! + F(20) - F(F(6)) \\ &:= 4! \times (-2 + T(0! + T(6))). \end{aligned}$$

$$\begin{aligned} 6027 &:= 7! + F(2 \times F(06)) \\ &:= 7 \times T(20 + T(6)). \end{aligned}$$

$$\begin{aligned} 6069 &:= 9!/60 + F(F(6)) \\ &:= 9!/60 + T(6). \end{aligned}$$

$$\begin{aligned} 6174 &:= (T(4!) - 7 + 1) \times T(6) \\ &:= F(F(F(4)!)) \times (F(7) + 1) \times F(F(6)). \end{aligned}$$

$$\begin{aligned} 6264 &:= (-4! + 6!) \times (F(2) + F(6)) \\ &:= 4! \times (6!/T(2) + T(6)). \end{aligned}$$

$$\begin{aligned} 6324 &:= -F(F(F(4)!))^2 + F(-F(F(3)) + F(F(6))) \\ &:= T(4!) \times T(T(T(2))) + 3 + T(6). \end{aligned}$$

$$\begin{aligned} 6336 &:= 6^{3!} - (F(3) + 6)! \\ &:= T(63) + T(3) \times 6!. \end{aligned}$$

$$\begin{aligned} 6384 &:= 4!/F(8)! - F(3!) \times 6! \\ &:= (4 + T(8 \times 3)) \times T(6). \end{aligned}$$

$$\begin{aligned} 6426 &:= ((F(6) - F(2))! + F(4!))/F(6) \\ &:= (6 + T(24)) \times T(6). \end{aligned}$$

$$\begin{aligned} 6435 &:= (5! - 3) \times F(4 + 6) \\ &:= (5! - 3) \times T(4 + 6). \end{aligned}$$

$$\begin{aligned} 6444 &:= F(4) \times F(4) \times (-4 + 6!) \\ &:= -4! + (4 + 4!) \times T(T(6)). \end{aligned}$$

$$\begin{aligned} 6447 &:= (7! + F(4!))/F(F(4)!) + F(F(6)) \\ &:= (T(7)/4 + T(4!)) \times T(6). \end{aligned}$$

$$\begin{aligned} 6459 &:= 9 \times 5! \times F(4)! - F(F(6)) \\ &:= T(9) \times (5! + 4!) - T(6). \end{aligned}$$

$$\begin{aligned} 6469 &:= 9 \times 6! + T(4) - T(6) \\ &:= 9 \times 6! - F(4) - F(6). \end{aligned}$$

$$\begin{aligned} 6473 &:= 3!! - 7 + F(4)! \times F(6) \\ &:= -T(3)! - 7 + T(4) \times 6!. \end{aligned}$$

$$\begin{aligned} 6496 &:= 6! \times 9 + 4! - F(6) \\ &:= 6! \times 9 + T(4) + 6. \end{aligned}$$

$$\begin{aligned} 6497 &:= F(F(7)) + 9 \times (-4! + 6!) \\ &:= 7 \times (T(T(9)) - 4) - 6!. \end{aligned}$$

$$\begin{aligned} 6525 &:= -5! \times 2 + F(5!/6) \\ &:= T(5) \times (T(T(2) + 5 + T(6))). \end{aligned}$$

$$\begin{aligned} 6549 &:= -9 \times 4! + F(5!/6) \\ &:= -T(9) + T(T(4)) \times 5! - 6. \end{aligned}$$

$$\begin{aligned} 6594 &:= F(4)! \times 9 + 5! - 6 \\ &:= (T(4) + T(9)) \times 5! - 6. \end{aligned}$$

$$\begin{aligned} 6642 &:= F(2^4) \times 6 + 6! \\ &:= 2 \times T(T(4) \times 6 + T(6)). \end{aligned}$$

$$\begin{aligned} 6644 &:= F(4)! \times (F(4) - 6!) + F(F(F(6))) \\ &:= T(4) \times (-T(T(4)) + 6!) - 6. \end{aligned}$$

$$\begin{aligned} 6648 &:= (F(8) + F(4)!) \times F(6) + 6! \\ &:= T(T(8)) \times T(4) - 6 - 6. \end{aligned}$$

$$\begin{aligned} 6699 &:= 9!/(9 \times 6) - F(F(6)) \\ &:= 9!/(9 \times 6) - T(6). \end{aligned}$$

$$\begin{aligned} 6721 &:= 1 + (F(2) + 7)!/6 \\ &:= T(1 + T(T(T(2)))) + T(7) \times T(T(6)). \end{aligned}$$

$$\begin{aligned} 6726 &:= 6 + (F(2) + 7)!/6 \\ &:= 6!/T(2) \times T(7) + 6. \end{aligned}$$

$$\begin{aligned} 6727 &:= 7 + (F(2) + 7)!/6 \\ &:= T(7) + T(T(T(T(2)))) + T(7) \times T(T(6)). \end{aligned}$$

$$\begin{aligned} 6728 &:= 8 + (F(2) + 7)!/6 \\ &:= 8 \times (T(T(2)) + 7!)/6. \end{aligned}$$

$$\begin{aligned} 6834 &:= -F(4)! + (3!! + 8!)/6 \\ &:= T(4) \times (T(3)! - T(8)) - 6. \end{aligned}$$

$$\begin{aligned} 6867 &:= 7 \times F(F(6)) + 8!/6 \\ &:= 7 \times T(6) + 8!/6. \end{aligned}$$

$$\begin{aligned} 7056 &:= F(6)!/5! \times F(0! + 7) \\ &:= T(6!/T(5)) \times (-0! + 7). \end{aligned}$$

$$\begin{aligned} 7227 &:= 7! + (T(T(2))/2)^7 \\ &:= 7! + F(2 + 2)^7. \end{aligned}$$

$$\begin{aligned} 7237 &:= F(7)^3 \times F(2) + 7! \\ &:= (7 + T(3))^{T(2)} + 7!. \end{aligned}$$

$$\begin{aligned} 7344 &:= (4! + 4!)^{F(3)} + 7! \\ &:= 4! \times (-T(4!)/3 + T(T(7))). \end{aligned}$$

$$\begin{aligned} 7353 &:= F(F(F(3))) - 5 \times 3!! + 7 \\ &:= 3 \times (T(5) + T(3) \times T(T(7))). \end{aligned}$$

$$\begin{aligned} 7413 &:= F(F(3!)) \times ((1 + 4)! + F(F(7))) \\ &:= T(T(3)) \times (T(1 + 4!) + T(7)). \end{aligned}$$

$$\begin{aligned} 7455 &:= (5! - 5) \times F(F(F(4)!)) + 7! \\ &:= T(5)/5 \times T(T(4) \times 7). \end{aligned}$$

$$\begin{aligned} 7456 &:= (F(6) + 5!)/4 \times F(F(7)) \\ &:= (6! - T(5)) \times T(4) + T(T(7)). \end{aligned}$$

$$\begin{aligned} 7472 &:= 2^{F(7)} - (-4 + 7)!! \\ &:= T(T(2)) \times T(T(7)) - 4 + 7!. \end{aligned}$$

$$\begin{aligned} 7476 &:= F(F(6)) \times (7^{F(4)} + F(7)) \\ &:= 6 \times T(7 \times 4) + 7!. \end{aligned}$$

$$\begin{aligned} 7495 &:= F((-5 + 9)!)/F(4)! - F(F(7)) \\ &:= -5! + T(T(9)) + T(T(T(4))) + 7!. \end{aligned}$$

$$\begin{aligned} 7584 &:= 4! + F(8) \times 5! + 7! \\ &:= 4 \times T(T(8)) - 5! + 7!. \end{aligned}$$

$$\begin{aligned} 7644 &:= (4! + 4) \times F(F(6)) \times F(7) \\ &:= T(4! + 4!) + T(T(6)) \times T(7). \end{aligned}$$

$$\begin{aligned} 7689 &:= (F(9) - F(8 - 6)) \times F(F(7)) \\ &:= T(9 \times 8) + T(6) + 7!. \end{aligned}$$

$$\begin{aligned} 7728 &:= F(8) \times 2^7 + 7! \\ &:= T(8 \times 2 + 7) \times T(7). \end{aligned}$$

$$\begin{aligned} 7874 &:= (4! + 7) \times (F(8) + F(F(7))) \\ &:= -T(T(T(4))) + 7! - T(T(8)) + 7!. \end{aligned}$$

$$\begin{aligned} 7937 &:= 7 + F(3! + 9) \times F(7) \\ &:= -T(7) + T(3)! + T(T(9)) \times 7. \end{aligned}$$

$$\begin{aligned} 7942 &:= -F(2) + F(F(F(4)!)) + F(9) \times F(F(7)) \\ &:= (-2 + 4!) \times (-T(9) + T(T(7))). \end{aligned}$$

$$\begin{aligned} 7993 &:= F(F(3!))/9 + F(7) \\ &:= T(T(3)!/9) + T(97). \end{aligned}$$

$$\begin{aligned} 8344 &:= F(F(4) \times F(4)!) + 3!! \times 8 \\ &:= 4! + 4 + T(T(T(3))) \times T(8). \end{aligned}$$

$$\begin{aligned} 8396 &:= F(F(F(6))) + F(9) - F(-3 + F(8)) \\ &:= 6!/9 + T(T(T(3))) \times T(8). \end{aligned}$$

$$\begin{aligned} 8447 &:= -7!/F(F(4)) + F(F(F(4)!)) + F(F(8)) \\ &:= T(7) \times T(4!) + T(T(4)) - 8. \end{aligned}$$

$$\begin{aligned} 8694 &:= F(4!) \times 9/(6 \times 8) \\ &:= (4 + 9) \times 6! - T(T(8)). \end{aligned}$$

$$\begin{aligned} 8784 &:= F(4)!! + 8!/(F(7) - 8) \\ &:= (T(4!) - 8 \times 7) \times T(8). \end{aligned}$$

$$\begin{aligned} 8786 &:= -6! \times F(8)/7 + F(F(8)) \\ &:= 6!/T(8) \times T(T(7)) + T(T(8)). \end{aligned}$$

$$\begin{aligned} 8856 &:= 6 \times (5 + T(8)) \times T(8) \\ &:= F(6) \times (5! + F(8 + 8)). \end{aligned}$$

$$\begin{aligned} 8968 &:= (8! + F(6)!)/9 + 8 \\ &:= (86 + T(T(9))) \times 8. \end{aligned}$$

$$\begin{aligned} 8972 &:= -2 \times F(7 + 9) + F(F(8)) \\ &:= T(T(2))! - T(7) + T(T(9)) \times 8. \end{aligned}$$

$$\begin{aligned} 9333 &:= F(F(3!))^3 + F(3!) \times 9 \\ &:= 3 \times (T(3) + 3 \times T(T(9))). \end{aligned}$$

$$\begin{aligned} 9384 &:= F(4!)/(F(8) \times F(3!)) \times F(9) \\ &:= -4! + 8 \times T(3 + T(9)). \end{aligned}$$

$$\begin{aligned} 9407 &:= F(7) \times (0! + F(4)!!) + F(9) \\ &:= T(7) \times (-0! + T(4!)) + T(T(9)). \end{aligned}$$

$$\begin{aligned} 9454 &:= -F(F(F(F(4)!))) + (-5! + F(4)!!) \times F(9) \\ &:= 4 + T(5 \times 4) \times T(9). \end{aligned}$$

$$\begin{aligned} 9474 &:= -F(4) + F(7) \times (F(4)!! + 9) \\ &:= 4! + 7!/4! \times T(9). \end{aligned}$$

$$\begin{aligned} 9657 &:= (F(F(7)) + 5! + 6!) \times 9 \\ &:= 7!/5! \times T(T(6)) - T(9). \end{aligned}$$

$$\begin{aligned} 9667 &:= F(7) \times (6! + F(F(6))) + F(9) \\ &:= T(T(7)) + T(6)^{-6+9}. \end{aligned}$$

$$\begin{aligned} 9672 &:= 2 \times (7! - 6 \times F(9)) \\ &:= (T(2) - T(T(7))) \times (T(6) - T(9)). \end{aligned}$$

$$\begin{aligned} 9724 &:= (4! - 2) \times F(7) \times F(9) \\ &:= (T(T(T(4))) - T(2)) \times 7 - T(T(9)). \end{aligned}$$

$$\begin{aligned} 9744 &:= (F(4!) + F(4!) - 7!)/9 \\ &:= 4! \times T(T(4! + T(7) - T(9))). \end{aligned}$$

2.3. With Square-Root.

In this subsection, we shall bring **selfie numbers written in terms of Fibonacci sequence and Triangular numbers** at the same time. The numbers are with used of **basic operations and square-root**. Again, the work is divided in two subsections, one in digit's order and another in reverse order of digits.

2.3.1. *Digit's Order.*

$$\begin{aligned} 84 &:= F(8) \times 4 \\ &:= T(\sqrt{T(8)}) \times 4. \end{aligned}$$

$$\begin{aligned} 189 &:= 1 \times F(8) \times 9 \\ &:= (1 + 8) \times T(T(\sqrt{9})). \end{aligned}$$

$$\begin{aligned} 378 &:= F(F(3)) + F(-7 + F(8)) \\ &:= T(T(T(3))) + \sqrt{T(7) + 8}. \end{aligned}$$

$$\begin{aligned} 379 &:= F(F(3) \times 7) + F(\sqrt{9}) \\ &:= -T(T(3)) + T(T(7)) - T(\sqrt{9}). \end{aligned}$$

$$\begin{aligned} 486 &:= \sqrt{F(4)^8} \times 6 \\ &:= \sqrt{T(\sqrt{4})^8} \times 6. \end{aligned}$$

$$\begin{aligned} 699 &:= F(F(F(F(6))/\sqrt{9})) \times \sqrt{9} \\ &:= T(T(6)) \times \sqrt{9} + T(\sqrt{9}). \end{aligned}$$

$$\begin{aligned} 966 &:= F(F(\sqrt{9}) \times F(6)) - F(F(6)) \\ &:= T(9) \times T(6) + T(6). \end{aligned}$$

$$\begin{aligned} 987 &:= F(F(\sqrt{9}) \times (F(8) - F(7))) \\ &:= -T(T(\sqrt{9})) + (T(8) \times T(7)). \end{aligned}$$

$$\begin{aligned} 996 &:= (9 + F(F(\sqrt{9}) \times F(6))) \\ &:= T(T(9)) - T(9) + 6. \end{aligned}$$

$$\begin{aligned} 1294 &:= F(12) \times 9 - \sqrt{4} \\ &:= -1 \times 2 + T(\sqrt{9})^4. \end{aligned}$$

$$\begin{aligned} 1296 &:= F(12) \times (\sqrt{9} + 6) \\ &:= T(1 + 2)^{\sqrt{9}} \times 6. \end{aligned}$$

$$\begin{aligned} 1369 &:= (1 + 36)^{F(\sqrt{9})} \\ &:= 1 + (-3 + T(T(6))) \times T(\sqrt{9}). \end{aligned}$$

$$\begin{aligned} 1398 &:= -F(13) \times (F(\sqrt{9}) - 8) \\ &:= (-1 + T(T(T(3)))) + \sqrt{9} \times \sqrt{T(8)}. \end{aligned}$$

$$\begin{aligned} 1597 &:= F(1^5 + 9 + 7) \\ &:= 1 + T((5 + \sqrt{9}) \times 7). \end{aligned}$$

$$\begin{aligned} 1598 &:= 1^5 + F(9 + 8) \\ &:= -T(T(-1 + 5)) + T(T(T(\sqrt{9}))) + T(8). \end{aligned}$$

$$\begin{aligned} 1599 &:= F(F(1 + 5) + 9) + F(\sqrt{9}) \\ &:= T(1 + T(T(-5 + 9))) + \sqrt{9}. \end{aligned}$$

$$\begin{aligned} 1728 &:= (-1 + F(7))^{F(\sqrt{2 \times 8})} \\ &:= (-1 + 7^2) \times T(8). \end{aligned}$$

$$\begin{aligned} 1847 &:= -1 + 8 \times (-\sqrt{4} + F(F(7))) \\ &:= T(T(1 + 8)) + \sqrt{4} \times T(T(7)). \end{aligned}$$

$$\begin{aligned} 1869 &:= F(1 \times 8) \times F(F(6) + \sqrt{9}) \\ &:= 1 \times 8 \times T(T(6)) + T(T(\sqrt{9})). \end{aligned}$$

$$\begin{aligned} 1885 &:= F(1 + F(8) - 8) \times 5 \\ &:= (-1 + T(\sqrt{T(8)} + T(\sqrt{T(8)}))) \times 5. \end{aligned}$$

$$\begin{aligned} 1890 &:= F(1 \times 8) \times 90 \\ &:= T(-1 + T(8)) \times \sqrt{9 + 0}. \end{aligned}$$

$$\begin{aligned} 1897 &:= (-1 + 8 \times F(9)) \times 7 \\ &:= T(-1 + T(8)) \times \sqrt{9} + 7. \end{aligned}$$

$$\begin{aligned} 1974 &:= F(1 \times 9 + 7) \times \sqrt{4} \\ &:= T(T(\sqrt{1 \times 9})) + T(7 + T(T(4))). \end{aligned}$$

$$\begin{aligned} 2589 &:= \sqrt{25} + F(F(8) - \sqrt{9}) \\ &:= T(2) \times T(5 + T(8)) + T(\sqrt{9}). \end{aligned}$$

$$\begin{aligned} 2594 &:= 2 \times 5 + F(9 \times \sqrt{4}) \\ &:= T(T(2))^5 / \sqrt{9} + \sqrt{4}. \end{aligned}$$

$$\begin{aligned} 2645 &:= (2 + F(F(6)))^{\sqrt{4}} \times 5 \\ &:= (2 + T(6))^{\sqrt{4}} \times 5. \end{aligned}$$

$$\begin{aligned} 2646 &:= F(2 + 6)^{\sqrt{4}} \times 6 \\ &:= T(2) \times T(6) \times \sqrt{4} \times T(6). \end{aligned}$$

$$\begin{aligned} 2796 &:= F(F(2) \times F(7)) \times F(\sqrt{9}) \times 6 \\ &:= T(2 + T(7)) \times T(\sqrt{9}) + 6. \end{aligned}$$

$$\begin{aligned} 2797 &:= F(2 + F(7)) + \sqrt{9^7} \\ &:= T(2 + T(7)) \times T(\sqrt{9}) + 7. \end{aligned}$$

$$\begin{aligned} 2962 &:= F(2) + \sqrt{9} \times F(F(6) \times 2) \\ &:= T(-2 + T(9)) + T(T(6) \times T(2)). \end{aligned}$$

$$\begin{aligned} 2964 &:= (F(2) + F(F(\sqrt{9}) \times F(6))) \times F(4) \\ &:= (-T(2) + T(9 \times 6)) \times \sqrt{4}. \end{aligned}$$

$$\begin{aligned} 3364 &:= (3 + F(F(3) + F(6)))^{\sqrt{4}} \\ &:= T(33) \times 6 - \sqrt{4}. \end{aligned}$$

$$\begin{aligned} 3384 &:= (3 + F(-F(F(3)) + F(8)))/\sqrt{4} \\ &:= T(3) \times (T(-3 + T(8)) + T(\sqrt{4})). \end{aligned}$$

$$\begin{aligned} 3669 &:= F(-F(3) + F(F(6))) - F(6)^{\sqrt{9}} \\ &:= T(36) + T(T(T(6))/\sqrt{9}). \end{aligned}$$

$$\begin{aligned} 3944 &:= (-F(F(3)) + F(F(\sqrt{9})^4)) \times 4 \\ &:= (T(3) + T(T(9)) - T(T(4))) \times 4. \end{aligned}$$

$$\begin{aligned} 3969 &:= (\sqrt{3 \times \sqrt{9}} \times F(F(6)))^{F(\sqrt{9})} \\ &:= T(T(3)) \times \sqrt{9} \times T(6) \times \sqrt{9}. \end{aligned}$$

$$\begin{aligned} 4179 &:= F(\sqrt{4} + 17) - F(\sqrt{9}) \\ &:= -T(T(\sqrt{4})) - 1 + T(T(7 + T(\sqrt{9}))). \end{aligned}$$

$$\begin{aligned} 4182 &:= (F(\sqrt{4}) + F((18 + F(2)))) \\ &:= T(T(\sqrt{4})) \times (T(1 + T(8)) - T(T(2))). \end{aligned}$$

$$\begin{aligned} 4184 &:= F(4) + F(F(1 \times 8) - \sqrt{4}) \\ &:= -\sqrt{4} + T(T(1 + 8 + 4)). \end{aligned}$$

$$\begin{aligned} 4197 &:= F(4) + F(19) + F(7) \\ &:= T(4) + 1 + T(T(T(\sqrt{9}) + 7)). \end{aligned}$$

$$\begin{aligned} 4373 &:= -F(\sqrt{4}) + 3^7 \times F(3) \\ &:= \sqrt{4} + T((3 + T(7)) \times 3). \end{aligned}$$

$$\begin{aligned} 4394 &:= (T(4) + 3)^{\sqrt{9}} \times \sqrt{4} \\ &:= F(4 + 3)^{\sqrt{9}} \times \sqrt{4}. \end{aligned}$$

$$\begin{aligned} 4647 &:= F(-\sqrt{4} + F(F(6))) + \sqrt{4} \times F(F(7)) \\ &:= T(T(-T(4) + T(6))) + T(T(\sqrt{4})) \times T(T(7)). \end{aligned}$$

$$\begin{aligned} 4768 &:= F(\sqrt{4}) + (F(F(7)) - 6) \times F(8) \\ &:= -T(T(4)) - T(7) + T(T(6)) \times T(\sqrt{T(8)}). \end{aligned}$$

$$\begin{aligned} 4860 &:= \sqrt{F(4)^8} \times 60 \\ &:= \sqrt{T(\sqrt{4})^8} \times 60. \end{aligned}$$

$$\begin{aligned} 4864 &:= \sqrt{4^8} \times (F(F(6)) - \sqrt{4}) \\ &:= \sqrt{4^8} \times (T(6) - \sqrt{4}). \end{aligned}$$

$$\begin{aligned} 4872 &:= F(\sqrt{4}) \times F(8) \times (F(F(7)) - F(2)) \\ &:= T(\sqrt{4}) \times 8 \times T(T(7))/2. \end{aligned}$$

$$\begin{aligned} 4873 &:= F(\sqrt{4}) + F(8) \times (F(F(7)) - F(F(3))) \\ &:= (T(\sqrt{4}) + T(8) \times T(T(7)))/3. \end{aligned}$$

$$\begin{aligned} 4874 &:= \sqrt{4} + F(8) \times (F(F(7)) - F(\sqrt{4})) \\ &:= \sqrt{4} \times (T(8) + 7^4). \end{aligned}$$

$$\begin{aligned} 4878 &:= -\sqrt{4} + 8 \times F(7 + 8) \\ &:= (4 + 8) \times T(T(7)) + \sqrt{T(8)}. \end{aligned}$$

$$\begin{aligned} 4879 &:= -F(\sqrt{4}) + 8 \times F(F(7) + F(\sqrt{9})) \\ &:= T(T(T(4)) - \sqrt{T(8)}) + T(T(7)) \times 9. \end{aligned}$$

$$\begin{aligned} 4887 &:= \sqrt{4} - 8 + F(8) \times F(F(7)) \\ &:= -T(T(\sqrt{4})) + T(T(\sqrt{T(8)})) + T(T(8)) \times 7. \end{aligned}$$

$$\begin{aligned} 4894 &:= F(4 + 8) \times F(9) - \sqrt{4} \\ &:= -\sqrt{4} + T(8) \times T(T(\sqrt{9}) + T(4)). \end{aligned}$$

$$\begin{aligned} 4899 &:= F(4 + 8) \times F(9) + \sqrt{9} \\ &:= T(T(\sqrt{4})) \times T(T(8)) + T(T(9) - \sqrt{9}). \end{aligned}$$

$$\begin{aligned} 4945 &:= (\sqrt{4} + F(F(\sqrt{9})^4)) \times 5 \\ &:= T(T(4)) \times 9 \times T(4) - 5. \end{aligned}$$

$$\begin{aligned} 4998 &:= \sqrt{49} \times F(9) \times F(8) \\ &:= (T(T(\sqrt{4})) + T(9)) \times 98. \end{aligned}$$

$$\begin{aligned} 5184 &:= (51 + F(8))^{\sqrt{4}} \\ &:= (\sqrt{5-1} \times T(8))^{\sqrt{4}}. \end{aligned}$$

$$\begin{aligned} 5439 &:= F(F(5 + F(4)))/F(3) - F(9) \\ &:= (T(5 + \sqrt{4}) + T(T(T(3)))) \times T(T(\sqrt{9})). \end{aligned}$$

$$\begin{aligned} 5482 &:= 5 + 4 + F(F(8))/2 \\ &:= T(T(T(5) - \sqrt{4})) + T(8)^2. \end{aligned}$$

$$\begin{aligned} 5825 &:= F(5 + 8) \times 25 \\ &:= 5 \times (T(T(\sqrt{T(8)})) + 2) \times 5. \end{aligned}$$

$$\begin{aligned} 6939 &:= 6 \times F(9)^{F(3)} + \sqrt{9} \\ &:= 6 \times T(T(9)) + 3^{T(\sqrt{9})}. \end{aligned}$$

$$\begin{aligned} 6942 &:= 6 \times (F(9)^{\sqrt{4}} + F(2)) \\ &:= 6 \times T(T(\sqrt{9})) \times T(T(4)) + 2. \end{aligned}$$

$$\begin{aligned} 7448 &:= (F(F(7)) \times 4 - F(\sqrt{4})) \times 8 \\ &:= T(7) \times (T(4) + \sqrt{4^8}). \end{aligned}$$

$$\begin{aligned} 7875 &:= (F(F(7)) - 8) \times 7 \times 5 \\ &:= T(-7 + T(\sqrt{T(8)})) \times 75. \end{aligned}$$

$$\begin{aligned} 7889 &:= -7 + 8 \times F(8 \times F(\sqrt{9})) \\ &:= -T(T(7)) + T(8) \times T(T(\sqrt{T(8)})) - T(T(\sqrt{9})). \end{aligned}$$

$$\begin{aligned} 7896 &:= (-F(7) + F(8)) \times F(F(\sqrt{9}) \times F(6)) \\ &:= 7 \times T(8 + T(9) - 6). \end{aligned}$$

$$\begin{aligned} 7922 &:= F(F(7)) \times F(9 \times 2/2) \\ &:= (T(7) + T(\sqrt{9})) \times (2 + T(T(T(2))))). \end{aligned}$$

$$\begin{aligned} 7928 &:= F(F(7)) \times F(9) - 2 + 8 \\ &:= -T(7) + (T(T(9) + T(T(2)))) \times \sqrt{T(8)}. \end{aligned}$$

$$\begin{aligned} 7959 &:= -F(F(7)) + F(\sqrt{9})^{F(5+F(\sqrt{9}))} \\ &:= (T(7) + T(T(T(\sqrt{9}))) + 5) \times T(T(\sqrt{9})). \end{aligned}$$

$$\begin{aligned} 7994 &:= (F(F(7)) + F(\sqrt{9})) \times F(9) + 4 \\ &:= \sqrt{T(T(7)) - T(\sqrt{9})^{\sqrt{9}} - T(T(\sqrt{4}))}. \end{aligned}$$

$$\begin{aligned} 7995 &:= (F(F(7)) + F(\sqrt{9})) \times F(9) + 5 \\ &:= \sqrt{T(T(7)) - T(\sqrt{9})^{\sqrt{9}} - 5}. \end{aligned}$$

$$\begin{aligned} 7998 &:= (F(F(7)) + F(\sqrt{9})) \times F(9) + 8 \\ &:= (T(7 + T(9)) - T(9)) \times \sqrt{T(8)}. \end{aligned}$$

$$\begin{aligned} 8213 &:= F(8) + 2^{13} \\ &:= T(\sqrt{T(8)}) + 2^{13}. \end{aligned}$$

$$\begin{aligned} 8294 &:= (F(F(8) - 2) - F(9)) \times \sqrt{4} \\ &:= 8 \times (2 + T(T(9))) - \sqrt{4}. \end{aligned}$$

$$\begin{aligned} 8364 &:= F(F(8)) - F(3 \times 6) + \sqrt{4} \\ &:= -T(T(8)) - T(T(T(3))) + T(6)^{T(\sqrt{4})}. \end{aligned}$$

$$\begin{aligned} 8400 &:= F(8) \times 400 \\ &:= T(\sqrt{T(8)}) \times 400. \end{aligned}$$

$$\begin{aligned} 8464 &:= (84 + F(6))^{\sqrt{4}} \\ &:= (8 + 4 \times T(6))^{\sqrt{4}}. \end{aligned}$$

$$\begin{aligned} 8749 &:= (T(T(8)) + 7) \times (4 + 9) \\ &:= F(F(8)) - F(7)^{\sqrt{F(4) \times \sqrt{9}}}. \end{aligned}$$

$$\begin{aligned} 8820 &:= F(8) \times F(8) \times 20 \\ &:= (T(8) + \sqrt{T(8)}) \times T(20). \end{aligned}$$

$$\begin{aligned} 8883 &:= F(8 + 8) \times (8 + F(F(3))) \\ &:= -T(\sqrt{T(8)} + T(\sqrt{T(8)})) + T(\sqrt{T(8)})^3. \end{aligned}$$

$$\begin{aligned} 8898 &:= F(F(8)) - 8 \times F(\sqrt{9})^8 \\ &:= T(T(8)) + (-\sqrt{T(8)} + T(T(9))) \times 8. \end{aligned}$$

$$\begin{aligned} 9259 &:= -F(\sqrt{9}) + F(F(F(2) + 5))^{\sqrt{9}} \\ &:= T(T(\sqrt{9}))^{T(2)} - 5 + \sqrt{9}. \end{aligned}$$

$$\begin{aligned} 9261 &:= F(9 - F(2))^{\sqrt{F(6)+1}} \\ &:= T(T(\sqrt{9}))^{\sqrt{2+6+1}}. \end{aligned}$$

$$\begin{aligned} 9263 &:= F(\sqrt{9}) + F(2 + 6)^3 \\ &:= T(\sqrt{9})/T(2) + T(6)^3. \end{aligned}$$

$$\begin{aligned} 9264 &:= \sqrt{9} + F(2 + 6)^{F(4)} \\ &:= 9/T(2) + T(6)^{T(\sqrt{4})}. \end{aligned}$$

$$\begin{aligned} 9269 &:= 9 - F(2) + F(F(6))^{\sqrt{9}} \\ &:= T(\sqrt{9}) + 2 + T(6)^{\sqrt{9}}. \end{aligned}$$

$$\begin{aligned} 9348 &:= -F(F(9)/F(3)) - F(\sqrt{4}) + F(F(8)) \\ &:= (\sqrt{9} \times T(3) + T(T(T(4)))) \times \sqrt{T(8)}. \end{aligned}$$

$$\begin{aligned} 9375 &:= \sqrt{9} \times (-F(3) + 7)^5 \\ &:= \sqrt{9} \times \sqrt{(-3 + T(7))^5}. \end{aligned}$$

$$\begin{aligned} 9576 &:= F(\sqrt{9}) \times (-5 + F(F(7))) \times F(F(6)) \\ &:= T(\sqrt{9}) \times T(5 \times 7 + T(6)). \end{aligned}$$

$$\begin{aligned} 9648 &:= -F(\sqrt{9}) - 6^4 + F(F(8)) \\ &:= (T(9) \times 6 - \sqrt{4}) \times T(8). \end{aligned}$$

$$\begin{aligned} 9789 &:= F(\sqrt{9})^{F(7)} + F(8 + 9) \\ &:= \sqrt{9} \times T(T(7)) \times 8 + T(9). \end{aligned}$$

2.3.2. *Reverse Order of Digits.*

$$\begin{aligned} 84 &:= 4 \times F(8) \\ &:= 4 \times T(\sqrt{T(8)}). \end{aligned}$$

$$\begin{aligned} 189 &:= 9 \times F(8 \times 1) \\ &:= 9 \times T(T(\sqrt{8+1})). \end{aligned}$$

$$\begin{aligned} 378 &:= F(F(8) - 7) + F(F(3)) \\ &:= T(\sqrt{T(8)} + 7 \times 3). \end{aligned}$$

$$\begin{aligned} 379 &:= F(\sqrt{9}) + F(7 \times F(3)) \\ &:= -T(\sqrt{9}) + T(T(7)) - T(T(3)). \end{aligned}$$

$$\begin{aligned} 438 &:= F(8)^{F(3)} - F(4) \\ &:= T(8 + T(T(3))) + T(\sqrt{4}). \end{aligned}$$

$$\begin{aligned} 648 &:= 8 \times \sqrt{F(4)^{F(6)}} \\ &:= T(8) \times T(\sqrt{4}) \times 6. \end{aligned}$$

$$\begin{aligned} 699 &:= \sqrt{9} \times F(F(9) - F(F(6))) \\ &:= T(\sqrt{9}) + \sqrt{9} \times T(T(6)). \end{aligned}$$

$$\begin{aligned} 966 &:= -F(F(6)) + F(F(6) \times F(\sqrt{9})) \\ &:= (T(6) + (T(6) \times T(9))). \end{aligned}$$

$$\begin{aligned} 987 &:= F((-F(7) + F(8)) \times F(\sqrt{9})) \\ &:= T(7) \times T(8) - T(T(\sqrt{9})). \end{aligned}$$

$$\begin{aligned} 996 &:= F(F(6) \times F(\sqrt{9})) + 9 \\ &:= 6 + T(T(9)) - T(9). \end{aligned}$$

$$\begin{aligned} 0142 &:= -2 + F(\sqrt{4} + 10) \\ &:= T(T(2)) + T(T(T(\sqrt{4})) + 10). \end{aligned}$$

$$\begin{aligned} 0174 &:= -4 + F(F(7)) - F(10) \\ &:= T(\sqrt{4}) + T(T(7)) - 10. \end{aligned}$$

$$\begin{aligned} 0189 &:= 9 \times F(8 \times 1 + 0) \\ &:= \sqrt{9} \times (8 + T(10)). \end{aligned}$$

$$\begin{aligned} 0199 &:= F(9) + \sqrt{9} \times F(10) \\ &:= 9 + T(9 + 10). \end{aligned}$$

$$\begin{aligned} 0347 &:= F(7 \times \sqrt{4}) - 30 \\ &:= T(T(7)) \times \sqrt{4} - T(30). \end{aligned}$$

$$\begin{aligned} 0379 &:= F(\sqrt{9}) + F(7 \times F(3 + 0)) \\ &:= \sqrt{9} + T(T(7)) - 30. \end{aligned}$$

$$\begin{aligned} 1293 &:= F(F(3) \times 9)/2 + 1 \\ &:= -3 + T(\sqrt{9})^{T(2)+1}. \end{aligned}$$

$$\begin{aligned} 1598 &:= F(8 + 9) + F(\sqrt{5-1}) \\ &:= T(T(8) + T(T(\sqrt{9}))) - T(T(5-1)). \end{aligned}$$

$$\begin{aligned} 1599 &:= F(\sqrt{9}) + F(9 + F(5 + 1)) \\ &:= \sqrt{9} + T(T(T(9-5)) + 1). \end{aligned}$$

$$\begin{aligned} 1847 &:= (F(F(7)) - \sqrt{4}) \times 8 - 1 \\ &:= T(T(7)) \times \sqrt{4} + T(T(8 + 1)). \end{aligned}$$

$$\begin{aligned} 1864 &:= (\sqrt{4} + 6) \times F(F(8-1)) \\ &:= (\sqrt{4} + T(T(6))) \times 8 \times 1. \end{aligned}$$

$$\begin{aligned} 1869 &:= F(\sqrt{9} + F(6)) \times F(8 \times 1) \\ &:= T(T(\sqrt{9})) + T(T(6)) \times 8 \times 1. \end{aligned}$$

$$\begin{aligned} 1897 &:= 7 \times (F(9) \times 8 - 1) \\ &:= 7 + \sqrt{9} \times T(T(8) - 1). \end{aligned}$$

$$\begin{aligned} 1974 &:= \sqrt{4} \times F(7 + 9 \times 1) \\ &:= T(T(T(4))) + T(T(7)) + T(T(\sqrt{9}) + 1). \end{aligned}$$

$$\begin{aligned} 2197 &:= F(7)^{9/(1+2)} \\ &:= (7 + T(\sqrt{9}))^{1+2}. \end{aligned}$$

$$\begin{aligned} 2589 &:= F(-\sqrt{9} + F(8)) + \sqrt{5^2} \\ &:= \sqrt{9} \times T(T(8) + 5) + T(T(2)). \end{aligned}$$

$$\begin{aligned} 2594 &:= F(\sqrt{4} \times 9) + 5 \times 2 \\ &:= \sqrt{4} + T(\sqrt{9})^5/T(2). \end{aligned}$$

$$\begin{aligned} 2646 &:= 6 \times F(\sqrt{4} + 6)^2 \\ &:= T(6)^{\sqrt{4}} \times T(6/2). \end{aligned}$$

$$\begin{aligned} 2797 &:= (F(7) - F(F(\sqrt{9}))) \times F(F(7)) + F(2) \\ &:= (T(T(7)) - T(\sqrt{9})) \times 7 - T(2). \end{aligned}$$

$$\begin{aligned} 2798 &:= (F(8) - 9) \times F(F(7)) + 2 \\ &:= (8 + T(\sqrt{9}) \times T(T(7) + 2)). \end{aligned}$$

$$\begin{aligned} 2889 &:= -F(-\sqrt{9} + F(8)) + F(F(8))/2 \\ &:= (T(T(9)) - T(8) - T(8)) \times T(2). \end{aligned}$$

$$\begin{aligned} 2961 &:= F(16) \times \sqrt{9} \times F(2) \\ &:= (T(T(-1 + 6)) + T(T(\sqrt{9}))) \times T(T(T(2))). \end{aligned}$$

$$\begin{aligned} 2962 &:= F(2 \times F(6)) \times \sqrt{9} + F(2) \\ &:= T(T(2) \times T(6)) + T(T(9) - 2). \end{aligned}$$

$$\begin{aligned} 2964 &:= F(4) \times (F(F(6) \times F(\sqrt{9})) + F(2)) \\ &:= \sqrt{4} \times (T(6 \times 9) - T(2)). \end{aligned}$$

$$\begin{aligned} 2977 &:= F(7) \times (F(F(7)) - \sqrt{9} - F(2)) \\ &:= 7 \times T(T(7)) + T(9) \times T(2). \end{aligned}$$

$$\begin{aligned} 3647 &:= (-7 + \sqrt{4} + F(F(F(6))))/3 \\ &:= T(T(7) \times T(\sqrt{4})) + T(T(6))/3. \end{aligned}$$

$$\begin{aligned} 3669 &:= F(-F(\sqrt{9}) + F(F(6))) - F(6)^3 \\ &:= T(T(\sqrt{9}) \times 6) + T(T(T(6)))/3. \end{aligned}$$

$$\begin{aligned} 3993 &:= (F(3) + 9)^{\sqrt{9}} \times 3 \\ &:= -T(3 \times 9) + T(93). \end{aligned}$$

$$\begin{aligned} 3999 &:= (9 + F(9)) \times 93 \\ &:= T(\sqrt{9}) \times T(T(9) - 9) + 3. \end{aligned}$$

$$\begin{aligned} 4179 &:= -F(\sqrt{9}) + F(F(7 + 1) - \sqrt{4}) \\ &:= T(T(T(\sqrt{9}) + 7)) - 1 - T(T(\sqrt{4})). \end{aligned}$$

$$\begin{aligned} 4182 &:= F(2) + F(F(8) - \sqrt{1 \times 4}) \\ &:= (-T(T(2)) + T(T(8) + 1)) \times T(T(\sqrt{4})). \end{aligned}$$

$$\begin{aligned} 4184 &:= F(4) + F(F(8) - \sqrt{1 \times 4}) \\ &:= -\sqrt{4} + T(T(8 + 1 + 4)). \end{aligned}$$

$$\begin{aligned} 4356 &:= (65 + F(F(3)))^{\sqrt{4}} \\ &:= ((6 + 5) \times T(3))^{\sqrt{4}}. \end{aligned}$$

$$\begin{aligned} 4373 &:= 3^7 \times F(3) - F(\sqrt{4}) \\ &:= T((3 + T(7)) \times 3) + \sqrt{4}. \end{aligned}$$

$$\begin{aligned} 4397 &:= F(7)^{\sqrt{9}} \times F(3) + F(4) \\ &:= T(7) + T(93) - \sqrt{4}. \end{aligned}$$

$$\begin{aligned} 4647 &:= F(F(7)) \times \sqrt{4} + F(F(F(6)) - \sqrt{4}) \\ &:= T(T(7)) \times T(T(\sqrt{4})) + T(T(T(6) - T(4))). \end{aligned}$$

$$\begin{aligned} 4768 &:= F(8) \times (-6 + F(F(7))) + F(\sqrt{4}) \\ &:= T(\sqrt{T(8)}) \times T(T(6)) - T(7) - T(T(4)). \end{aligned}$$

$$\begin{aligned} 4796 &:= -6 + F(\sqrt{9}) \times 7^4 \\ &:= T(6) \times T(\sqrt{9} \times 7) - T(T(4)). \end{aligned}$$

$$\begin{aligned} 4799 &:= -\sqrt{9} + F(\sqrt{9}) \times 7^4 \\ &:= -9 + T(97) + T(T(4)). \end{aligned}$$

$$\begin{aligned} 4847 &:= (F(F(7)) - \sqrt{4}) \times F(8) - 4 \\ &:= T(T(7)^{\sqrt{4}}/8) - 4. \end{aligned}$$

$$\begin{aligned} 4864 &:= \sqrt{4}^{F(6)} \times (F(8) - \sqrt{4}) \\ &:= (T(T(4)) + T(6)) \times \sqrt{8^4}. \end{aligned}$$

$$\begin{aligned} 4873 &:= (3 + T(T(7)) \times T(8))/T(\sqrt{4}) \\ &:= (-F(F(3)) + F(F(7))) \times F(8) + F(\sqrt{4}). \end{aligned}$$

$$\begin{aligned} 4876 &:= F(6) \times F(7 + 8) - 4 \\ &:= (T(T(6) + T(7)) - \sqrt{T(8)}) \times 4. \end{aligned}$$

$$\begin{aligned} 4878 &:= 8 \times F(7 + 8) - \sqrt{4} \\ &:= \sqrt{T(8)} \times (-7 + T(T(8) + 4)). \end{aligned}$$

$$\begin{aligned} 4892 &:= F(F(-2 + 9)) \times F(8) - F(\sqrt{4}) \\ &:= -T(T(T(2))) + (9 + 8)^{T(\sqrt{4})}. \end{aligned}$$

$$\begin{aligned} 4893 &:= -3 + F(9) \times F(8 + 4) \\ &:= T(T(T(3))) \times T(T(\sqrt{9})) + T(8) + T(T(\sqrt{4})). \end{aligned}$$

$$\begin{aligned} 4894 &:= -\sqrt{4} + F(9) \times F(8 + 4) \\ &:= (T(T(4) + T(\sqrt{9}))) \times T(8) - \sqrt{4}. \end{aligned}$$

$$\begin{aligned} 4895 &:= F(5 \times F(\sqrt{9})) \times F(8 + F(4)) \\ &:= (5^{\sqrt{9}} - T(8)) \times T(T(4)). \end{aligned}$$

$$\begin{aligned} 4899 &:= \sqrt{9} + F(9) \times F(8 + 4) \\ &:= T(9) + T(98) + T(\sqrt{4}). \end{aligned}$$

$$\begin{aligned} 4913 &:= (-F(3) + 19)^{F(4)} \\ &:= (T(T(3)) - 1 - \sqrt{9})^{T(\sqrt{4})}. \end{aligned}$$

$$\begin{aligned} 4998 &:= F(8) \times F(9) \times (9 - \sqrt{4}) \\ &:= T(T(8))/T(\sqrt{9}) \times T(9) + T(\sqrt{4}). \end{aligned}$$

$$\begin{aligned} 5428 &:= F(F(8))/2 - 45 \\ &:= (T(\sqrt{T(8)}) + 2) \times (T(T(T(T(\sqrt{4})))) + 5). \end{aligned}$$

$$\begin{aligned} 5825 &:= 5^2 \times F(8 + 5) \\ &:= 5 \times (2 + T(T(\sqrt{T(8)}))) \times 5. \end{aligned}$$

$$\begin{aligned} 6394 &:= 4 \times F(F(9)/F(3)) + 6 \\ &:= T(T(T(4))) + \sqrt{9} + T(T(3)) \times T(T(6)). \end{aligned}$$

$$\begin{aligned} 7448 &:= 8 \times (-F(\sqrt{4}) + 4 \times F(F(7))) \\ &:= (T(T(\sqrt{T(8)}) + \sqrt{4}) - T(4)) \times T(7). \end{aligned}$$

$$\begin{aligned} 7458 &:= 85^{\sqrt{4}} + F(F(7)) \\ &:= (T(T(\sqrt{T(8)})) - 5) \times T(T(T(T(\sqrt{4}))))/7. \end{aligned}$$

$$\begin{aligned} 7889 &:= F(F(\sqrt{9}) \times 8) \times 8 - 7 \\ &:= T(T(T(\sqrt{9}))) \times T(8) - T(\sqrt{T(8)}) - T(T(7)). \end{aligned}$$

$$\begin{aligned} 7949 &:= 9 \times F(4) + F(9) \times F(F(7)) \\ &:= T(\sqrt{9}) \times T(T(T(\sqrt{4}))) + T(9) - 7. \end{aligned}$$

$$\begin{aligned} 7959 &:= F(\sqrt{9})^{F(5+F(\sqrt{9}))} - F(F(7)) \\ &:= T(T(\sqrt{9})) \times (T(T(5)) + T(T(T(\sqrt{9})))) + T(7). \end{aligned}$$

$$\begin{aligned} 7992 &:= 2 + F(9) \times (F(\sqrt{9}) + F(F(7))) \\ &:= T(T(2))^{\sqrt{9}} \times (9 + T(7)). \end{aligned}$$

$$\begin{aligned} 7995 &:= 5 + F(9) \times (F(\sqrt{9}) + F(F(7))) \\ &:= T(T(5)) - T(9) \times (T(T(T(\sqrt{9})))) - T(T(7)). \end{aligned}$$

$$\begin{aligned} 7998 &:= 8 + F(9) \times (F(\sqrt{9}) + F(F(7))) \\ &:= \sqrt{T(8)} \times (-T(9) + T(T(9) + 7)). \end{aligned}$$

$$\begin{aligned} 8364 &:= \sqrt{4} - F(6 \times 3) + F(F(8)) \\ &:= T(T(\sqrt{4})) \times (T(T(6)) \times T(3) + 8). \end{aligned}$$

$$\begin{aligned} 8898 &:= F(F(8)) - F(\sqrt{9})^8 \times 8 \\ &:= (-\sqrt{T(8)} + T(T(9))) \times 8 + T(T(8)). \end{aligned}$$

$$\begin{aligned} 9216 &:= (F(6) \times 12)^{F(\sqrt{9})} \\ &:= T(6)^{1+2} - T(9). \end{aligned}$$

$$\begin{aligned} 9258 &:= F(8)^{5-2} - \sqrt{9} \\ &:= (T(8) - T(5))^{T(2)} - \sqrt{9}. \end{aligned}$$

$$\begin{aligned} 9259 &:= -F(\sqrt{9}) + F(F(5 + F(2)))^{\sqrt{9}} \\ &:= \sqrt{9} - 5 + T(T(T(2)))^{\sqrt{9}}. \end{aligned}$$

$$\begin{aligned} 9261 &:= F(16/2)^{\sqrt{9}} \\ &:= ((1 + 6) \times T(2))^{\sqrt{9}}. \end{aligned}$$

$$\begin{aligned} 9262 &:= F(2) + F(6 + 2)^{\sqrt{9}} \\ &:= -2 + T(6)^{T(2)} + \sqrt{9}. \end{aligned}$$

$$\begin{aligned} 9264 &:= F(4) + F(6 + 2)^{\sqrt{9}} \\ &:= T(\sqrt{4}) + T(6)^{\sqrt{T(2) \times \sqrt{9}}}. \end{aligned}$$

$$\begin{aligned} 9375 &:= 5^{7-F(3)} \times \sqrt{9} \\ &:= 5^{\sqrt{T(7)-3}} \times \sqrt{9}. \end{aligned}$$

$$\begin{aligned} 9477 &:= F(7) \times (F(7) - 4)^{\sqrt{9}} \\ &:= T(7) \times T(T(7)) - T(T(T(4))) + T(\sqrt{9}). \end{aligned}$$

$$\begin{aligned} 9576 &:= F(F(6)) \times (F(F(7)) - 5) \times F(\sqrt{9}) \\ &:= 6 \times T(7 \times (5 + \sqrt{9})). \end{aligned}$$

$$\begin{aligned} 9789 &:= (F(9) + 8) \times F(F(7)) + \sqrt{9} \\ &:= \sqrt{9} \times 8 \times T(T(7)) + T(9). \end{aligned}$$

2.4. With Factorial and Square-Root.

In this subsection, we shall bring **selfie numbers written in terms of Fibonacci sequence and Triangular numbers** at the same time. The numbers are with used of **basic operations, factorial and square-root**. Again, the work is divided in two subsections, one in digit's order and another in reverse order of digits.

2.4.1. Digit's Order.

$$720 := (7 - F(2))! + 0 = T(\sqrt{7+2})! + 0.$$

$$721 := (7 - F(2))! + 1 = T(\sqrt{7+2})! + 1.$$

$$722 := (7 - F(2))! + 2 = T(\sqrt{7+2})! + 2.$$

$$723 := (7 - F(2))! + 3 = T(\sqrt{7+2})! + 3.$$

$$724 := (7 - F(2))! + 4 = T(\sqrt{7+2})! + 4.$$

$$725 := (7 - F(2))! + 5 = T(\sqrt{7+2})! + 5.$$

$$726 := (7 - F(2))! + 6 = T(\sqrt{7+2})! + 6.$$

$$727 := (7 - F(2))! + 7 = T(\sqrt{7+2})! + 7.$$

$$728 := (7 - F(2))! + 8 = T(\sqrt{7+2})! + 8.$$

$$729 := (7 - F(2))! + 9 = T(\sqrt{7+2})! + 9.$$

$$4350 := F(4)! \times (3!! + 5) + 0 = T(T(\sqrt{4})) \times (T(3)! + 5) + 0.$$

$$4351 := F(4)! \times (3!! + 5) + 1 = T(T(\sqrt{4})) \times (T(3)! + 5) + 1.$$

$$4352 := F(4)! \times (3!! + 5) + 2 = T(T(\sqrt{4})) \times (T(3)! + 5) + 2.$$

$$4353 := F(4)! \times (3!! + 5) + 3 = T(T(\sqrt{4})) \times (T(3)! + 5) + 3.$$

$$4354 := F(4)! \times (3!! + 5) + 4 = T(T(\sqrt{4})) \times (T(3)! + 5) + 4.$$

$$4355 := F(4)! \times (3!! + 5) + 5 = T(T(\sqrt{4})) \times (T(3)! + 5) + 5.$$

$$4356 := F(4)! \times (3!! + 5) + 6 = T(T(\sqrt{4})) \times (T(3)! + 5) + 6.$$

$$4357 := F(4)! \times (3!! + 5) + 7 = T(T(\sqrt{4})) \times (T(3)! + 5) + 7.$$

$$4358 := F(4)! \times (3!! + 5) + 8 = T(T(\sqrt{4})) \times (T(3)! + 5) + 8.$$

$$4359 := F(4)! \times (3!! + 5) + 9 = T(T(\sqrt{4})) \times (T(3)! + 5) + 9.$$

$$5490 := F(5 \times F(4)) \times 9 + 0 = (5! + \sqrt{4}) \times T(9) + 0.$$

$$5491 := F(5 \times F(4)) \times 9 + 1 = (5! + \sqrt{4}) \times T(9) + 1.$$

$$5492 := F(5 \times F(4)) \times 9 + 2 = (5! + \sqrt{4}) \times T(9) + 2.$$

$$5493 := F(5 \times F(4)) \times 9 + 3 = (5! + \sqrt{4}) \times T(9) + 3.$$

$$5494 := F(5 \times F(4)) \times 9 + 4 = (5! + \sqrt{4}) \times T(9) + 4.$$

$$5495 := F(5 \times F(4)) \times 9 + 5 = (5! + \sqrt{4}) \times T(9) + 5.$$

$$5496 := F(5 \times F(4)) \times 9 + 6 = (5! + \sqrt{4}) \times T(9) + 6.$$

$$5497 := F(5 \times F(4)) \times 9 + 7 = (5! + \sqrt{4}) \times T(9) + 7.$$

$$5498 := F(5 \times F(4)) \times 9 + 8 = (5! + \sqrt{4}) \times T(9) + 8.$$

$$5499 := F(5 \times F(4)) \times 9 + 9 = (5! + \sqrt{4}) \times T(9) + 9.$$

$$42 := F(F(F(4)!)) \times 2 \\ := \sqrt{4} \times T(T(T(2))).$$

$$48 := F(4)! \times 8 \\ := T(T(\sqrt{4})) \times 8.$$

$$199 := F(F(1 + (\sqrt{9})!)) - F(9) \\ := T(19) + 9.$$

$$239 := -F(2) + 3!!/\sqrt{9} \\ := (-T(2) + T(3)!)/\sqrt{9}.$$

$$247 := (-2 + F(F(F(4)!))) \times F(7) \\ := T(T(2)!)/T(\sqrt{4}) + 7.$$

$$284 := \sqrt{2 \times (8! + F(F(4)!))} \\ := -2 \times 8 + T(4!).$$

$$297 := 2^{(\sqrt{9})!} + F(F(7)) \\ := -T(2) + T((\sqrt{9+7})!).$$

$$364 := (F(3!) + 6!)/\sqrt{4} \\ := -T(T(T(3))) + T(-T(6) + T(T(4))).$$

$$369 := -F(3!) + F(F(6) + (\sqrt{9})!) \\ := -T(36) + T(T(9)).$$

$$374 := (T(3)! + T(7))/\sqrt{4} \\ := -3 + F(7 \times \sqrt{4}).$$

$$398 := F(F(3!)) + F((\sqrt{9})! + 8) \\ := T(T(T(T(3)))/\sqrt{9}) - 8.$$

$$399 := (F(F(3!)) - F(\sqrt{9})) \times F(F((\sqrt{9})!)) \\ := -T(3) + 9 \times T(9).$$

$$438 := -F(4) + F(F(3!)) \times F(8) \\ := T(4! \times 3)/\sqrt{T(8)}.$$

$$439 := -\sqrt{4} + F(F(3!))^{F(\sqrt{9})} \\ := -\sqrt{4} + T(T(3)) \times T(T(\sqrt{9})).$$

$$440 := F(F(F(4)!))^{F(4)} - 0! \\ := T(T(T(\sqrt{4})))^{F(4)} - 0!.$$

$$441 := F(F(F(4)!))^{F(4-1)} \\ := T(T(T(\sqrt{4})))^{F(4 \times 1)}.$$

$$442 := T(T(T(4)) - 4)/T(2) \\ := F(F(F(4)!))^{F(4)} + F(2).$$

$$443 := F(F(F(4)!))^{F(4)} + F(3) \\ := \sqrt{4} + T(T(T(\sqrt{4}))) \times T(T(3)).$$

$$444 := F(F(F(4)!))^{√4} + F(4) \\ := T(T(√4)) \times 4! + T(4!).$$

$$447 := F(4)!! - F(F(F(4)!)) \times F(7) \\ := T(4!) + T(T(T(√4))) \times 7.$$

$$449 := F(F((F(4)!))^{√4} + F((√9)!) \\ := -T(T(4)) + 4! \times T(T(√9)).$$

$$459 := 4 \times 5! - F(F((√9)!) \\ := T(√4 + T(5)) \times √9.$$

$$464 := -\sqrt{4^{F(6)}} + F(4)!! \\ := \sqrt{4} \times T(T(6)) + \sqrt{4}.$$

$$474 := (4 + F(F(7))) \times \sqrt{4} \\ := (-T(4!) + 7!)/T(4).$$

$$480 := 4! \times (F(8) - 0!) \\ := 4 \times (\sqrt{T(8)} - 0!)!$$

$$483 := (\sqrt{4} + F(8)) \times F(F(3!)) \\ := (\sqrt{4} + T(\sqrt{T(8)})) \times T(T(3)).$$

$$487 := (4!/8)!! - F(F(7)) \\ := \sqrt{T(\sqrt{4})^8} + T(T(7)).$$

$$496 := -F(F(4)!) + 9!/6! \\ := T(4 + \sqrt{\sqrt{9^6}}).$$

$$497 := 4! \times F(F((√9)!)) - 7 \\ := T(4 + 9) + T(T(7)).$$

$$589 := F(5!/8) - F(F((√9)!)) \\ := T(5 \times 8) - T(T(T(√9))).$$

$$594 := -5! + (\sqrt{9})!! - F(4)! \\ := -5! + T(\sqrt{9})! - T(T(\sqrt{4})).$$

$$648 := (-6 + 4!) \times T(8) \\ := F(6) \times \sqrt{F(4)^8}.$$

$$664 := -F(6)!/6! + F(4)!! \\ := T(6 \times 6) - \sqrt{4}.$$

$$696 := 6! - \sqrt{9} \times F(6) \\ := 6! - T(9) + T(6).$$

$$699 := -F(F(6)) + (9 - \sqrt{9})! \\ := -T(6) + (9 - \sqrt{9})!.$$

$$714 := (7 - 1)! - F(4)! \\ := (7 - 1)! - T(T(\sqrt{4})).$$

$$734 := F(7) + 3!! + F(\sqrt{4}) \\ := -7 + T(T(3)) + T(T(\sqrt{4}))!$$

$$739 := F(7) + 3!! + (\sqrt{9})! \\ := T(7) + T(3)! - 9.$$

$$746 := F(7) \times \sqrt{4} + 6! \\ := T(7) - \sqrt{4} + 6!.$$

$$840 := F(8) \times 40 \\ := (\sqrt{T(8)})! + (4 + 0!)!$$

$$846 := F(8) \times F(4)! + 6! \\ := T(\sqrt{T(8)}) \times T(T(\sqrt{4})) + 6!.$$

$$945 := F(F((√9)!)) \times 45 \\ := \sqrt{9} \times (T(4!) + T(5)).$$

$$979 := F(9 + 7) - F((√9)!) \\ := T(T(T(\sqrt{9}))) + T(7) + T(\sqrt{9})!$$

$$984 := -\sqrt{9} + F(8 \times \sqrt{4}) \\ := T(\sqrt{9})! - T(8) + T(4!).$$

$$993 := (\sqrt{9})! + F(F(\sqrt{9}) \times F(3!)) \\ := T(T(9)) - T(9) + 3.$$

$$995 := F((√9)!) + F(F(F((√9)!)) - 5) \\ := T(T(9)) - T(9) + 5.$$

$$1089 := (-1 + F(0! + 8))^{F(\sqrt{9})} \\ := (1 + (-0! + \sqrt{T(8)})!) \times 9.$$

$$1149 := F(11) \times F(F(F(4)!)) - (\sqrt{9})!! \\ := 114 + T(T(9)).$$

$$1299 := F(12) \times 9 + \sqrt{9} \\ := 12!/9! - T(T(\sqrt{9})).$$

$$1359 := -1 + F(3!) \times 5 \times F(9) \\ := T(13) \times T(5) - T(\sqrt{9}).$$

$$1379 := -1 + (-3 + F(F(7))) \times (\sqrt{9})! \\ := 1 + T(T(3+7) - \sqrt{9}).$$

$$1394 := F(13) \times (\sqrt{9})! - 4 \\ := -1 + 3 \times T(\sqrt{9} \times T(4)).$$

$$1428 := F(1 + F(F(4)!)) \times 2 \times F(8) \\ := (T(1 + T(4)) + 2) \times T(\sqrt{T(8)}).$$

$$1433 := -1 - F(4)! + 3!! + 3!! \\ := -1 + \sqrt{4} \times T(3)! - T(3).$$

$$1440 := \sqrt{1 \times 4} \times F(4+0)!! \\ := \sqrt{1 \times 4} \times T(4-0)!.$$

$$1443 := F(1 \times 4) + \sqrt{4} \times 3!! \\ := -1 + 4 + \sqrt{4} \times T(3)!.$$

$$1447 := \sqrt{1 \times 4} \times F(4)!! + 7 \\ := T(-1 + T(T(4))) - T(4) - T(7).$$

$$1449 := F(1 \times 4)! / (-\sqrt{4} + F(9)) \\ := -1 + T(T(T(4))) - T(4) \times 9.$$

$$1452 := (1 + F(4)!! + 5) \times 2 \\ := (-1 + T(\sqrt{4})^5) \times T(T(2)).$$

$$1459 := 1 + F(4)^5 \times (\sqrt{9})! \\ := 1 + T(\sqrt{4})^5 \times T(\sqrt{9}).$$

$$1467 := 1 + \sqrt{4} \times (6! + F(7)) \\ := -1 + \sqrt{4} \times 6! + T(7).$$

$$1476 := (F(1 + F(4)!) + F(F(7))) \times 6 \\ := (T(1 + T(T(\sqrt{4})))) - 7) \times 6.$$

$$1477 := 1 + F(4)! \times (F(F(7)) + F(7)) \\ := T(-1 + T(T(T(\sqrt{4})))) \times 7 + 7.$$

$$1489 := 1 + F(4)! / F(8) - (\sqrt{9})!! \\ := 1 \times 4 + T(\sqrt{T(8)} \times 9).$$

$$1529 := F(\sqrt{1+5}) + 2 \times (\sqrt{9})!! \\ := T(T(T(-1+5))) - 2 - 9.$$

$$1547 := (1 + 5! - \sqrt{4}) \times F(7) \\ := T(1 + 54) + 7.$$

$$1584 := \sqrt{1+5!} \times F(8+4) \\ := (1+5)! + T(8) \times 4!.$$

$$1674 := -1 \times 6 + 7! / F(4) \\ := 1 + (-T(6) + 7!) / T(\sqrt{4}).$$

$$1696 := (F(F(1+6)) - F(F((\sqrt{9}!))) \times F(6) \\ := 1 + T(69) - 6!.$$

$$1724 := -1 - 7! + F(-F(2) + F(F(F(4)!))) \\ := \sqrt{1+7!} + T(2 + T(T(4))).$$

$$1749 := (-1 + F(7))^{F(4)} + F(F((\sqrt{9}!)) \\ := \sqrt{1+7!} \times 4! + T(9).$$

$$1779 := 1 + 7 \times (F(F(7)) + F(F((\sqrt{9}!))) \\ := T(1 + T(T(7))) / 7 + 9.$$

$$1793 := 1 + (F(F(7)) - 9) \times F(3!) \\ := 1 + T(T(7)) + T(\sqrt{9}) \times T(T(T(3))).$$

$$1799 := -1 + 7! / F(\sqrt{9}) - (\sqrt{9})!! \\ := (-1 + T((\sqrt{7+9}!))) \times T(\sqrt{9}).$$

$$1833 := (1 + F(F(8) - 3!)) \times 3 \\ := T \left(\sqrt{(-1 + \sqrt{T(8)}) \times T(3)!} \right) + 3.$$

$$1849 := (1 + F(8) \times \sqrt{4})^{F(\sqrt{9})} \\ := 1 + 8 \times T(4! - \sqrt{9}).$$

$$1865 := 1 + 8 \times F(F(6) + 5) \\ := -1 + T(8) + T(\sqrt{6! \times 5}).$$

$$1898 := -1 + 8! / F(F((\sqrt{9}!)) - F(8) \\ := T(-1 + T(8)) \times \sqrt{9} + 8.$$

$$1899 := 1 \times 8! / F(F((\sqrt{9}!)) - F(F((\sqrt{9}!)) \\ := (T(-1 + T(8)) + \sqrt{9}) \times \sqrt{9}.$$

$$1919 := -1 + F((\sqrt{9}!)!) / F(-1+9) \\ := -1 + (9-1)! / T(T(\sqrt{9})).$$

$$1932 := F((1 + \sqrt{9})!) / (F(3) + 2)! \\ := (1 + T(9)) \times T(T(3)) \times 2.$$

$$1939 := 19 + F(3)! / F(F((\sqrt{9}!)) \\ := 1 + T(T(9)) + T(-3 + T(9)).$$

$$1943 := 1 + T(\sqrt{9} + T(T(4))) + T(T(T(3))) \\ := -1 + 9 \times F(4)!^3.$$

$$1945 := 1 + F((\sqrt{9})!) \times F(4)^5 \\ := 1 + 9 \times (T(T(T(T(\sqrt{4})))) - T(5)).$$

$$2054 := 2^{\sqrt{0!+5!}} + F(4)! \\ := 2^{\sqrt{0!+5!}} + T(T(\sqrt{4})).$$

$$2099 := 2 + (F(F(0! + (\sqrt{9})!))) \times 9 \\ := 20 + T(T(T(\sqrt{9}))) \times 9.$$

$$2199 := 2 + F(1 + (\sqrt{9})!)^{\sqrt{9}} \\ := (T(T(2)) - 1)! + T(T(T(\sqrt{9}))) \times 9.$$

$$2354 := (2 - F(F(3!)) \times (-5! + F(F(4)!))) \\ := 2 \times T(T(3)!/T(5)) + \sqrt{4}.$$

$$2393 := F(F(F(2) + 3!)) + \sqrt{9} \times 3! \\ := 2 + T(T(T(3))) + \sqrt{9} \times T(3)!.$$

$$2394 := ((2 + 3)! - (\sqrt{9})!) \times F(F(F(4)!)) \\ := -T(2 \times 3) + T(T(9) + 4!).$$

$$2395 := F(2) - F(F(3!)) \times ((\sqrt{9})! - 5!) \\ := T(2^{T(3)}) + T(T(\sqrt{9})) \times T(5).$$

$$2435 := (-F(F(F(2) + F(4)!)) + 3!) \times 5 \\ := ((T(T(2)))! - \sqrt{4} - T(T(T(3)))) \times 5.$$

$$2438 := -2 + 4 \times F(-3! + F(8)) \\ := (2 + T(T(4 + 3)) \times \sqrt{T(8)}).$$

$$2456 := (-F(2) - F(4) + 5!) \times F(F(6)) \\ := -2^{T(T(\sqrt{4}))} + 5! \times T(6).$$

$$2458 := F(2) - (F(4) - 5!) \times F(8) \\ := -2 + T(\sqrt{4}) \times T(5 \times 8).$$

$$2459 := 2 + F(F(F(4)!)) \times (5! - \sqrt{9}) \\ := 2 - (T(\sqrt{4}) - 5!) \times T(T(\sqrt{9})).$$

$$2493 := -F(2) + F(F(4)!)/\sqrt{9} - F(F(F(3!))) \\ := T(T(2) \times 4!) - T(9) \times 3.$$

$$2494 := -F(F(2 \times 4)) + F((\sqrt{9})!)/F(4) \\ := (T(2) + T(T(4))) \times (T(9) - \sqrt{4}).$$

$$2495 := -F(2) - 4! + F(F((\sqrt{9})!)) \times 5! \\ := T(T(2))! - T(T(4)) + T(T(9) + T(5)).$$

$$2497 := F(2) + 4! \times F((\sqrt{9})!) \times F(7) \\ := T(T(2)) + T(T(4)) + T(\sqrt{9}) \times T(T(7)).$$

$$2499 := (-F(2) + (-4 + 9)!) \times F(F((\sqrt{9})!)) \\ := (-T(T(2)) + T(T(4))) \times (T(9) + T(\sqrt{9})).$$

$$2518 := -2 + 5! \times 1 \times F(8) \\ := -2 + 5! \times T(T(\sqrt{1+8})).$$

$$2539 := (F(2) + 5!) \times F(F(3!)) - F(\sqrt{9}) \\ := -2 + 5! \times T(T(3)) + T(T(\sqrt{9})).$$

$$2543 := 2 + (5! + F(\sqrt{4})) \times F(F(3!)) \\ := T(T(T(2))) \times 5! + \sqrt{4} + T(T(3)).$$

$$2549 := (F(2) + 5!) \times F(F(F(4)!)) + F((\sqrt{9})!) \\ := T(T(T(2)) \times T(5)) - T(T(T(4))) - T(\sqrt{9}).$$

$$2564 := (2 + 5!) \times F(F(6)) + \sqrt{4} \\ := (2 + 5!) \times T(6) + \sqrt{4}.$$

$$2574 := \sqrt{F(2) + 5!} \times (F(F(7)) + F(\sqrt{4})) \\ := T(2) \times (-5! + T(T(7))) \times T(\sqrt{4}).$$

$$2578 := 2 + F(5 + F(7)) - 8 \\ := T(\sqrt{T(T(2))! \times 5}) + T(7) + (\sqrt{T(8)})!.$$

$$2579 := -2 + F(5 + F(7)) - \sqrt{9} \\ := -2 - 5! + T(T(7) + T(9)).$$

$$2596 := (-2 + 5!) \times (F(F(\sqrt{9})) + F(F(6))) \\ := T(T(2 \times 5)) + T(T(9)) + T(6).$$

$$2689 := F(2) - F(6)!/(-F(8) + (\sqrt{9})!) \\ := -2 + (T(T(6)) + T(T(8))) \times \sqrt{9}.$$

$$2694 := F(2 \times F(6)) \times F(\sqrt{9}) + F(4)! \\ := \sqrt{2 \times (T(6) - \sqrt{9} + T(4)!)}.$$

$$2709 := (2^7 + 0!) \times F(F((\sqrt{9})!)) \\ := T(2) \times T(7 \times T(\sqrt{09})).$$

$$2743 := -F(2) + (7 \times \sqrt{4})^3 \\ := T(T(2))! + 7 + T(T(\sqrt{4}) \times T(T(3))).$$

$$\begin{aligned}
2746 &:= 2 + 7^{F(4)} \times F(6) \\
&:= T(T(T(T(2)) + 7)) - \sqrt{4} \times 6!. \\
2759 &:= -2^{F(7)} + 5 + F(F(F((\sqrt{9}!))) \\
&:= T(T(2))! + T(T(7)) \times 5 + 9. \\
2792 &:= 2 \times (F(F(7)) \times (\sqrt{9})! - 2) \\
&:= T(2 + T(7)) \times T(\sqrt{9}) + 2. \\
2793 &:= 2 \times F(F(7)) \times (\sqrt{9})! - 3 \\
&:= (-T(2) + T(7 + 9)) \times T(T(3)). \\
2799 &:= 2 \times F(F(7)) \times (\sqrt{9})! + \sqrt{9} \\
&:= T(2 + T(7)) \times T(\sqrt{9}) + 9. \\
2835 &:= (F(2) + 8)! / (F(3!) + 5!) \\
&:= \sqrt{T(2)^8} \times 35. \\
2859 &:= (\sqrt{2 \times 8})! \times 5! - F(F(\sqrt{9})!) \\
&:= T(2) + \sqrt{T(8)} + T(5! - T(9)). \\
2879 &:= (-2 + 8!/7) / F(\sqrt{9}) \\
&:= T(T(2)) \times (\sqrt{T(8)})! - T(T(7)) - T(T(9)). \\
2884 &:= (F(2) + F(\sqrt{8 + 8})!) \times 4 \\
&:= 2^8 + T(T(8) \times \sqrt{4}). \\
2896 &:= 2 \times (8 + F(\sqrt{9}) \times 6!) \\
&:= 2 \times (8 + T(\sqrt{9})! + 6!). \\
2898 &:= (2 + F(8)) \times (\sqrt{9})! \times F(8) \\
&:= 2 \times T(8 + T(9)) + T(8). \\
2943 &:= (F(2 \times F((\sqrt{9}!))) - F(4)!) \times 3 \\
&:= T(2) + (T(T(9)) - T(T(4))) \times 3. \\
2944 &:= (2 \times F((\sqrt{9})!) + F(4)!) \times 4 \\
&:= T(2) \times (T(T(9)) - T(T(4))) + 4. \\
2949 &:= (F(2 \times F((\sqrt{9}!))) - 4) \times \sqrt{9} \\
&:= (T(2) + T(T(9)) - T(T(4))) \times \sqrt{9}. \\
2959 &:= -2 + (F(F((\sqrt{9}!))) + 5!) \times F(F((\sqrt{9}!))) \\
&:= -2 + (T(T(\sqrt{9})) + 5!) \times T(T(\sqrt{9})). \\
2961 &:= F(2 \times F((\sqrt{9}!))) \times \sqrt{F(6) + 1} \\
&:= T(T(T(2) + 9)) - (6 - 1)!. \\
2977 &:= (-F(2) - \sqrt{9} + F(F(7))) \times F(7) \\
&:= -2 \times T(T(9)) + 7! + 7. \\
3066 &:= 3! \times (-0! + \sqrt{F(6)^6}) \\
&:= -T(T(3) - 0!) + T(T(6 + 6)). \\
3087 &:= F(F(3!)) \times F(08) \times 7 \\
&:= T(T(3)) \times T(\sqrt{T(08)}) \times 7. \\
3155 &:= (3!! - F(\sqrt{1 + 5!})) \times 5 \\
&:= (T(T(T(3)) - 1) \times T(5) + 5). \\
3194 &:= T(3)! - 1 + T(9) \times T(T(4)) \\
&:= F(3) \times F(19 - \sqrt{4}). \\
3328 &:= (F(F(F(3)) + 3!)) \times 2^8 \\
&:= T(T(3))/3 + T(\sqrt{T(2)^8}). \\
3347 &:= F(3)! / (3 \times 4) - F(7) \\
&:= (T(T(3)) - T(3))^{T(\sqrt{4})} - T(7). \\
3355 &:= F(3)! / \sqrt{3!!/5} - 5 \\
&:= (T(T(3) \times T(3)) + 5) \times 5. \\
3369 &:= -3! + (-3! + F(F(6)))^{\sqrt{9}} \\
&:= T(33) \times 6 + \sqrt{9}. \\
3394 &:= F(3! + F(3!)) \times 9 + F(\sqrt{4}) \\
&:= T(3 \times T(T(3))) + T(-\sqrt{9} + T(T(4))). \\
3399 &:= F(3! + F(3!)) \times 9 + (\sqrt{9})! \\
&:= T(3^3) \times 9 - \sqrt{9}. \\
3409 &:= (F(F(F(3!))) - F(4)!! + 0!) / \sqrt{9} \\
&:= T(3^4 + 0!) + T(\sqrt{9}). \\
3443 &:= (3 + 4)! - F(-4 + F(F(3!))) \\
&:= T(3 + T(T(4))) \times \sqrt{4} + T(T(3)). \\
3447 &:= -F(F(F(3!)) - 4) + 4 + 7! \\
&:= -(T(T(T(3))) + T(4!)) \times T(\sqrt{4}) + 7!. \\
3462 &:= 3! + 4! \times F(6 \times 2) \\
&:= T(3 + \sqrt{4}) \times T(T(6)) - T(2). \\
3469 &:= F(3!) - F(4)!! + F(F(F(6)) - F(\sqrt{9})) \\
&:= T(T(T(3))) - \sqrt{4} + T(6!/9).
\end{aligned}$$

$$3485 := (3!! - \sqrt{4} - F(8)) \times 5 \\ := (T(T(3)) + T(4) + T(T(8))) \times 5.$$

$$3538 := (F(3) + 5!) \times (F(3!) + F(8)) \\ := T \left(T \left(T \left(\sqrt{T(T(3)) - 5} \right) \right) \right) + 3 \times T(T(8)).$$

$$3545 := 3!! \times 5 - F(\sqrt{4} \times 5) \\ := T(3)! \times 5 - T(\sqrt{4} \times 5).$$

$$3574 := 3!! \times 5 - F(7) \times \sqrt{4} \\ := T(3)! \times 5 - T(7) + \sqrt{4}.$$

$$3580 := 3!! \times 5 - F(8) + 0! \\ := T(3)! \times 5 - T(\sqrt{T(8)}) + 0!.$$

$$3587 := 3!! \times \sqrt{\sqrt{\sqrt{5^8}} - F(7)} \\ := 3 + (5! + 8) \times T(7).$$

$$3592 := 3!! \times 5 - 9 + F(2) \\ := T(3)! \times 5 - T(\sqrt{9}) - 2.$$

$$3593 := 3!! \times 5 - 9 + F(3) \\ := (T(3)! \times T(5) - T(T(\sqrt{9}))) / 3.$$

$$3595 := (3!! - F(5 - \sqrt{9})) \times 5 \\ := T(3)! \times T(5) / \sqrt{9} - 5.$$

$$3598 := -F(3) + 5! \times (9 + F(8)) \\ := T(3)! \times 5 + T(\sqrt{9}) - 8.$$

$$3644 := (-F(3!) + F(F(F(6)))) / F(4) - \sqrt{4} \\ := T(3)! + T(T(6) + T(T(4))) - \sqrt{4}.$$

$$3684 := 3!! + (6! + F(8)) \times 4 \\ := (-T(3) + T(T(6)) \times 8) \times \sqrt{4}.$$

$$3694 := -F(F(F(3!))) + F(6 + 9) \times 4! \\ := T(3)! \times T(T(6)) / T(9) - \sqrt{4}.$$

$$3696 := (3! + F(6 + 9)) \times 6 \\ := T(3)! \times T(T(6)) / T(\sqrt{9} + 6).$$

$$3699 := (F(3! + F(6)) + F(9)) \times 9 \\ := T(\sqrt{3^6}) + T(9 \times 9).$$

$$3724 := (F(3!) \times F(F(7)) - 2) \times \sqrt{4} \\ := -3 + T(T(7)) + T(T(2)^4).$$

$$3729 := (F(3!) \times F(F(7))) \times 2 + F(F(\sqrt{9})) \\ := T(T(3)) + (T(T(7)) + T(T(2))) \times 9.$$

$$3792 := 3! \times (7! / F((\sqrt{9})!)) + 2 \\ := (3 - T(T(7)) + T(T(9))) \times T(T(2)).$$

$$3795 := (3!! + F(7) \times \sqrt{9}) \times 5 \\ := (3 \times T(7)) \times T(9) + T(5).$$

$$3834 := (-\sqrt{3^6} + 3!!) \times F(4)! \\ := T(3) + T(83 + 4).$$

$$3843 := 3 + 8! \times \sqrt{4} / T(T(3)) \\ := F(3)! / F(8) \times \sqrt{4} + 3.$$

$$3845 := 3!! + (8 - F(4))^5 \\ := (T(3)! - \sqrt{T(8)} + T(T(4))) \times 5.$$

$$3846 := 3! + 8! \times \sqrt{4} / F(F(6)) \\ := T(3) + 8! \times \sqrt{4} / T(6).$$

$$3848 := F(3!) + 8! \times \sqrt{4} / F(8) \\ := (-T(T(T(3))) - 8 + (T(T(\sqrt{4})))!) \times 8.$$

$$3849 := F(3)! / F(8) \times \sqrt{4} + 9 \\ := T(T(3)) + T(T(8 + 4) + 9).$$

$$3857 := (F(3!) + F(8)) \times (5! + F(7)) \\ := -T(T(T(3))) + T(\sqrt{T(8)} \times T(5)) - 7.$$

$$3879 := -F(F(3!)) \times F(8) + 7! - (\sqrt{9})! \\ := T(3) + T(87) + T(9).$$

$$3897 := F(F(3)) + 8 \times ((\sqrt{9})! - F(F(7))) \\ := -3 \times T(8) - T(T(9)) + 7!.$$

$$3924 := (-3! + F(F((\sqrt{9})!)) \times 2) \times 4 \\ := (T(3)! - T(9 + 2)) \times T(T(\sqrt{4})).$$

$$3936 := (-F(3)^{(\sqrt{9})!} + 3!!) \times 6 \\ := T(3 + 93) - 6!.$$

$$3947 := F(F(F(3!)) - F(\sqrt{9})) - F(\sqrt{4}) - F(F(7)) \\ := -3 - T(T(9)) - T(T(4)) + 7!.$$

$$3949 := F((F(3!) \times F(\sqrt{9}))) \times 4 + F(F(\sqrt{9})) \\ := -T(T(T(3))) + T(T(9 + 4)) - T(\sqrt{9}).$$

$$3955 := (-F(F(3)) + F(9)) \times 5! - 5 \\ := -T(T(T(3))) + T(T(\sqrt{9} + 5 + 5)).$$

$$3959 := (-F(F(3)) + F(9)) \times 5! - F(F(\sqrt{9})) \\ := -T(T(3)!/T(9)) + T(T(5) \times T(\sqrt{9})).$$

$$3963 := -3! + (\sqrt{9} \times F(F(6)))^{F(3)} \\ := T(T(3)) \times 9 \times T(6) - T(3).$$

$$3976 := F(3!) \times (9! - 7!)/6! \\ := -T(T(T(3))) + T(T(\sqrt{9})) + T(T(7 + 6)).$$

$$3984 := -F(3!) \times ((\sqrt{9})! - F(8) \times 4!) \\ := -3 - T(9) + 8!/T(4).$$

$$3990 := 3! \times ((\sqrt{9})!! - F(9 + 0!)) \\ := T(T(3)) \times T(9 + 9 + 0!).$$

$$3994 := -3 \times F(9) + F((\sqrt{9})!)^4 \\ := T(3) \times T(T(9) - 9) - \sqrt{4}.$$

$$4093 := -F(4) + (0! + \sqrt{9})^{3!} \\ := 4^{T(\sqrt{09})} - 3.$$

$$4128 := (F(4!) + F((1 + 2)!))/F(8) \\ := T(T(\sqrt{4})) \times (1 + T(T(T(2)))) + T(T(8)).$$

$$4187 := F(4!) + F((\sqrt{1 + 8})! + F(7)) \\ := -T(41) + 8 + 7!.$$

$$4189 := F(F(4)!) + F(1 + F(8) - \sqrt{9}) \\ := T(T(4 + 1 + 8)) + \sqrt{9}.$$

$$4194 := (-F(F((4 - 1)!)) + (\sqrt{9})!!) \times F(4)! \\ := T(T(4)) - 1 + T(T(9)) \times 4.$$

$$4229 := 4! \times 2 + F(-2 + F(F((\sqrt{9})!))) \\ := T(T(T(4) + T(2))) - 2 + T(9).$$

$$4247 := F(F(4)!)/(F(2) + F(F(4)!)) - F(F(7)) \\ := T(T(T(T(\sqrt{4})))) - 2^{T(4)} + 7!.$$

$$4249 := F(F(F((F(4)!))) - 2) + \sqrt{4} \times F(9) \\ := T(\sqrt{4}) \times T(T(T(2))) + T(T(4 + 9)).$$

$$4254 := (F(4)!! - \sqrt{F(2) + 5!}) \times F(4)! \\ := (-4! + T(T(T(2)) \times T(5) + \sqrt{4})).$$

$$4294 := -4! - 2 + (\sqrt{9})! \times F(4)!! \\ := T(T(4)) \times T(T(2) + 9) + 4.$$

$$4295 := F(F(F(F(4)!)) - 2) - (\sqrt{9})! + 5! \\ := T(T(4)) \times T(T(2) + 9) + 5.$$

$$4297 := -4! + F(2) - (\sqrt{9})!! + 7! \\ := T(T(4)) \times T(T(2) + 9) + 7.$$

$$4299 := (F(4)!! - 2) \times (\sqrt{9})! - 9 \\ := T(T(4)) \times T(T(2) + 9) + 9.$$

$$4307 := F(4)! \times 3!! - F(07) \\ := T(T(\sqrt{4})) \times (T(3)! - 0!) - 7.$$

$$4312 := F(4)! \times 3!! - F((1 + 2)!) \\ := -\sqrt{4} + (T(3)! - 1) \times T(T(2)).$$

$$4313 := F(4)! \times 3!! - 1 - 3! \\ := T(T(\sqrt{4})) \times T(3)! - 1 - T(3).$$

$$4315 := F(4)! \times 3!! - 1 \times 5 \\ := T(T(\sqrt{4})) \times T(3)! - 1 \times 5.$$

$$4318 := F(4)! \times 3!! - F(\sqrt{1 + 8}) \\ := -\sqrt{4} - T(3)! + (-1 + 8)!.$$

$$4319 := F(4)! \times 3!! - 1^9 \\ := T(T(\sqrt{4})) \times T(3)! - 1^9.$$

$$4322 := F(4)! \times 3!! + \sqrt{2 + 2} \\ := \sqrt{4} \times T(3)! \times T(2) + 2.$$

$$4325 := F(4)! \times 3!! + \sqrt{25} \\ := \sqrt{4} \times T(3)! \times T(2) + 5.$$

$$4339 := F(\sqrt{4}) + (3 + 3!!) \times (\sqrt{9})! \\ := T(4) + T(3)! \times T(3) + 9.$$

$$4340 := F(F(F(4)!)) + 3!! \times F(4)! - 0! \\ := T(T(T(\sqrt{4}))) + T(3)! \times T(T(\sqrt{4})) - 0!.$$

$$4341 := F(4)! \times 3!! + F(F((4 - 1)!)) \\ := T(T(\sqrt{4})) \times T(3)! + T(T(4 - 1)).$$

$$4342 := F(4)! \times 3!! + 4! - 2 \\ := 4 + (T(3)! + T(\sqrt{4})) \times T(T(2)).$$

$$4349 := F(F(4)!) + F(F(3!)) + F(4)! \times (\sqrt{9})!! \\ := (\sqrt{4} + T(T(T(3))) - 4!) \times T(T(\sqrt{9})).$$

$$4364 := -4 + (F(3!) + 6!) \times F(4)! \\ := T(\sqrt{4})^{T(3)} \times 6 - T(4).$$

$$4367 := F(4)^{3!} \times 6 - 7 \\ := T(\sqrt{4})^{T(3)} \times 6 - 7.$$

$$4376 := F(4)! \times 3!! + 7 \times F(6) \\ := T(-\sqrt{4} + T(T(3))) + T(T(7 + 6)).$$

$$4389 := F(F(F(4)!)) + (3!! + 8) \times (\sqrt{9})! \\ := (4 + T(3)!) \times \sqrt{T(8)} + T(9).$$

$$4392 := F(4)! \times (3!! + (\sqrt{9})! \times 2) \\ := T(4!) - 3 + T(T(9) \times 2).$$

$$4393 := F(F(4)!) + F(F(F(3!))) - \sqrt{9^{F(3!)}} \\ := T(T(4)) + (T(3)! + \sqrt{9}) \times T(3).$$

$$4397 := F(4)!^3 + F((\sqrt{9})! + F(7)) \\ := -T(T(\sqrt{4})!) + T(T(T(3)))/\sqrt{9} + 7!.$$

$$4398 := F(4)! \times (3!! + F(9) - F(8)) \\ := (4 + T(3)! + 9) \times \sqrt{T(8)}.$$

$$4414 := (F(4)!/F(F(F(4)!)) - 1) \times \sqrt{4} \\ := (-4 + T(T(T(4) + 1))) \times \sqrt{4}.$$

$$4437 := 4^4 + F(3! + F(7)) \\ := -T(4!) \times \sqrt{4} - 3 + 7!.$$

$$4438 := F(4)! \times (F(4)!! + F(F(3!))) - 8 \\ := T(T(T(\sqrt{4}) + T(4))) + T(T(T(3))) + T(\sqrt{T(8)}).$$

$$4439 := F(F(F(F(4)!))) - (F(4) + 3!!) \times 9 \\ := -T(T(T(4))) - T(T(T(T(\sqrt{4})))) + T(3) \times T(T(9)).$$

$$4444 := (F(F(F(4)!)) + F(4)!!) \times F(4)! - \sqrt{4} \\ := 4 \times (T(T(\sqrt{4})))! + 4! + T(T(T(4))).$$

$$4447 := -F(F(F(F(4)!))) + F(F(F(4)!)) \times (F(4)!! + F(7)) \\ := \sqrt{4} - T(4! + T(4)) + 7!.$$

$$4449 := (F(F(F(4)!)) + F(4)!!) \times F(4)! + \sqrt{9} \\ := T(\sqrt{4})^4 \times T(T(4)) - T(\sqrt{9}).$$

$$4452 := F(F(F(4)!)) \times (-F(F(F(4)!)) + F(F(5 + 2))) \\ := (-T(\sqrt{4}) + T(4!)) \times T(5) - T(2).$$

$$4472 := -F(F(4)!) + (F(F(4)!))!/(7 + 2) \\ := (T(T(T(\sqrt{4}))) \times T(4)) + T(T(7))) \times 2.$$

$$4477 := -4! \times 4! + F(7) + 7! \\ := -\sqrt{4} - T(T(T(T(T(\sqrt{4})))))/7 + 7!.$$

$$4479 := -F(\sqrt{4}) + F(F(4)!) \times 7!/9 \\ := T(4!) \times T(-\sqrt{4} + 7) - T(T(\sqrt{9})).$$

$$4482 := (F(F(4)!))!/(F(\sqrt{4}) + 8) + 2 \\ := (T(\sqrt{4})^4 + T(T(8))) \times T(T(2)).$$

$$4484 := F(F(4)!)/(F(\sqrt{4}) + 8) + 4 \\ := (-T(T(4)) + T(48)) \times 4.$$

$$4485 := F(F(4)!)/(F(\sqrt{4}) + 8) + 5 \\ := T(\sqrt{4}) \times T(T(4)) + T(8) \times 5!.$$

$$4487 := (-4! - T(T(4)) + (\sqrt{T(8)!})!) \times 7 \\ := F(F(4)!)/(F(\sqrt{4}) + 8) + 7.$$

$$4488 := F(4)! \times F(4)!! + 8 \times F(8) \\ := 4 \times (\sqrt{4} + 8!/T(8)).$$

$$4489 := (F(4)^4 + 8!)/9 \\ := T(\sqrt{4})^{\sqrt{4}} + 8!/9.$$

$$4493 := (F(4) - F(4)!!) \times 9 + F(F(F(3!))) \\ := (-T(T(T(\sqrt{4}))) + T(4!) \times T(9))/3.$$

$$4494 := F(F(F(4)!)) \times (4! \times 9 - \sqrt{4}) \\ := (T(T(T(4)))/\sqrt{4} - T(T(\sqrt{9}))) \times T(T(\sqrt{4})).$$

$$4499 := (-T(\sqrt{4}) + T(4!) \times T(9))/\sqrt{9} \\ := F(F(F(4)!)) + (F(F(4)!))!/9 - F(\sqrt{9}).$$

$$4559 := -F(F(F(F(4)!))) - 5! + 5^{(\sqrt{9})!} \\ := T(4!) \times T(5) + 59.$$

$$4579 := (4! - 5) \times (F(F(7)) + F((\sqrt{9})!)) \\ := T(4!) \times T(5) + 79.$$

$$4608 := 4!^{F(\sqrt{F(6)+0!})} \times 8 \\ := \sqrt{4^{6+0!}} \times T(8).$$

$$4637 := (-\sqrt{4^{F(6)}} + F(F(3!)) \times F(F(7))) \\ := T(\sqrt{4}) + (T(6)/3!) - T(T(7)).$$

$$4644 := ((F(4)!! + F(F(6))^{\sqrt{4}}) \times 4 \\ := -\sqrt{4} \times 6 + T(4! \times 4).$$

$$4660 := (-F(\sqrt{4}) + F(F(6))) \times F(F(F(6) - 0!)) \\ := (\sqrt{4} + T(T(6))) \times (T(6) - 0!).$$

$$4679 := (-\sqrt{4} + 6! \times F(7))/F(\sqrt{9}) \\ := T(4)!/6! - T(T(7)) + T(9).$$

$$4696 := (-4!/(F(F(6)))! + (F((\sqrt{9})!))!)/6 \\ := T(T(T(4)) - 6 + T(9)) + T(T(6)).$$

$$4698 := F(4)! \times (6! + (\sqrt{9} \times F(8))) \\ := (T(\sqrt{4}) + T(-6 + T(9))) \times \sqrt{T(8)}.$$

$$4744 := (F(4)!! + F(F(7)) \times \sqrt{4}) \times 4 \\ := T(T(4)) + 7! - T(4! + \sqrt{4}).$$

$$4759 := (F(4)!! + F(F(7))) \times 5 - (\sqrt{9})! \\ := T(4 \times T(7) - T(5)) + T(\sqrt{9}).$$

$$4765 := (F(\sqrt{4}) \times F(F(7)) + 6!) \times 5 \\ := T(4!) + T(T(7) + T(6 + 5)).$$

$$4766 := -F(\sqrt{4}) + (F(F(7)) - 6) \times F(F(6)) \\ := T(4!) + T(T(7)) \times T(T(6))/T(6).$$

$$4767 := (-F(4) \times F(7) + 6!) \times 7 \\ := -T(\sqrt{4}) \times T(7 + 6) + 7!.$$

$$4769 := F(\sqrt{4}) + 7! - F(6) \times F(9) \\ := -T(T(4)) + 7! - 6^{\sqrt{9}}.$$

$$4786 := -F(F(F(4)!)) + 7! - F(F(8) - F(6)) \\ := -\sqrt{4} + 7 \times (-T(8) + 6!).$$

$$4787 := F(\sqrt{4}) - F(F(7)) - F(8) + 7! \\ := -T(\sqrt{4} \times 7 + 8) + 7!.$$

$$4789 := F(F(F(4)!)) + 7! - 8 \times F(9) \\ := T(4) \times T(T(7)) + (\sqrt{T(8)})! + 9.$$

$$4790 := F(4! - 7) \times \sqrt{9} - 0! \\ := T(\sqrt{4}) + 7! - T(T(T(\sqrt{9}) + 0!)).$$

$$4791 := F(4) \times F(7 + 9 + 1) \\ := 4 + 7! - T(T(T(\sqrt{9}) + 1)).$$

$$4792 := F(4! - 7) \times \sqrt{9} + F(2) \\ := 4 + T(7) \times T(9 \times 2).$$

$$4793 := F(4! - 7) \times \sqrt{9} + F(3) \\ := -T(4) + 7! - T(\sqrt{9}) - T(T(T(3))).$$

$$4799 := F(4! - 7) \times \sqrt{9} + F((\sqrt{9})!) \\ := -T(4) + 7! - T(T(9 - \sqrt{9})).$$

$$4807 := F(\sqrt{4}) \times (8 - 0)! - F(F(7)) \\ := -T(\sqrt{4}) - T(T(\sqrt{T(8)})) + 0! + 7!.$$

$$4809 := (-4 + F(F(8 - 0!))) \times F(F((\sqrt{9})!)) \\ := (-\sqrt{4} + T(T(\sqrt{T(8)}))) \times T(T(\sqrt{09})).$$

$$4845 := -F(F(4)!)/F(8) + F(4 \times 5) \\ := (T(\sqrt{4}) + T(T(8)) + T(4!)) \times 5.$$

$$4851 := F(F(F(4)!)) \times (F(8) \times \sqrt{5! + 1}) \\ := T(T(T(4)) - 8 + 51).$$

$$4867 := F(F(4)!) \times F(F(8) - 6) - F(7) \\ := T(T(\sqrt{4}))! + T(86) + T(T(7)).$$

$$4869 := -4! + F(8) \times F(F(F(6))/\sqrt{9}) \\ := -T(T(4) + 8) + (T(6)/\sqrt{9})!.$$

$$4883 := F(4) + 8 \times F(F(8) - 3!) \\ := 4 \times 8 + T(\sqrt{T(8)}) \times T(T(T(3))).$$

$$4885 := -F(F(4)!) + F(8) \times F(8 + 5) \\ := T(T(\sqrt{4}))! - T(\sqrt{T(8)}) + T(T(8 + 5)).$$

$$4890 := (-F(4) + F(8) \times F(F((\sqrt{9})! + 0!))) \\ := (T(T(\sqrt{4}))! - T(T(\sqrt{T(8)}))) \times (9 + 0!).$$

$$4891 := -\sqrt{4} + F(8) \times F(F((\sqrt{9})! + 1)) \\ := T(4) \times ((\sqrt{T(8)})! - T(T(T(\sqrt{9})))) + 1.$$

$$4893 := F(4 + 8) \times F(9) - 3 \\ := \sqrt{T(T(4)) - \sqrt{T(8)}} \times (T(\sqrt{9})! - T(T(3))).$$

$$4895 := F(\sqrt{4} + 8) \times F((\sqrt{9})! + 5) \\ := T(T(4)) \times (T(T(8))/9 + T(5)).$$

$$4897 := F(\sqrt{4}) - F(F(8) - 9) + 7! \\ := 4 \times T(8) + T(97).$$

$$4898 := (-F(4!) + 8!) \times F(F(\sqrt{9})) + F(F(8)) \\ := T(T(4)) - 8 + T(98).$$

$$4914 := -F(F(F(4)!)) \times (\sqrt{9})! + (1 + F(4))! \\ := T(4 + 9) \times (-1 + T(T(4))).$$

$$4917 := 4! + F(9 - 1) \times F(F(7)) \\ := -T(\sqrt{4}) - (T(\sqrt{9}) - 1)! + 7!.$$

$$4925 := (F(4^{F(\sqrt{9})}) - 2) \times 5 \\ := (T(T(T(4))) - (T(\sqrt{9}))!) \times T(T(2)) + 5.$$

$$4934 := F(F(F(4)!)) + (F(9)/F(3))^{F(4)} \\ := -T(T(\sqrt{4})) + 9 \times T(3)! - T(T(T(4))).$$

$$4938 := (-4! \times F(9) + F(3)!)/8 \\ := (T(T(T(4))) + \sqrt{9} - T(3)!) \times \sqrt{T(8)}.$$

$$4946 := -(F(F(4)!)/(\sqrt{9})!) + F(4)! + F(F(F(6))) \\ := -4 + T((9 - 4)! - T(6)).$$

$$4948 := -\sqrt{4} + (-\sqrt{9})! + F(F(4)!)/8 \\ := -\sqrt{4} + T(T(9 + 4) + 8).$$

$$4949 := (F(F(4)! - (\sqrt{9})!)/F(F(4)) - F(F(\sqrt{9})) \\ := -T(4 + 9) + (\sqrt{49})!.$$

$$4950 := ((F(F(4)! - (\sqrt{9})!)/F(5 + 0!)) \\ := T(49 + 50).$$

$$4951 := (\sqrt{49})! - F(\sqrt{5! + 1}) \\ := T(4 + 95) + 1.$$

$$4955 := (4 + F(F(F((\sqrt{9})!)) - 5)) \times 5 \\ := T(4 + 95) + 5.$$

$$4956 := \sqrt{4} \times (-F(\sqrt{9}) + 5!) \times F(F(6)) \\ := T(4 + 95) + 6.$$

$$4959 := -\sqrt{F(4)^{F(\sqrt{9})}} + (5 + F(\sqrt{9}))! \\ := T(4 + 95) + 9.$$

$$4964 := (\sqrt{49})! - T(6) - T(T(4)) \\ := F(4)^{F(\sqrt{9})!} - F(F(F(6)) - 4).$$

$$4965 := (F(4)! + F(F(\sqrt{9}) \times F(6))) \times 5 \\ := (T(4!)/\sqrt{9} + T(T(6))) \times T(5).$$

$$4972 := (-\sqrt{4} \times F(9) + 7!) \times F(2) \\ := (T(4^{\sqrt{9}}) + T(T(7))) \times 2.$$

$$4978 := -F(4)! \times 9 + 7! - 8 \\ := -T(T(\sqrt{4})) \times 9 + 7! - 8.$$

$$4982 := -4! - F(9) + (8 - F(2))! \\ := -T(T(4)) - \sqrt{9} + (T(\sqrt{T(8)})/T(2))!.$$

$$4984 := (F(4)! - F((\sqrt{9})!)) \times F(8)/F(4) \\ := T(T(\sqrt{4})) \times T(\sqrt{9})! + T(T(8)) - \sqrt{4}.$$

$$4986 := -F(4)! \times 9 + 8!/F(6) \\ := (T(T(4)) \times \sqrt{9} + T(T(8))) \times 6.$$

$$4987 := \sqrt{4} - F(9) - F(8) + 7! \\ := T(T(4)) - \sqrt{9} \times T(8) + 7!.$$

$$4992 := -4! \times F(\sqrt{9}) + (9 - 2)! \\ := 4^{\sqrt{9}} \times T(9 + T(2)).$$

$$4994 := F(F(F(F(4)!)) - F((\sqrt{9})!)) \times ((\sqrt{9})! + 4!) \\ := T(4! + 9) \times 9 - T(T(4)).$$

$$4997 := -F(4) \times \sqrt{9} - F(9) + 7! \\ := -4 + T(\sqrt{9}) - T(9) + 7!.$$

$$5019 := -F(F(5 + 0!)) + (1 + (\sqrt{9})!) \\ := -T(5 + 0!) + (1 + T(\sqrt{9}))!.$$

$$5127 := F(\sqrt{5! + 1}) - 2 + 7! \\ := T(\sqrt{5! + 1}) + T(T(T(2))) + 7!.$$

$$5139 := 5! + (1 + 3!)! - F(F((\sqrt{9})!)) \\ := 5! + (1 + T(3))! - T(T(\sqrt{9})).$$

$$5147 := 5! - F(1 + F(4)) + 7! \\ := T(T(5) - 1) + \sqrt{4} + 7!.$$

$$5157 := -F(5 - 1) + 5! + 7! \\ := -T(\sqrt{5 - 1}) + 5! + 7!.$$

$$5159 := 5! - 1 + (5 + F(\sqrt{9}))! \\ := -T(5) - 1 + 5 \times T(T(9)).$$

$$\begin{aligned} 5187 &:= ((5 + 1)! + F(8)) \times 7 \\ &:= T(\sqrt{5-1} + T(8)) \times 7. \end{aligned}$$

$$\begin{aligned} 5267 &:= F(F(5 + 2)) - 6 + 7! \\ &:= -\sqrt{-5 + T(T(T(2)))} + T(T(6)) + 7!. \end{aligned}$$

$$\begin{aligned} 5274 &:= (5 + 2)! + F(F(7)) + F(\sqrt{4}) \\ &:= (T(5) - 2) \times T(T(7)) - 4. \end{aligned}$$

$$\begin{aligned} 5279 &:= (5 + 2)! + F(F(7)) + (\sqrt{9})! \\ &:= 5 + T(T(T(T(2)))) + 7! + \sqrt{9}. \end{aligned}$$

$$\begin{aligned} 5346 &:= (-5 \times 3!! + F(4!))/F(6) \\ &:= (T(T(5) + 3) + T(T(\sqrt{4}))!) \times 6. \end{aligned}$$

$$\begin{aligned} 5379 &:= 5! \times 3 + 7! - F(F((\sqrt{9})!)) \\ &:= 5! \times 3 + 7! - T(T(\sqrt{9})). \end{aligned}$$

$$\begin{aligned} 5394 &:= (-5! + 3!!) \times 9 - F(4!) \\ &:= T(5 \times 3) \times T(9) - T(T(\sqrt{4})). \end{aligned}$$

$$\begin{aligned} 5445 &:= (5! + F(\sqrt{4})) \times 45 \\ &:= (T(5) \times 4! + T(\sqrt{4})) \times T(5). \end{aligned}$$

$$\begin{aligned} 5449 &:= -(5 - F(\sqrt{4}))! + F(F(F(F(4)!)))/F(\sqrt{9}) \\ &:= (-5! + T(T(T(4)))) \times 4 - T(T(T(\sqrt{9}))). \end{aligned}$$

$$\begin{aligned} 5469 &:= (F(F(5 + F(4))) - F(6))/F(\sqrt{9}) \\ &:= -5! + 4! \times T(T(6)) + T(9). \end{aligned}$$

$$\begin{aligned} 5474 &:= -5! + 4! \times F(F(7)) + \sqrt{4} \\ &:= 5! \times T(T(4)) - T(T(7)) - (T(T(\sqrt{4})))!. \end{aligned}$$

$$\begin{aligned} 5484 &:= 5 + F(4)! + F(F(8))/\sqrt{4} \\ &:= (5! + 4!) \times T(8) + T(4!). \end{aligned}$$

$$\begin{aligned} 5489 &:= -5 + F(F(F(4)!)) + F(F(8))/F(\sqrt{9}) \\ &:= 5 \times T(T(T(4))) - T(T(8 + \sqrt{9})). \end{aligned}$$

$$\begin{aligned} 5592 &:= 5!/5 \times F(F(9 - 2)) \\ &:= 5!/T(5) \times (T(\sqrt{9})! - T(T(T(2))))). \end{aligned}$$

$$\begin{aligned} 5649 &:= (-5! + F(6) \times F(4!)) + 9 \\ &:= T(5! - T(6)) - T(T(T(\sqrt{4}))) + T(\sqrt{9})!. \end{aligned}$$

$$\begin{aligned} 5734 &:= -5 + 7! - F(F((3)!)) + F(4)! \\ &:= -5 + 7! - T(T(3)) + T(T(\sqrt{4}))!. \end{aligned}$$

$$\begin{aligned} 5739 &:= -F(-5 + F(7)) + 3!! \times F((\sqrt{9})!) \\ &:= -T(5) + 7! + T(3)! - T(\sqrt{9}). \end{aligned}$$

$$\begin{aligned} 5744 &:= (5 - 7 + F(4)!) \times F(F(4)!) \\ &:= 5 + 7! + T(T(\sqrt{4}))! - T(T(T(\sqrt{4}))). \end{aligned}$$

$$\begin{aligned} 5749 &:= -5 + 7! + F(4)! - (\sqrt{9})! \\ &:= T(57) + 4^{T(\sqrt{9})}. \end{aligned}$$

$$\begin{aligned} 5786 &:= 5 + 7! + F(8) + 6! \\ &:= 5 + 7! + T(\sqrt{T(8)}) + 6!. \end{aligned}$$

$$\begin{aligned} 5789 &:= -5! - 7! + F(F(8)) + \sqrt{9} \\ &:= -T(5) - T(T(7)) + \sqrt{T(8)} \times T(T(9)). \end{aligned}$$

$$\begin{aligned} 5794 &:= -5! - 7! + F((\sqrt{9})!) + F(F(F(F(4)!))) \\ &:= T(-5 + T(7)) \times T(T(\sqrt{9})) - \sqrt{4}. \end{aligned}$$

$$\begin{aligned} 5795 &:= (5 \times F(F(7)) - (\sqrt{9})!) \times 5 \\ &:= (-5 + T(7) \times T(T(9)))/5. \end{aligned}$$

$$\begin{aligned} 5796 &:= F((-5 + F(7)) \times \sqrt{9})/F(6) \\ &:= (5! - T(7)) \times \sqrt{9} \times T(6). \end{aligned}$$

$$\begin{aligned} 5799 &:= 5 + 7! + (\sqrt{9})!! + F(9) \\ &:= -5 - T(T(7)) + T(\sqrt{9}) \times T(T(9)). \end{aligned}$$

$$\begin{aligned} 5874 &:= 5! + 8!/7 - F(4)! \\ &:= -5! + T(T(8)) \times (7 + \sqrt{4}). \end{aligned}$$

$$\begin{aligned} 5886 &:= (5! \times 8 + F(8)) \times 6 \\ &:= 5! + \sqrt{T(8)} + 8 \times 6!. \end{aligned}$$

$$\begin{aligned} 5897 &:= F(F(F((-5 + 8)!))) - 9 - 7! \\ &:= T(58) + T(T(T(\sqrt{9}) + 7)). \end{aligned}$$

$$\begin{aligned} 5922 &:= F(-5 + F(F((\sqrt{9})!))) \times (F(2 + 2))! \\ &:= (-5! + T(T(9 + T(2)))) \times 2. \end{aligned}$$

$$\begin{aligned} 5928 &:= -5! + F((\sqrt{9} + F(2))!) - 8! \\ &:= (5 + \sqrt{9}) \times T(2 + T(8)). \end{aligned}$$

$$\begin{aligned} 5929 &:= ((5! + F(9))/2)^{F(\sqrt{9})} \\ &:= (T(T(T(5) - 9)))^2/9. \end{aligned}$$

$$\begin{aligned} 5934 &:= -5! + (\sqrt{9})! - F(3)! + F(4)! \\ &:= 5 + (T(T(T(\sqrt{9}))) / 3)^{\sqrt{4}}. \end{aligned}$$

$$\begin{aligned} 5944 &:= 5! + (F((\sqrt{9})!) + F(4)!) \times F(F(4)!) \\ &:= T(5) - T(T(T(\sqrt{9}))) + 4 \times T(T(T(4))). \end{aligned}$$

$$\begin{aligned} 5946 &:= -5! + (T(T(9)) - 4!) \times 6 \\ &:= -\sqrt{5^{F((\sqrt{9})!)}} \times F(F(4)!) + F(F(F(6))). \end{aligned}$$

$$\begin{aligned} 5949 &:= F(5! / (\sqrt{9})!) - 4! \times F(9) \\ &:= (-5 + T(9 \times 4)) \times 9. \end{aligned}$$

$$\begin{aligned} 5950 &:= (5! - F(F(\sqrt{9}))) \times 50 \\ &:= (5 + T(9)) \times (5! - 0!). \end{aligned}$$

$$\begin{aligned} 5968 &:= (5 + (\sqrt{9})! + F(F(6))) \times 8 \\ &:= (5 + T(T(\sqrt{9})) + 6!) \times 8. \end{aligned}$$

$$\begin{aligned} 5979 &:= 5! \times F((\sqrt{9})!) + 7! - F(F((\sqrt{9})!)) \\ &:= T(5) \times (-T(\sqrt{9}) + T(T(7))) - T(T(\sqrt{9})). \end{aligned}$$

$$\begin{aligned} 5994 &:= (5! - 9) \times 9 \times F(4)! \\ &:= (T(5) - T(\sqrt{9})) \times T(9 \times 4). \end{aligned}$$

$$\begin{aligned} 5997 &:= 5! \times F((\sqrt{9})!) - \sqrt{9} + 7! \\ &:= -T(T(5) - \sqrt{9}) + T(T(9)) + 7!. \end{aligned}$$

$$\begin{aligned} 6045 &:= -6! + F(04 \times 5) \\ &:= (T(T(6 + 0!)) - T(\sqrt{4})) \times T(5). \end{aligned}$$

$$\begin{aligned} 6084 &:= (6 \times F(-0! + 8))^{\sqrt{4}} \\ &:= T(T(6) - 0! - 8)^{\sqrt{4}}. \end{aligned}$$

$$\begin{aligned} 6144 &:= F\left(\sqrt{F(6) + 1}\right)^{F(F(4)!) \times 4!} \\ &:= 6 \times 1 \times \sqrt{4^{T(4)}}. \end{aligned}$$

$$\begin{aligned} 6192 &:= 6! - 1 + F(F(F((\sqrt{9})!))) / 2 \\ &:= 6 \times (T(T(1 \times 9)) - T(2)). \end{aligned}$$

$$\begin{aligned} 6194 &:= 6! + 1 + F(F(F((\sqrt{9})!))) / \sqrt{4} \\ &:= 6 \times (-1 + T(T(9))) - T(4). \end{aligned}$$

$$\begin{aligned} 6279 &:= (F(F(6)) + 2) \times F(7) \times F(F((\sqrt{9})!)) \\ &:= T(T(6)) + T(2) \times T(7 \times 9). \end{aligned}$$

$$\begin{aligned} 6462 &:= (6 + F(4)) \times (6! - 2) \\ &:= (6! - \sqrt{4}) \times (6 + T(2)). \end{aligned}$$

$$\begin{aligned} 6464 &:= (6! - \sqrt{4}) \times F(6) + F(4)!! \\ &:= T(T(6) / T(\sqrt{4})) \times T(T(6)) - 4. \end{aligned}$$

$$\begin{aligned} 6467 &:= (6 + F(4)) \times 6! - F(7) \\ &:= (-6 / T(T(\sqrt{4}))) + T(T(6)) \times T(7). \end{aligned}$$

$$\begin{aligned} 6474 &:= 6! \times \sqrt{4} + 7! - F(4)! \\ &:= T(6 \times \sqrt{4}) \times (T(7) + T(T(4))). \end{aligned}$$

$$\begin{aligned} 6479 &:= (6! - F(\sqrt{4})) + 7! + (\sqrt{9})!! \\ &:= (T(T(6)) + \sqrt{4}) \times T(7) - T(9). \end{aligned}$$

$$\begin{aligned} 6499 &:= (6! + \sqrt{4}) \times 9 + F(F(\sqrt{9})) \\ &:= T(6) - \sqrt{4} + T(\sqrt{9})! \times 9. \end{aligned}$$

$$\begin{aligned} 6549 &:= -\sqrt{6! / 5} + F(4)^{F((\sqrt{9})!)} \\ &:= -6 + 5! \times T(T(4)) - T(9). \end{aligned}$$

$$\begin{aligned} 6578 &:= -F(6)! / 5! \times F(7) + F(F(8)) \\ &:= (T(6) + 5) \times T(T(7) - \sqrt{T(8)}). \end{aligned}$$

$$\begin{aligned} 6579 &:= -F(F(6)) + 5! \times F(F(7) - \sqrt{9}) \\ &:= -T(6) + 5! \times T(7 + \sqrt{9}). \end{aligned}$$

$$\begin{aligned} 6624 &:= F((\sqrt{F(6) + F(6)!}) / (F(2) + F(4)!)) \\ &:= T(T(6) + \sqrt{6 - 2}) \times 4!. \end{aligned}$$

$$\begin{aligned} 6639 &:= F(6)! / 6 - \sqrt{3^{F((\sqrt{9})!)}} \\ &:= T(66) \times 3 + T(\sqrt{9}). \end{aligned}$$

$$\begin{aligned} 6645 &:= -6! / 6 + F(4 \times 5) \\ &:= (T(6) \times T(6) + \sqrt{4}) \times T(5). \end{aligned}$$

$$\begin{aligned} 6669 &:= (6! + F(F(6))) \times (6 + \sqrt{9}) \\ &:= (6! + T(6)) \times (6 + \sqrt{9}). \end{aligned}$$

$$\begin{aligned} 6684 &:= (-\sqrt{6^6} + 8!) / F(4)! \\ &:= (T(T(6)) + 6! + (\sqrt{T(8)!})) \times 4. \end{aligned}$$

$$\begin{aligned} 6699 &:= (F(6)! - F(F(6)) \times (\sqrt{9})!) / (\sqrt{9})! \\ &:= T(T(6)) \times (-6! / T(9) + T(9)). \end{aligned}$$

$$\begin{aligned} 6714 &:= F(6)! / (7 - 1) - F(4)! \\ &:= -6 + (7 + 1)! / T(T(\sqrt{4})). \end{aligned}$$

$$\begin{aligned} 6739 &:= F(F(F(6))) / F(7) \times F(3)! + \sqrt{9} \\ &:= T(T(6)) + T(7) + T(3)! \times 9. \end{aligned}$$

$$\begin{aligned} 6794 &:= -T(T(6) + 7) + T(\sqrt{9})! \times (T(4)) \\ &:= F(6 + 7) + 9^4. \end{aligned}$$

$$6885 := F(-F(6)/8 + F(8)) + 5! \\ := (T(-6 + T(8)) - \sqrt{T(8)}) \times T(5).$$

$$6891 := 6 \times F(8) + F(F(F((\sqrt{9})!)) - 1) \\ := T(T(6)) + T(T(8)) \times (9 + 1).$$

$$6924 := 6 \times (F(9)^2 - \sqrt{4}) \\ := 6! + T(T(9)) \times T(T(2)) - T(T(\sqrt{4})).$$

$$6938 := F(F(6) + (\sqrt{9})!) + 3^8 \\ := 6 \times T(T(9)) + T(3)! + 8.$$

$$6960 := F(6)!/F(F((\sqrt{9})!)) + (F(6) - 0!)! \\ := (T(6) + 9) \times (T(T(6)) + 0!).$$

$$6966 := (F(F(6))^{F(\sqrt{9})} + 6!) \times 6 \\ := (6 + T(T(9))) \times 6 + 6!.$$

$$6969 := 6 \times F(9) + F(F(F(6)) - F(F(\sqrt{9}))) \\ := -T(T(6)) + (T(\sqrt{9}))! + 6! \times 9.$$

$$6974 := F(F(F(6)) - F(F(\sqrt{9}))) + F(F(7)) - 4! \\ := (T(T(T(6) - 9)) + T(T(7))) \times \sqrt{4}.$$

$$6984 := 6! \times 9 + F(8) \times 4 \\ := 6! \times T(\sqrt{9}) + T(T(8)) \times 4.$$

$$6990 := (-F(F(6)) + (\sqrt{9})!) \times (9 + 0!) \\ := (-T(6) + (T(\sqrt{9}))!) \times (9 + 0!).$$

$$7249 := 7! + F(2) + F(4!)/F(F((\sqrt{9})!)) \\ := 7! - 2 + T(T(\sqrt{4} + 9)).$$

$$7384 := F(7) \times \sqrt{(F(3!) + 8!) \times F(F(4)!)} \\ := (T(T(7)) + T(3)! + (\sqrt{T(8)})!) \times 4.$$

$$7444 := (F(F(7)) \times F(F(4)!) - F(4)) \times 4 \\ := (T(T(7)) \times T(T(4)) + \sqrt{4})/T(\sqrt{4}).$$

$$7447 := 7^4 + F(4)! + 7! \\ := 7^4 + T(T(\sqrt{4})) + 7!.$$

$$7449 := F(7) \times (4! \times 4! - \sqrt{9}) \\ := (T(7 \times T(4)) - \sqrt{4}) \times \sqrt{9}.$$

$$7464 := F(F(7)) \times F(4) + F(F(F(6)) - F(\sqrt{4})) \\ := (-T(T(7)) - T(\sqrt{4}) + 6!) \times 4!.$$

$$7475 := 7! + (F(4)! - F(F(7))) \times 5 \\ := (T(T(7)) - T(\sqrt{4})) \times (T(7) - 5).$$

$$7479 := 7 + \sqrt{4^{F(7)}} - (\sqrt{9})! \\ := 7! + T(\sqrt{4}) + T(T(7)) \times T(\sqrt{9}).$$

$$7488 := F(7) \times \sqrt{4!^{\sqrt{8+8}}} \\ := (T(7) - \sqrt{4}) \times 8 \times T(8).$$

$$7491 := (F(F(7)) - F(4)!) \times (F(9) - 1) \\ := T(T(7)) \times T(T(T(\sqrt{4}))) - T(T(9 \times 1)).$$

$$7494 := F(7) \times 4!^{F(\sqrt{9})} + F(4)! \\ := T(T(7)) \times T(T(T(\sqrt{4}))) - T(T(9)) + T(\sqrt{4}).$$

$$7497 := F(7) \times F(F(F(4)!)) \times 9 + 7! \\ := \sqrt{7^4} \times T(T(9) - T(7)).$$

$$7539 := (-7 + 5! \times F(F(3!))) \times \sqrt{9} \\ := (-7 + 5! \times T(T(3))) \times \sqrt{9}.$$

$$7599 := (F(7) + 5! \times F(F((\sqrt{9})!))) \times \sqrt{9} \\ := T(-T(7) + 5!) + T(9 \times 9).$$

$$7629 := 7 \times F(F(6) \times 2) + (\sqrt{9})! \\ := (-T(T(7)) + 6!) \times T(T(T(2))) + T(T(9)).$$

$$7679 := 7 \times (6! + F(7 \times F(\sqrt{9}))) \\ := -T(T(7)) + (-T(6) + T(T(7))) \times T(T(\sqrt{9})).$$

$$7686 := 7! + F(F(6)) \times F(8) \times 6 \\ := 7! + T(6) \times \sqrt{T(8)} \times T(6).$$

$$7744 := (F(7) \times 7 - F(4))^{\sqrt{4}} \\ := 7! + (T(7) + 4!)^{\sqrt{4}}.$$

$$7749 := F(F(-7 + F(7))) + F(4)!/(\sqrt{9})! \\ := T(-7 - 7 + T(T(4))) \times 9.$$

$$7784 := 7! + (-7 + F(8))^{F(4)} \\ := T(7) \times (-T(7) + \sqrt{T(8)} + T(4!)).$$

$$7854 := (F(F(7)) + F(8) + 5!) \times F(F(F(4)!)) \\ := (T(7) + \sqrt{T(8)}) \times T(T(\sqrt{5+4})).$$

$$7932 := F(7) \times F(9 + 3!) + 2 \\ := (T(T(7)) + T(\sqrt{9})) \times T(T(3)) - T(T(2))!.$$

$$\begin{aligned} 7944 &:= F(F(7)) \times F(9) + 4! - \sqrt{4} \\ &:= (T(7) + \sqrt{9} + T(4!)) \times 4!. \end{aligned}$$

$$\begin{aligned} 7945 &:= F(7)^{F(\sqrt{9})} + F(4)!^5 \\ &:= (T(7) + T(T(\sqrt{9})) + T(T(T(4)))) \times 5. \end{aligned}$$

$$\begin{aligned} 7947 &:= 7! + (\sqrt{9})!! + F(4)^7 \\ &:= 7! + T(\sqrt{9})! + T(\sqrt{4})^7. \end{aligned}$$

$$\begin{aligned} 7949 &:= F(F(7)) \times F(9) + 4! + \sqrt{9} \\ &:= -7 + T(\sqrt{9}) \times T(T(T(\sqrt{4}))) + T(9). \end{aligned}$$

$$\begin{aligned} 7974 &:= F(F(7)) \times F(9) + F(7) \times 4 \\ &:= T(T(7)) \times 9 + 7! - T(T(\sqrt{4}))!. \end{aligned}$$

$$\begin{aligned} 7986 &:= F(F(7)) \times F(9) + 8 \times F(6) \\ &:= 7 \times T(T(9)) + T(\sqrt{T(8)}) + 6!. \end{aligned}$$

$$\begin{aligned} 7992 &:= (F(F(7)) + F(\sqrt{9})) \times F(9) + 2 \\ &:= (7! - 9 - T(T(9))) \times 2. \end{aligned}$$

$$\begin{aligned} 8145 &:= 81 + F(F(4)!)/5 \\ &:= (\sqrt{T(8)})! + T(-1 + T(T(4))) \times 5. \end{aligned}$$

$$\begin{aligned} 8247 &:= F(8 + 2) + \sqrt{4^{F(7)}} \\ &:= -T(\sqrt{T(8)}) + T(T(2)) \times T(4! + T(7)). \end{aligned}$$

$$\begin{aligned} 8297 &:= 8!/(2 + \sqrt{9}) + F(F(7)) \\ &:= 8 \times (T(2) + T(T(9))) - 7. \end{aligned}$$

$$\begin{aligned} 8379 &:= F(8)^{F(3)} \times (F(7) + (\sqrt{9})!) \\ &:= (T(T(8) + T(3)) + T(7)) \times 9. \end{aligned}$$

$$\begin{aligned} 8469 &:= F(8) + F(4!)/6 + (\sqrt{9})!! \\ &:= T(8) \times (T(\sqrt{4}) + T(T(6))) + T(9). \end{aligned}$$

$$\begin{aligned} 8594 &:= F(F(8)) + (-5! + F((\sqrt{9})!)) \times F(F(F(4)!)) \\ &:= -T(T(8)) + T(5) \times T(\sqrt{9})! - T(T(T(4))). \end{aligned}$$

$$\begin{aligned} 8684 &:= F(F(8)) - F(6 + 8) \times F(4)! \\ &:= (-8 + T(6)) \times (T(T(8)) + \sqrt{4}). \end{aligned}$$

$$\begin{aligned} 8793 &:= F(F(8)) + 7 - \sqrt{9} \times 3!! \\ &:= T(8) + T(T(7)) \times T(T(\sqrt{9})) + T(T(T(3))). \end{aligned}$$

$$\begin{aligned} 8799 &:= (-8 + T(T(7)) + T(T(\sqrt{9}))) \times T(T(\sqrt{9})) \\ &:= F(F(8)) + F(7) - \sqrt{9} \times (\sqrt{9})!. \end{aligned}$$

$$\begin{aligned} 8932 &:= (F(F(8)) - 9 \times 3!!) \times 2 \\ &:= (T(T(\sqrt{T(8)})) \times T(T(T(\sqrt{9}))) + T(T(T(3))))/T(T(2)). \end{aligned}$$

$$\begin{aligned} 8944 &:= (8!/9 - F(F(4)!)) \times \sqrt{4} \\ &:= 8 \times (T(T(9) + \sqrt{4}) - T(4)). \end{aligned}$$

$$\begin{aligned} 8947 &:= 8!/9 \times \sqrt{4} - F(7) \\ &:= -(\sqrt{T(8)})! + T(T(\sqrt{9}))^{T(\sqrt{4})} + T(T(7)). \end{aligned}$$

$$\begin{aligned} 9048 &:= (\sqrt{9} + 0!)! \times F(F(4)! + 8) \\ &:= (T(T(T(\sqrt{9}))) + 0!) \times (T(\sqrt{4}) + T(8)). \end{aligned}$$

$$\begin{aligned} 9249 &:= F(9)^2 \times F(F(4)! + F(F(\sqrt{9}))) \\ &:= 9 + T(T(2)) \times T(T(4) + T(9)). \end{aligned}$$

$$\begin{aligned} 9253 &:= -F((\sqrt{9})!) + F(F(F(2) + 5))^3 \\ &:= T(T(\sqrt{9}))^{T(2)} - 5 - 3. \end{aligned}$$

$$\begin{aligned} 9260 &:= F(F((\sqrt{9})!))^{F(-2+6)} - 0! \\ &:= T(T(\sqrt{9}))^{T(2)} - (6 \times 0)!. \end{aligned}$$

$$\begin{aligned} 9262 &:= F(F((\sqrt{9})!))^{F(-2+6)} + F(2) \\ &:= \sqrt{9} - 2 + T(6)^{T(2)}. \end{aligned}$$

$$\begin{aligned} 9282 &:= F(F((\sqrt{9})!)) \times (F(2) + F(8)^2) \\ &:= T(T(\sqrt{9})) + T(-2 + 8)^{T(2)}. \end{aligned}$$

$$\begin{aligned} 9284 &:= F(F((\sqrt{9})!)) + 2 + F(8)^{F(4)} \\ &:= T(T(\sqrt{9}))^{T(2)} + T(\sqrt{T(8)}) + \sqrt{4}. \end{aligned}$$

$$\begin{aligned} 9285 &:= F(F(F((\sqrt{9})!)) - F(2)) + F(8) \times 5! \\ &:= (-T(9) - 2 + T(T(8))) \times T(5). \end{aligned}$$

$$\begin{aligned} 9294 &:= F(9) - F(2) + F(F((\sqrt{9})!))^{F(4)} \\ &:= (T(T(9)) - 2) \times 9 - T(\sqrt{4}). \end{aligned}$$

$$\begin{aligned} 9324 &:= F(F((\sqrt{9})!)) \times (F(F(3!))^2 + F(4)) \\ &:= (T(T(9)) \times 3 + T(2)) \times T(\sqrt{4}). \end{aligned}$$

$$\begin{aligned} 9339 &:= F(9 - F(3)) \times 3!! - F(F((\sqrt{9})!)) \\ &:= T(9 + 3) + T(T(3))^{\sqrt{9}}. \end{aligned}$$

$$\begin{aligned} 9345 &:= F(F((\sqrt{9})!)) \times (F(F(3!) + F(4))) \times 5 \\ &:= T(T(\sqrt{9})) \times (T(3)! - T(T(4))) \times 5. \end{aligned}$$

$$\begin{aligned} 9347 &:= (-\sqrt{9} + 3!! + \sqrt{4}) \times F(7) \\ &:= 9 + (T(T(3)) + \sqrt{4}) \times T(T(7)). \end{aligned}$$

$$9352 := -F((\sqrt{9})!) + 3!! \times (F(5 + 2)) \\ := T(T(\sqrt{9}))^3 + T(T(5) - 2).$$

$$9354 := -(\sqrt{9})! + 3!! \times F(5 + \sqrt{4}) \\ := -T(\sqrt{9}) + T(3)! \times (T(5) - \sqrt{4}).$$

$$9357 := -\sqrt{9} + 3! \times 5! \times F(7) \\ := -\sqrt{9} + T(3)! \times (-T(5) + T(7)).$$

$$9369 := F(9 - F(3)) \times 6! + 9 \\ := (T(T(9)) + T(3)) \times (6 + \sqrt{9}).$$

$$9372 := (F(F(\sqrt{9})) + 3!!) \times F(7) - F(2) \\ := T(\sqrt{9})! + T(T(3)) \times (T(T(7)) + T(T(2))).$$

$$9378 := (F(\sqrt{9}) + 3!!) \times F(7) - 8 \\ := T(\sqrt{9})! + (T(3) + 7) \times T(T(8)).$$

$$9381 := F(F((\sqrt{9})!)) + 3!! \times F(8 - 1) \\ := T(T(\sqrt{9}))^3 + (\sqrt{T(8)} - 1)!.$$

$$9384 := (\sqrt{9})!! \times (-F(3!) + F(8)) + 4! \\ := T(T(9) + 3) \times 8 - 4!.$$

$$9387 := F(F((\sqrt{9})!)) \times (3!! - F(8) \times F(7)) \\ := (-T(9) + T(3)! + T(T(8))) \times 7.$$

$$9397 := -F(\sqrt{9}) + (3!! + \sqrt{9}) \times F(7) \\ := (T(T(9)) + T(3)) \times 9 + T(7).$$

$$9425 := F((\sqrt{9})! + F(F(4)!)) \times 25 \\ := (-T(\sqrt{9}) + T(T(T(4)) + T(T(2)))) \times 5.$$

$$9438 := ((\sqrt{9})! + F(4)!) \times (-F(3!) + F(8)) \\ := (9 + 4) \times (T(3)! + \sqrt{T(8)}).$$

$$9447 := 9 + (F(4)! + F(4)!) \times F(7) \\ := \sqrt{9} - T(4!) + 4! \times T(T(7)).$$

$$9450 := F(F((\sqrt{9})!)) \times 450 \\ := T(9) \times T(4 \times 5 + 0).$$

$$9474 := 9^{F(4)} \times F(7) - F(4) \\ := (-\sqrt{9} - T(4!) + 7!) \times \sqrt{4}.$$

$$9494 := F(F((\sqrt{9})!))^{F(4)} + F(9 + 4) \\ := T(T(T(\sqrt{9}))) + (\sqrt{4} + T(T(\sqrt{9}))^{T(\sqrt{4})}).$$

$$9495 := (F((\sqrt{9})!)/F(F(4)!)) - F(F((\sqrt{9})!)) \times 5 \\ := T(9) \times (4! \times 9 - 5).$$

$$9497 := F(F((\sqrt{9})!))^{F(4)} + \sqrt{9} + F(F(7)) \\ := -9 + \sqrt{4} \times T(97).$$

$$9498 := -((\sqrt{9})!! + 4) \times F(\sqrt{9}) + F(F(8)) \\ := T(T(\sqrt{9}))^{T(\sqrt{4})} + T(\sqrt{9}) + T(T(\sqrt{T(8)})).$$

$$9534 := -F(F(F((\sqrt{9})!))) + 5 \times F(3!)^4 \\ := -T(T(T(\sqrt{9}))) + T(5 \times T(3)) \times T(T(T(\sqrt{4}))).$$

$$9582 := (\sqrt{9})! \times F(5!/8 + 2) \\ := (T(95) + T(T(\sqrt{T(8)}))) \times 2.$$

$$9594 := (\sqrt{9})!! \times 5!/9 - F(4)! \\ := (\sqrt{9} + 5!) \times T(\sqrt{9} \times 4).$$

$$9599 := (\sqrt{9})!! \times 5!/9 - F(F(\sqrt{9})) \\ := (T(\sqrt{9})! \times 5! - 9)/9.$$

$$9645 := (9 + F(6)!/F(F(4)!)) \times 5 \\ := (T(\sqrt{9})! - T(T(6))/T(\sqrt{4})) \times T(5).$$

$$9647 := (F((\sqrt{9})!) - F(F(F(6))))/\sqrt{4} - 7! \\ := T(9) \times T(T(6)) - T(T(\sqrt{4})!) - T(7).$$

$$9667 := F(9) + (6! + F(F(6))) \times F(7) \\ := T(T(\sqrt{9})) \times T(6) \times T(6) + T(T(7)).$$

$$9699 := (-F((\sqrt{9})!) + F(F(F(6))) \times 9)/(\sqrt{9})! \\ := -\sqrt{9} + T(T(6)) \times (T(9) - \sqrt{9}).$$

$$9723 := (-\sqrt{9} + F(F(7)) \times 2) \times F(F(3!)) \\ := T(T(\sqrt{9})) + 7 \times T(T(2)) \times T(T(T(3))).$$

$$9724 := F(9) \times F(7) \times (-2 + 4!) \\ := (T(\sqrt{9})! + T(7)) \times (T(2) + T(4)).$$

$$9740 := ((\sqrt{9})!! - F(F(7))) \times (F(F(F(4)!)) - 0!) \\ := -\sqrt{9} + T(T(7)) \times 4! - 0!.$$

$$9744 := (-\sqrt{9})!! + F(F(7)) \times 4! \times \sqrt{4} \\ := T(\sqrt{9}) \times T(7 \times 4) \times 4.$$

$$9753 := F(F(F((\sqrt{9})!))) - F(F(7)) - 5! \times F(3!) \\ := 9 + T(T(7)) \times (\sqrt{-5 + T(T(3))})!.$$

$$\begin{aligned} 9772 &:= (F(F((\sqrt{9}!))) \times F(F(7)) - 7) \times 2 \\ &:= T(97) + 7! - T(T(T(2))). \end{aligned}$$

$$\begin{aligned} 9774 &:= (\sqrt{9}!) \times (7 \times F(F(7)) - \sqrt{4}) \\ &:= (-T(T(9) - T(7)) + 7!) \times \sqrt{4}. \end{aligned}$$

$$\begin{aligned} 9786 &:= F(\sqrt{9}) \times 7 \times (-F(8) + 6!) \\ &:= (T(T(\sqrt{9})) - 7) \times ((\sqrt{T(8)!}) - T(6)). \end{aligned}$$

$$\begin{aligned} 9793 &:= -9 + F(7) \times (F(9) + 3!) \\ &:= T(97) + (T(T(\sqrt{9}))/3)!. \end{aligned}$$

$$\begin{aligned} 9849 &:= -(\sqrt{9}!) + F(F(8)) - F(F(4)! + F((\sqrt{9}!))) \\ &:= 9!/T(8) - T(4! - \sqrt{9}). \end{aligned}$$

$$\begin{aligned} 9864 &:= 9!/T(8) - 6^{T(\sqrt{4})} \\ &:= (F(9) + F(8 + 6)) \times 4!. \end{aligned}$$

$$\begin{aligned} 9954 &:= F(F((\sqrt{9}!))) \times (-\sqrt{9}!) + 5! \times 4 \\ &:= T(T(\sqrt{9})) \times (9 + T(5!/4)). \end{aligned}$$

$$\begin{aligned} 9974 &:= F(F((\sqrt{9}!)))^{\sqrt{9}} - 7 + F(4)!! \\ &:= T(T(\sqrt{9}))^{\sqrt{9}} - 7 + (T(T(\sqrt{4})))!. \end{aligned}$$

$$\begin{aligned} 9981 &:= F(F((\sqrt{9}!)))^{\sqrt{9}} + (\sqrt{8+1})!! \\ &:= 9 \times T(T(9)) + T(T(8 \times 1)). \end{aligned}$$

$$\begin{aligned} 9983 &:= (\sqrt{9}!) + F(\sqrt{9}) + F(8)^3 \\ &:= (-T(T(\sqrt{9})) + T(9) \times T(T(8)))/3. \end{aligned}$$

$$\begin{aligned} 9984 &:= (\sqrt{9}!) + \sqrt{9} + F(8)^{F(4)} \\ &:= 9 \times T(T(9)) + T(T(8)) + T(\sqrt{4}). \end{aligned}$$

$$\begin{aligned} 9985 &:= F(F(F((\sqrt{9}!))) - F(F(\sqrt{9})) - 8 \times 5! \\ &:= T(9)/\sqrt{9} \times T(T(8)) - 5. \end{aligned}$$

$$\begin{aligned} 9989 &:= F((\sqrt{9}!)) + (\sqrt{9}!) + F(8)^{\sqrt{9}} \\ &:= (-\sqrt{9} + T(9) \times T(T(8)))/\sqrt{9}. \end{aligned}$$

$$\begin{aligned} 9993 &:= F(9) - F(F((\sqrt{9}!)) + F((\sqrt{9}!)) + F(F(F(3!))) \\ &:= \sqrt{9} + T(9) \times (-9 + T(T(T(3)))). \end{aligned}$$

$$\begin{aligned} 9994 &:= -(\sqrt{9}!) + (F(F(\sqrt{9})) + 9)^4 \\ &:= (T(T(T(\sqrt{9}))) - 9) \times T(9) + 4. \end{aligned}$$

$$\begin{aligned} 9995 &:= F(F(F((\sqrt{9}!))) + 9 - F((\sqrt{9}!)) \times 5! \\ &:= (T(T(T(\sqrt{9}))) - 9) \times T(9) + 5. \end{aligned}$$

$$\begin{aligned} 9996 &:= ((\sqrt{9}!) + F((\sqrt{9}!))) \times F(9) \times F(F(6)) \\ &:= (T(\sqrt{9}) + T(9) \times (-9 + T(T(6))))!. \end{aligned}$$

$$\begin{aligned} 9998 &:= -9! + (F(9) \times (F(F((\sqrt{9}!)) + F(F(8)))) \\ &:= (T(T(T(\sqrt{9}))) - 9) \times T(9) + 8. \end{aligned}$$

2.4.2. Reverse Order of Digits.

$$3840 := 0 + \sqrt{4} \times 8!/F(F(3!)) = 0 + \sqrt{4} \times 8!/T(T(3)).$$

$$3841 := 1 + \sqrt{4} \times 8!/F(F(3!)) = 1 + \sqrt{4} \times 8!/T(T(3)).$$

$$3842 := 2 + \sqrt{4} \times 8!/F(F(3!)) = 2 + \sqrt{4} \times 8!/T(T(3)).$$

$$3843 := 3 + \sqrt{4} \times 8!/F(F(3!)) = 3 + \sqrt{4} \times 8!/T(T(3)).$$

$$3844 := 4 + \sqrt{4} \times 8!/F(F(3!)) = 4 + \sqrt{4} \times 8!/T(T(3)).$$

$$3845 := 5 + \sqrt{4} \times 8!/F(F(3!)) = 5 + \sqrt{4} \times 8!/T(T(3)).$$

$$3846 := 6 + \sqrt{4} \times 8!/F(F(3!)) = 6 + \sqrt{4} \times 8!/T(T(3)).$$

$$3847 := 7 + \sqrt{4} \times 8!/F(F(3!)) = 7 + \sqrt{4} \times 8!/T(T(3)).$$

$$3848 := 8 + \sqrt{4} \times 8!/F(F(3!)) = 8 + \sqrt{4} \times 8!/T(T(3)).$$

$$3849 := 9 + \sqrt{4} \times 8!/F(F(3!)) = 9 + \sqrt{4} \times 8!/T(T(3)).$$

$$4480 := 0 + 8!/(F(4) \times F(4)) = 0 + 8!/(T(\sqrt{4}) \times T(\sqrt{4})).$$

$$4481 := 1 + 8!/(F(4) \times F(4)) = 1 + 8!/(T(\sqrt{4}) \times T(\sqrt{4})).$$

$$4482 := 2 + 8!/(F(4) \times F(4)) = 2 + 8!/(T(\sqrt{4}) \times T(\sqrt{4})).$$

$$4483 := 3 + 8!/(F(4) \times F(4)) = 3 + 8!/(T(\sqrt{4}) \times T(\sqrt{4})).$$

$$4484 := 4 + 8!/(F(4) \times F(4)) = 4 + 8!/(T(\sqrt{4}) \times T(\sqrt{4})).$$

$$4485 := 5 + 8!/(F(4) \times F(4)) = 5 + 8!/(T(\sqrt{4}) \times T(\sqrt{4})).$$

$$4486 := 6 + 8!/(F(4) \times F(4)) = 6 + 8!/(T(\sqrt{4}) \times T(\sqrt{4})).$$

$$4487 := 7 + 8!/(F(4) \times F(4)) = 7 + 8!/(T(\sqrt{4}) \times T(\sqrt{4})).$$

$$4488 := 8 + 8!/(F(4) \times F(4)) = 8 + 8!/(T(\sqrt{4}) \times T(\sqrt{4})).$$

$$4489 := 9 + 8!/(F(4) \times F(4)) = 9 + 8!/(T(\sqrt{4}) \times T(\sqrt{4})).$$

$$\begin{aligned}
5490 &:= 0 + 9 \times F(F(4) \times 5) = 0 + T(9) \times (\sqrt{4} + 5!). \\
5491 &:= 1 + 9 \times F(F(4) \times 5) = 1 + T(9) \times (\sqrt{4} + 5!). \\
5492 &:= 2 + 9 \times F(F(4) \times 5) = 2 + T(9) \times (\sqrt{4} + 5!). \\
5493 &:= 3 + 9 \times F(F(4) \times 5) = 3 + T(9) \times (\sqrt{4} + 5!). \\
5494 &:= 4 + 9 \times F(F(4) \times 5) = 4 + T(9) \times (\sqrt{4} + 5!). \\
42 &:= 2 \times F(F(F(4)!)) \\
&:= T(T(T(2))) \times \sqrt{4}. \\
48 &:= 8 \times F(4)! \\
&:= 8 \times T(T(\sqrt{4})). \\
284 &:= \sqrt{(F(F(4)!) + 8!) \times 2} \\
&:= T(4!) - 8 \times 2. \\
239 &:= (\sqrt{9})! + F(F(3! + F(2))) \\
&:= (-\sqrt{9} + T(3)!)/T(2). \\
297 &:= F(F(7)) + F((\sqrt{9})!)^2 \\
&:= T((\sqrt{7} + 9)!) - T(2). \\
339 &:= (\sqrt{9})!/F(3) - F(F(3!)) \\
&:= T(T(9))/3 - T(3). \\
398 &:= F(8) + F((\sqrt{9})! + F(3!)) \\
&:= -8 + T(T(T(T(\sqrt{9}))/3)). \\
399 &:= F(F((\sqrt{9})!)) \times (-\sqrt{9} + F(F(3!))) \\
&:= 9 \times T(9) - T(3). \\
439 &:= -F(\sqrt{9}) + F(F(3!))^{\sqrt{4}} \\
&:= T(T(\sqrt{9})) \times T(T(3)) - \sqrt{4}. \\
441 &:= F(F(F(1 \times 4)!))^{\sqrt{4}} \\
&:= (T(T(-1 + 4)))^{\sqrt{4}}. \\
442 &:= F(2) + F(F(F(4)!))^{\sqrt{4}} \\
&:= (T(T(T(T(2)))) - T(4)) \times \sqrt{4}. \\
443 &:= F(F(3!))^{\sqrt{4}} + \sqrt{4} \\
&:= T(T(3))^{\sqrt{4}} + \sqrt{4}. \\
444 &:= F(F((F(4)!))^{\sqrt{4}} + F(4) \\
&:= T(T(\sqrt{4})) \times 4! + T(4!). \\
447 &:= -F(7) \times F(F(F(4)!)) + F(4)!! \\
&:= 7 \times T(T(T(\sqrt{4}))) + T(4!). \\
5495 &:= 5 + 9 \times F(F(4) \times 5) = 5 + T(9) \times (\sqrt{4} + 5!). \\
5496 &:= 6 + 9 \times F(F(4) \times 5) = 6 + T(9) \times (\sqrt{4} + 5!). \\
5497 &:= 7 + 9 \times F(F(4) \times 5) = 7 + T(9) \times (\sqrt{4} + 5!). \\
5498 &:= 8 + 9 \times F(F(4) \times 5) = 8 + T(9) \times (\sqrt{4} + 5!). \\
5499 &:= 9 + 9 \times F(F(4) \times 5) = 9 + T(9) \times (\sqrt{4} + 5!). \\
449 &:= F(F((\sqrt{9})!))^{\sqrt{4}} + F(F(4)!) \\
&:= T(T(\sqrt{9})) \times 4! - T(T(4)). \\
459 &:= -F(F((\sqrt{9})!)) + 5! \times 4 \\
&:= \sqrt{9} \times T(T(5) + \sqrt{4}). \\
464 &:= -\sqrt{4^{F(6)}} + F(4)!! \\
&:= \sqrt{4} \times T(T(6)) + \sqrt{4}. \\
474 &:= (4 + F(F(7))) \times \sqrt{4} \\
&:= (-T(4!) + 7!)/T(4). \\
483 &:= F(F(3!)) \times (F(8) + \sqrt{4}) \\
&:= -T(T(3)) + T(\sqrt{T(8)}) \times 4!. \\
496 &:= -F(6) + 9!/F(4)!! \\
&:= T(T(6))/\sqrt{9} + 4!. \\
594 &:= F(4)!! - (\sqrt{9})! - 5! \\
&:= -T(T(\sqrt{4})) + T(\sqrt{9})! - 5!. \\
648 &:= 8 \times \sqrt{F(4)^{F(6)}} \\
&:= T(8) \times (4! - 6). \\
664 &:= F(4)!! - F(6)!/6! \\
&:= -\sqrt{4} + T(6 \times 6). \\
696 &:= 6! - \sqrt{9} \times F(6) \\
&:= 6! - T(9) + T(6). \\
699 &:= (9 - \sqrt{9})! - F(F(6)) \\
&:= (9 - \sqrt{9})! - T(6). \\
699 &:= (9 - \sqrt{9})! - F(F(6)) \\
&:= (9 - \sqrt{9})! - T(6). \\
714 &:= -F(4)! + (-1 + 7)! \\
&:= -T(T(\sqrt{4})) + (-1 + 7)!. \\
734 &:= F(\sqrt{4}) + 3!! + F(7) \\
&:= T(T(T(\sqrt{4}))) + T(3)! - 7.
\end{aligned}$$

$$\begin{aligned} 739 &:= (\sqrt{9})! + 3!! + F(7) \\ &:= -9 + T(3)! + T(7). \end{aligned}$$

$$\begin{aligned} 746 &:= 6! + \sqrt{4} \times F(7) \\ &:= 6! - \sqrt{4} + T(7). \end{aligned}$$

$$\begin{aligned} 945 &:= 5 \times F(F(F(4)!)) \times 9 \\ &:= (T(5) + T(4!)) \times \sqrt{9}. \end{aligned}$$

$$\begin{aligned} 979 &:= F(9 + 7) - F((\sqrt{9})!) \\ &:= T(T(T(\sqrt{9}))) + T(7) + T(\sqrt{9})!. \end{aligned}$$

$$\begin{aligned} 984 &:= F(4! - 8) - \sqrt{9} \\ &:= T(4!) - T(8) + T(\sqrt{9})!. \end{aligned}$$

$$\begin{aligned} 993 &:= F(F(3!) \times F(\sqrt{9})) + (\sqrt{9})! \\ &:= ((3 + T(T(9))) - T(9)). \end{aligned}$$

$$\begin{aligned} 995 &:= F(-5 + F(F((\sqrt{9})!))) + F((\sqrt{9})!) \\ &:= 5 + T(T(9)) - T(9). \end{aligned}$$

$$\begin{aligned} 0148 &:= F(8) \times (F(4)! + 1) + 0! \\ &:= -\sqrt{T(8)} + T(T(T(4)))/10. \end{aligned}$$

$$\begin{aligned} 0188 &:= F(8) \times (8 + 1) - 0! \\ &:= T(\sqrt{T(8)}) \times (8 + 1) - 0!. \end{aligned}$$

$$\begin{aligned} 0193 &:= F(3!) \times (\sqrt{9} + 1)! + 0! \\ &:= 3 + T(9 + 10). \end{aligned}$$

$$\begin{aligned} 0196 &:= (F(6) + (\sqrt{9})!)^{1+0!} \\ &:= 6 + T(9 + 10). \end{aligned}$$

$$\begin{aligned} 0245 &:= (5! + F(4)) \times 2 - 0! \\ &:= T(5)^{\sqrt{4}} + 20. \end{aligned}$$

$$\begin{aligned} 0279 &:= F(F((\sqrt{9})!)) \times F(7) + (2 + 0)! \\ &:= 9 \times (T(7) + T(2 + 0)). \end{aligned}$$

$$\begin{aligned} 0283 &:= \sqrt{(F(3!) + 8!) \times 2} - 0! \\ &:= -T(3) + T(8) + T(T(T(T(2)))) + 0!. \end{aligned}$$

$$\begin{aligned} 0284 &:= 4 \times \sqrt{(8 - F(2))! + 0!} \\ &:= 4 \times (T(8) \times 2 - 0!). \end{aligned}$$

$$\begin{aligned} 0297 &:= F(F(7)) + F(\sqrt{9})^{(2+0)!} \\ &:= -T(7) + T(T(9) - 20). \end{aligned}$$

$$\begin{aligned} 0394 &:= F(4)!!/F(\sqrt{9}) + F(F(3!) + 0!) \\ &:= T(4!) + 93 + 0!. \end{aligned}$$

$$\begin{aligned} 0396 &:= 6 \times \sqrt{9} \times (F(F(3!)) + 0!) \\ &:= (T(6) + T(9)) \times T(3 + 0). \end{aligned}$$

$$\begin{aligned} 0419 &:= (F(F((\sqrt{9})!)) - 1) \times F(F(F(4)!)) - 0! \\ &:= T(\sqrt{9})! - 1 - T((4 + 0)!). \end{aligned}$$

$$\begin{aligned} 0426 &:= 6 \times \sqrt{F(2) + (F(4)! + 0)!} \\ &:= 6 \times (T(2) \times 4! - 0!). \end{aligned}$$

$$\begin{aligned} 0427 &:= \sqrt{7! + F(2)} \times F(4)! + 0! \\ &:= T(T(7)) + T(2 + 4 + 0). \end{aligned}$$

$$\begin{aligned} 0463 &:= F(F(3!)) + F(F(6))^{\sqrt{4}} + 0! \\ &:= T(T(3)) + T(6)^{\sqrt{4}} + 0!. \end{aligned}$$

$$\begin{aligned} 0465 &:= F(5 + F(6)) \times \sqrt{4} - 0! \\ &:= T(5 \times 6 + 4 \times 0). \end{aligned}$$

$$\begin{aligned} 0467 &:= F(7 + 6) \times \sqrt{4} + 0! \\ &:= T(T(7)) + T(6) + 40. \end{aligned}$$

$$\begin{aligned} 0475 &:= (5 + F(F(7))) \times \sqrt{4} - 0! \\ &:= T(5) \times T(7) + T(T(4 + 0)). \end{aligned}$$

$$\begin{aligned} 0478 &:= -8 - F(F(7)) + F(4)! - 0! \\ &:= \sqrt{T(8)} + T(T(7)) + T(T(4) + 0!). \end{aligned}$$

$$\begin{aligned} 0479 &:= ((\sqrt{9})! + F(F(7))) \times \sqrt{4} + 0! \\ &:= T(T(T(\sqrt{9}))) - T(7) + T(4! - 0!). \end{aligned}$$

$$\begin{aligned} 0481 &:= (-1 + F(8)) \times 4! + 0! \\ &:= (-1 + T(\sqrt{T(8)})) \times 4! + 0!. \end{aligned}$$

$$\begin{aligned} 0482 &:= -F(2) + F(8) \times (4! - 0!) \\ &:= 2 \times ((\sqrt{T(8)})!/T(\sqrt{4}) + 0!). \end{aligned}$$

$$\begin{aligned} 0489 &:= (\sqrt{9})! + F(8) \times (4! - 0!) \\ &:= T(T(9)) - T(T(8)) + (4 + 0)!!. \end{aligned}$$

$$\begin{aligned} 0493 &:= 3!! + (\sqrt{9})! - F(F(F(4)! + 0!)) \\ &:= -3 + T(-9 + 40). \end{aligned}$$

$$\begin{aligned} 0495 &:= F(5 \times F(\sqrt{9})) \times (F(F(4)! + 0!) \\ &:= T(5) \times (9 + 4! + 0). \end{aligned}$$

$$\begin{aligned} 0499 &:= F(\sqrt{9})^9 - F(F(4)! + 0!) \\ &:= T(5) \times (9 + 4! + 0). \end{aligned}$$

$$\begin{aligned} 0529 &:= (F(F((\sqrt{9})!)) + 2)^{\sqrt{5-0!}} \\ &:= T(9 \times T(2) + 5) + 0!. \end{aligned}$$

$$\begin{aligned} 0532 &:= -2 + 3! \times F(\sqrt{5! + 0!}) \\ &:= T(T(T(T(2)))) + T((\sqrt{T(T(3)) - 5})!) + 0!. \end{aligned}$$

$$\begin{aligned} 0544 &:= -(F(F(4)!)) \times (F(F(F(4)!)) - F(\sqrt{5! + 0!})) \\ &:= (4! + T(4)) \times (T(5) + 0!). \end{aligned}$$

$$\begin{aligned} 0547 &:= F(7) + (F(4)! \times F(\sqrt{5! + 0!})) \\ &:= 7 \times T(\sqrt{4! + 5!}) + 0!. \end{aligned}$$

$$\begin{aligned} 0549 &:= 9 \times (\sqrt{F(4)! \times 5} + 0!) \\ &:= 9 \times (4 \times T(5) + 0!). \end{aligned}$$

$$\begin{aligned} 0567 &:= 7 \times (-F(6) + F(\sqrt{5! + 0!})) \\ &:= T(7) \times T(6) - T(5 + 0!). \end{aligned}$$

$$\begin{aligned} 0579 &:= \sqrt{9} \times F(F(7)) - (5 + 0!) \\ &:= T(T(9)) - T(T(7)) - 50. \end{aligned}$$

$$\begin{aligned} 0589 &:= F(-(\sqrt{9})! + F(8)) - F(F(5 + 0!)) \\ &:= -T(\sqrt{9}) + T(T(8) - \sqrt{5 - 0!}). \end{aligned}$$

$$\begin{aligned} 0594 &:= F(4)! \times 9 \times \sqrt{5! + 0!} \\ &:= (T(4!) - \sqrt{9}) \times \sqrt{5 - 0!}. \end{aligned}$$

$$\begin{aligned} 0597 &:= -F(7) + F(\sqrt{9} \times (5 + 0)) \\ &:= T(T(7) + T(\sqrt{9})) + \sqrt{5 - 0!}. \end{aligned}$$

$$\begin{aligned} 0599 &:= \sqrt{9! - F(9)} \times 5! + 0! \\ &:= T(9)/9 \times 5! - 0!. \end{aligned}$$

$$\begin{aligned} 0609 &:= F(9 + 06) - 0! \\ &:= T(T(\sqrt{9})) \times (0! + T(6 + 0!)). \end{aligned}$$

$$\begin{aligned} 0659 &:= F(9) + \sqrt{5^{F(6+0)}} \\ &:= -T(9) - T(5) + 6! - 0!. \end{aligned}$$

$$\begin{aligned} 0678 &:= -F(8) + F(F(7)) \times \sqrt{F(6) + 0!} \\ &:= -T(8) - 7 + 6! + 0!. \end{aligned}$$

$$\begin{aligned} 0695 &:= 5^{F(\sqrt{9})} + 6! \times 0! \\ &:= T(5) \times T(9) + T(6) - 0!. \end{aligned}$$

$$\begin{aligned} 0709 &:= (\sqrt{9})!! + 0! - F(7) + 0! \\ &:= T(\sqrt{9}) + T(0! + T(7 + 0!)). \end{aligned}$$

$$\begin{aligned} 0718 &:= -F(\sqrt{8 + 1}) + (7 - 0!)! \\ &:= (\sqrt{T(8)})! - 1 - (7 \times 0)!. \end{aligned}$$

$$\begin{aligned} 0734 &:= F(4)! + F(3!) + (7 - 0!)! \\ &:= T(T(\sqrt{4})) + T(3)! + 7 + 0!. \end{aligned}$$

$$\begin{aligned} 0739 &:= (\sqrt{9})! + 3!! + F(7 + 0) \\ &:= -9 + T(3)! + T(7 + 0). \end{aligned}$$

$$\begin{aligned} 0754 &:= F(\sqrt{4 + 5}) \times F(F(7) + 0!) \\ &:= T(T(4)) \times T(5) - \sqrt{7! + 0!}. \end{aligned}$$

$$\begin{aligned} 0759 &:= F(9) + 5 + (7 - 0!)! \\ &:= \sqrt{9} \times T(T(5) + 7 + 0). \end{aligned}$$

$$\begin{aligned} 0769 &:= (\sqrt{9})!! - F(F(6)) + 70 \\ &:= T(\sqrt{9})! + T(6) + T(7 + 0). \end{aligned}$$

$$\begin{aligned} 0792 &:= F(2) + (\sqrt{9})!! + \sqrt{7! + 0!} \\ &:= 2 \times (-9 + T(T(7)) - 0!). \end{aligned}$$

$$\begin{aligned} 0794 &:= F(4)!! + \sqrt{9} + \sqrt{7! + 0!} \\ &:= \sqrt{4} \times (-9 + T(T(7 + 0))). \end{aligned}$$

$$\begin{aligned} 0798 &:= F(8) \times (\sqrt{9} \times F(7) - 0!) \\ &:= T(T(8)/\sqrt{9}) + (7 - 0!)!. \end{aligned}$$

$$\begin{aligned} 0853 &:= 3!! + 5! + F(8 - 0!) \\ &:= T(3)! - 5! + T(T(\sqrt{T(8)})) + 0!. \end{aligned}$$

$$\begin{aligned} 0867 &:= 7 \times F(F(6)) + (\sqrt{8 + 0!})!! \\ &:= T(7 \times 6) - T(8 + 0). \end{aligned}$$

$$\begin{aligned} 0895 &:= (5! - F((\sqrt{9})!)) \times 8 - 0! \\ &:= -5! + T(T(9)) - T(\sqrt{T(8)}) + 0!. \end{aligned}$$

$$\begin{aligned} 0896 &:= (6! + F((\sqrt{9})!)) \times (F(8) + 0!) \\ &:= T(T(6)) + T(T(\sqrt{9}) \times \sqrt{T(8)}) - 0!. \end{aligned}$$

$$\begin{aligned} 0924 &:= 4 \times (-2 + F(F((\sqrt{9})! + 0!))) \\ &:= T(4 + 2) \times (T(9) - 0!). \end{aligned}$$

$$\begin{aligned} 0932 &:= F(F(F(2) + 3!)) \times (\sqrt{9} + 0!) \\ &:= (2 + T(T(T(3)))) \times (\sqrt{9} + 0!). \end{aligned}$$

$$\begin{aligned} 0935 &:= (5! - 3) \times F((\sqrt{9})!) - 0! \\ &:= -5! + T(T(3)) + T(T(9)) - 0!. \end{aligned}$$

$$\begin{aligned} 0944 &:= -4^{F(4)!} + ((\sqrt{9})! + 0!)! \\ &:= T(44) - T(9) - 0!. \end{aligned}$$

$$\begin{aligned} 0945 &:= (5! - \sqrt{4}) \times F((\sqrt{9})!) + 0! \\ &:= T(5) \times (4^{\sqrt{9}} - 0!). \end{aligned}$$

$$\begin{aligned} 0947 &:= 7! + \sqrt{4} - T(90) \\ &:= F(F(7)) - F(4)! + (\sqrt{9+0})!. \end{aligned}$$

$$\begin{aligned} 0951 &:= (-1 + 5!) \times F((\sqrt{9})!) - 0! \\ &:= T(T(1+5)) + T(\sqrt{9+0})!. \end{aligned}$$

$$\begin{aligned} 0954 &:= -F(4)! + 5! \times (9 - 0!) \\ &:= -T(T(\sqrt{4})) + 5! \times (9 - 0!). \end{aligned}$$

$$\begin{aligned} 0956 &:= F(6) \times 5! - \sqrt{9} - 0! \\ &:= T(T(6)) + 5 + T(\sqrt{9+0})!. \end{aligned}$$

$$\begin{aligned} 0957 &:= F(F(7)) + 5 + (\sqrt{9})!! - 0! \\ &:= -T(7+5) + T(T(9+0)). \end{aligned}$$

$$\begin{aligned} 0961 &:= (-1 + 6!) \times F((\sqrt{9})!) + 0! \\ &:= -(-1 + 6)! + T(T(9) + 0!). \end{aligned}$$

$$\begin{aligned} 0963 &:= F(F(3) \times F(6)) - (\sqrt{9} + 0)! \\ &:= -3 + T(6) \times (T(9) + 0!). \end{aligned}$$

$$\begin{aligned} 0965 &:= 5! \times F(6) + (\sqrt{9})! - 0! \\ &:= T(5) + T(T(6)) + (T(\sqrt{9}))! - 0!. \end{aligned}$$

$$\begin{aligned} 0967 &:= 7 + F(6) \times ((\sqrt{9})! - 0)! \\ &:= T(T(7)) + T(T(T(6)))/(T(\sqrt{9} + 0)!)). \end{aligned}$$

$$\begin{aligned} 0968 &:= 8 \times ((F(6) - \sqrt{9})! + 0!) \\ &:= 8 \times (T(6+9) + 0!). \end{aligned}$$

$$\begin{aligned} 0973 &:= (3!! - F(F(7))) \times F(\sqrt{9}) - 0! \\ &:= T(3)! + T(7) \times 9 + 0!. \end{aligned}$$

$$\begin{aligned} 0982 &:= F(2 \times 8) - (\sqrt{9})! + 0! \\ &:= -2 - \sqrt{T(8)} + T(T(9) - 0!). \end{aligned}$$

$$\begin{aligned} 0985 &:= -5 + T(T(8) + 9 - 0!) \\ &:= F(-5 + F(8)) - \sqrt{9} + 0!. \end{aligned}$$

$$\begin{aligned} 0987 &:= F(7 + 8 + (9 \times 0)!) \\ &:= -T(7) - T(\sqrt{T(8)}) + T(T(9)) + 0!. \end{aligned}$$

$$\begin{aligned} 0988 &:= F(8 + 8) + (9 \times 0)! \\ &:= T(8 + T(8)) - \sqrt{9} + 0!. \end{aligned}$$

$$\begin{aligned} 1149 &:= -(\sqrt{9})!! + F(F(F(4)!)) \times F(11) \\ &:= T(T(9) + \sqrt{4}) + T(T(T(1+1))). \end{aligned}$$

$$\begin{aligned} 1259 &:= F(F((\sqrt{9})!)) \times 5!/2 - 1 \\ &:= T(9) \times T(5+2) - 1. \end{aligned}$$

$$\begin{aligned} 1369 &:= ((\sqrt{9})! + F(F(F(6))))/F(3! \times 1) \\ &:= -9 + T(T(6) + 31). \end{aligned}$$

$$\begin{aligned} 1379 &:= (-\sqrt{9} + F(F(7))) \times 3! - 1 \\ &:= T(T(9)) + 7^3 + 1. \end{aligned}$$

$$\begin{aligned} 1394 &:= -4 + (\sqrt{9})! \times F(F(3! + 1)) \\ &:= T(T(4) \times \sqrt{9}) \times 3 - 1. \end{aligned}$$

$$\begin{aligned} 1398 &:= (8 - F(\sqrt{9})) \times F(F(3! + 1)) \\ &:= ((\sqrt{T(8)})! - T(T(\sqrt{9}))) \times (3 - 1). \end{aligned}$$

$$\begin{aligned} 1399 &:= (\sqrt{9})! \times F(F(9 - F(3))) + 1 \\ &:= T(T(9) - \sqrt{9}) + T(31). \end{aligned}$$

$$\begin{aligned} 1428 &:= F(8) \times 2 \times F(F(F(4)!)) + 1 \\ &:= T(\sqrt{T(8)}) \times (2 + T(T(4) + 1)). \end{aligned}$$

$$\begin{aligned} 1438 &:= (8 - 3!) \times (F(4))! - 1 \\ &:= (\sqrt{T(8)})! + T(3)! - \sqrt{4 \times 1}. \end{aligned}$$

$$\begin{aligned} 1443 &:= 3!! + F(4) + (4 - 1)!! \\ &:= T(3)! + T(\sqrt{4}) + T(4 - 1)!. \end{aligned}$$

$$\begin{aligned} 1459 &:= \sqrt{9^5} \times F(4)! + 1 \\ &:= \sqrt{9^5} \times T(T(\sqrt{4})) + 1. \end{aligned}$$

$$\begin{aligned} 1467 &:= (F(7) + 6!) \times \sqrt{4} + 1 \\ &:= T(7) + 6! \times \sqrt{4} - 1. \end{aligned}$$

$$\begin{aligned} 1476 &:= -6! + F(7)^{F(4)} - 1 \\ &:= 6 \times (-7 + T(T(T(T(\sqrt{4})))) + 1)). \end{aligned}$$

$$\begin{aligned} 1482 &:= 2 \times (F(8) + (4 - 1)!!) \\ &:= 2 \times T(T(8) + \sqrt{4 \times 1}). \end{aligned}$$

$$\begin{aligned} 1529 &:= (\sqrt{9})!! \times 2 + F(\sqrt{5! + 1}) \\ &:= -9 - 2 + T(T(T(5 - 1))). \end{aligned}$$

$$\begin{aligned} 1574 &:= F(\sqrt{4}) + F(7) \times (5! + 1) \\ &:= T(\sqrt{4} \times 7) \times T(5) - 1. \end{aligned}$$

$$1579 := (\sqrt{9})! + F(7) \times (5! + 1) \\ := -T(9) + T(T(7)) \times (5 - 1).$$

$$1584 := 4! \times T(8) + (5 + 1)! \\ := F(4 + 8) \times \sqrt{5! + 1}.$$

$$1593 := -3 + T(T(9) + \sqrt{5! + 1}) \\ := F(F(3!)) + 9 - 5 + 1.$$

$$1597 := F(-7 + (9 - 5 \times 1)!) \\ := T(T(7) \times \sqrt{9 - 5}) + 1.$$

$$1675 := -5 + 7!/\sqrt{F(6)} + 1 \\ := T(57) + T(6) + 1.$$

$$1679 := (-\sqrt{9} + 7!)/\sqrt{F(6)} + 1 \\ := T(\sqrt{9} \times T(7)) - T(61).$$

$$1696 := -F(6) \times (F(F((\sqrt{9})!)) - F(F(6 + 1))) \\ := T(69) - 6! + 1.$$

$$1779 := (F(F((\sqrt{9})!)) + F(F(7))) \times 7 + 1 \\ := 9 + T(T(T(7)))/7 + 1.$$

$$1793 := F(3!) \times (-9 + F(F(7))) + 1 \\ := T(T(T(3))) \times T(\sqrt{9}) + T(T(7)) + 1.$$

$$1799 := (F((\sqrt{9})!) \times (-F((\sqrt{9})!) + F(F(7)))) - 1 \\ := T(\sqrt{9}) \times T((\sqrt{9} + 7)!) - 1.$$

$$1824 := (F(F(F(F(4)!))) - 2)/(\sqrt{8 + 1})! \\ := T(T(4) \times T(T(2))) - T(\sqrt{8 + 1}).$$

$$1833 := (3! + F(3!))/F(8) + 1 \\ := 3 + T \left(\sqrt{T(3)! \times (\sqrt{T(8)} - 1)} \right).$$

$$1839 := F((\sqrt{9})!)/F(F(3!)) - 81 \\ := T(T(9)) - T(T(T(3))) + T(T(8 + 1)).$$

$$1843 := -F(F(3!)) + F(F(4)!) \times F(F(8 - 1)) \\ := -T(3) + T(T(T(T(\sqrt{4})))) \times 8 + 1.$$

$$1889 := (\sqrt{9})!! \times F(8)/8 - 1 \\ := \sqrt{9} \times (T(T(8)) - T(8)) - 1.$$

$$1898 := 8!/F(F((\sqrt{9})!)) - F(8) - 1 \\ := 8 + \sqrt{9} \times T(T(8) - 1).$$

$$1899 := F((\sqrt{9})!)/F(F((\sqrt{9})!)) - F(8 \times 1) \\ := \sqrt{9} \times (\sqrt{9} + T(T(8) - 1)).$$

$$1919 := F((\sqrt{9})!)/F(-1 + 9) - 1 \\ := (9 - 1)!/T(T(\sqrt{9})) - 1.$$

$$1932 := 2 \times T(T(3)) \times (T(9) + 1) \\ := F((F(2) + 3)!)/(\sqrt{9} + 1)!.$$

$$1943 := 3!^{F(4)} \times 9 - 1 \\ := T(3)^{T(\sqrt{4})} \times 9 - 1.$$

$$2099 := 9 \times F(F((\sqrt{9})! + 0!)) + 2 \\ := T(T(T(\sqrt{9}))) \times 9 - 0! + T(T(T(2))).$$

$$2139 := \sqrt{9} \times 3!! - F(F((1 + 2)!)) \\ := T(93 - 1)/2.$$

$$2393 := 3!! \times \sqrt{9} + F(F(3! + F(2))) \\ := T(T(T(3))) + \sqrt{9} \times (T(3))! + 2.$$

$$2394 := F(F(F(4)!)) \times (-\sqrt{9})! + (3 + 2)! \\ := T(4! + T(9)) - T(3 \times 2).$$

$$2438 := F(F(8) - 3!) \times 4 - 2 \\ := \sqrt{T(8)} \times T(T(3 + 4)) + 2.$$

$$2458 := F(8) \times (5! - F(4) + F(2)) \\ := T(8 \times 5) \times T(\sqrt{4}) - 2.$$

$$2459 := F(F((\sqrt{9})!)) \times (5! - F(4)) + 2 \\ := T(T(\sqrt{9})) \times 5! - T(T(4)) - T(T(2)).$$

$$2474 := -F(4)!! + F(-7 + 4!) \times 2 \\ := 4! + T(\sqrt{7^4}) \times 2.$$

$$2494 := F(F(4)!)/\sqrt{9} - F(F(4 \times 2)) \\ := (T(4)!/T(\sqrt{9}))^{\sqrt{4}} - T(T(2)).$$

$$2495 := 5! \times F(F((\sqrt{9})!)) - 4! - F(2) \\ := T(T(5) + T(9)) - T(T(4)) + T(T(2))!.$$

$$2496 := F(6)!/F(F((\sqrt{9})!)) + 4!^2 \\ := (-6 + T(9)) \times 4^{T(2)}.$$

$$2497 := 7!/F(\sqrt{9}) - 4! - F(2) \\ := T(T(7)) \times T(\sqrt{9}) + T(T(4)) + T(T(2)).$$

$$\begin{aligned}
2539 &:= -F(\sqrt{9}) + F(F(3!)) \times (5! + F(2)) \\
&:= T(T(\sqrt{9})) + T(T(3)) \times 5! - 2. \\
2543 &:= F(F(3!)) \times (F(\sqrt{4}) + 5!) + 2 \\
&:= T(T(T(3))) \times (-4 + T(5)) + 2. \\
2549 &:= F((\sqrt{9})!) + F(F(F(4)!)) \times (5! + F(2)) \\
&:= -T(\sqrt{9}) - T(T(T(4))) + T(T(5) \times T(T(2))).
\end{aligned}$$

$$\begin{aligned}
2564 &:= \sqrt{4} + F(F(6)) \times (5! + 2) \\
&:= \sqrt{4} + T(6) \times (5! + 2). \\
2574 &:= (F(\sqrt{4}) + F(F(7))) \times \sqrt{5! + F(2)} \\
&:= T(\sqrt{4}) \times (T(T(7)) - 5!) \times T(2).
\end{aligned}$$

$$\begin{aligned}
2578 &:= -8 + F(F(7) + 5) + 2 \\
&:= (\sqrt{T(8)})! + T(7) + T(5!/2).
\end{aligned}$$

$$\begin{aligned}
2579 &:= -\sqrt{9} + F(F(7) + 5) - 2 \\
&:= T(T(9) + T(7)) - 5! - 2.
\end{aligned}$$

$$\begin{aligned}
2644 &:= -\sqrt{4} + F(4)! \times F(F(6))^2 \\
&:= T(T(T(4))) + 4 \times T(T(6) + 2).
\end{aligned}$$

$$\begin{aligned}
2649 &:= \sqrt{9} + F(4)! \times F(F(6))^2 \\
&:= T(\sqrt{9} \times 4!) + T(T(6/2)).
\end{aligned}$$

$$\begin{aligned}
2694 &:= F(4)!! + F(\sqrt{9}) \times F(F(6) \times 2) \\
&:= T(4!) \times 9 - T(6/2).
\end{aligned}$$

$$\begin{aligned}
2743 &:= (F(F(F((3!))))/\sqrt{4} + F(7))/2 \\
&:= T(T(T(3)) \times T(\sqrt{4})) + 7 + T(T(2))!.
\end{aligned}$$

$$\begin{aligned}
2744 &:= (F(4)! + F(F(4)!))^{7+2} \\
&:= (4! - T(4))^{7+2}.
\end{aligned}$$

$$\begin{aligned}
2747 &:= F(F(7)) - F(4)! + 7!/2 \\
&:= -T(7) + T(\sqrt{4} + 72).
\end{aligned}$$

$$\begin{aligned}
2792 &:= 2 \times ((\sqrt{9})! \times (F(F(7)))) - 2 \\
&:= 2 + T(\sqrt{9}) \times T(T(7) + 2).
\end{aligned}$$

$$\begin{aligned}
2793 &:= -3 + (\sqrt{9})! \times F(F(7)) \times 2 \\
&:= T(T(3)) \times (T(9 + 7) - T(2)).
\end{aligned}$$

$$\begin{aligned}
2799 &:= \sqrt{9} + (\sqrt{9})! \times F(F(7)) \times 2 \\
&:= T(9 + 9) + T(72).
\end{aligned}$$

$$\begin{aligned}
2859 &:= -F(F((\sqrt{9})!)) + 5! \times (8/2)! \\
&:= 9 + T(T(5) \times (8 - T(2))).
\end{aligned}$$

$$\begin{aligned}
2879 &:= F((\sqrt{9})!)/(-7 + F(8)) - F(2) \\
&:= -T(T(9)) - T(T(7)) + (\sqrt{T(8)})! \times T(T(2)).
\end{aligned}$$

$$\begin{aligned}
2884 &:= (F(4)!! \times 8 + 8)/2 \\
&:= \sqrt{4^8} + T(T(8) \times 2).
\end{aligned}$$

$$\begin{aligned}
2894 &:= (F(4!)/F((\sqrt{9})!) - 8)/2 \\
&:= 4 \times T(\sqrt{9})! + 8 + T(T(2)).
\end{aligned}$$

$$\begin{aligned}
2896 &:= 6! + F(9) \times 8^2 \\
&:= (6! + T(\sqrt{9})! + 8) \times 2.
\end{aligned}$$

$$\begin{aligned}
2898 &:= F(8) \times (\sqrt{9})! \times (F(8) + 2) \\
&:= \sqrt{T(8)} \times T(9) + T(T(8) \times 2).
\end{aligned}$$

$$\begin{aligned}
2943 &:= (3!! + F(4!))/F((\sqrt{9})!) \times 2 \\
&:= T(3^4) - T(9 \times T(2)).
\end{aligned}$$

$$\begin{aligned}
2944 &:= F(F(4)!) \times 4 \times 92 \\
&:= \sqrt{\sqrt{4^{T(4)}}} \times 92.
\end{aligned}$$

$$\begin{aligned}
2949 &:= \sqrt{9} \times (-4 + F(F((\sqrt{9})!) \times 2)) \\
&:= (\sqrt{9} - T(T(4)) + T(T(9))) \times T(2).
\end{aligned}$$

$$\begin{aligned}
2959 &:= (F(F((\sqrt{9})!)) + 5!) \times F(F((\sqrt{9})!)) - 2 \\
&:= (T(T(\sqrt{9})) + 5!) \times T(T(\sqrt{9})) - 2.
\end{aligned}$$

$$\begin{aligned}
2974 &:= T(4! + 7) \times T(\sqrt{9}) - 2 \\
&:= F(F(F(4)!)) + (-7! + F(F(F((\sqrt{9})!))))/2.
\end{aligned}$$

$$\begin{aligned}
3025 &:= F(5 \times 2)^{F(03)} \\
&:= T(5 \times 2)^{\sqrt{01+3}}.
\end{aligned}$$

$$\begin{aligned}
3066 &:= (\sqrt{F(6)^6} - 0!) \times 3! \\
&:= T(T(6 + 6)) - T(-0! + T(3)).
\end{aligned}$$

$$\begin{aligned}
3155 &:= -5 \times (F(\sqrt{5! + 1}) - 3!!) \\
&:= 5 + T(5) \times T(-1 + T(T(3))).
\end{aligned}$$

$$\begin{aligned}
3194 &:= \sqrt{4} \times F(F(9)/F(1 \times 3)) \\
&:= T(T(4)) \times T(9) - 1 + T(3)!.
\end{aligned}$$

$$\begin{aligned}
3347 &:= -F(7) + F(F(4)!)/F(3) \times 3! \\
&:= -T(7) + T(\sqrt{4} + 3)^3.
\end{aligned}$$

$$3374 := (\sqrt{4} + F(7))^3 - F(F(3)) \\ := \sqrt{4} \times (7! + T(T(3)))/3.$$

$$3394 := F(\sqrt{4}) + 9 \times F(3! + F(3!)) \\ := T(T(T(4)) - \sqrt{9}) + T(3 \times T(T(3))).$$

$$3397 := (F(F(7)) + \sqrt{9^{F(3)}})/F(3) \\ := T(79 + 3) - T(3).$$

$$3399 := 9 \times F((\sqrt{9})! + F(3!)) + 3! \\ := 9 \times T(9 \times 3) - 3.$$

$$3409 := (F(F(F((\sqrt{9})!))) + 0! - F(4)!!)/3 \\ := T(T(T(\sqrt{9}) + 0!)) + T(T(T(T(\sqrt{4}))))/3.$$

$$3443 := (3 + 4)! - F(-4 + F(F(3!))) \\ := T(3 + T(T(4))) \times \sqrt{4} + T(T(3)).$$

$$3447 := 7! + 4 - F(-4 + F(F(3!))) \\ := 7! - T(\sqrt{4}) \times (T(4!) + T(T(T(3)))).$$

$$3459 := -F(\sqrt{9}) + F(-5 + 4!) - 3!! \\ := (T(T(9)) + 5!) \times T(\sqrt{4}) - T(3).$$

$$3469 := F((\sqrt{9})!) + F((F(F(6)) - \sqrt{4})) - 3!! \\ := \sqrt{9} - 6! + T(T(T(4) + 3)).$$

$$3485 := 5 \times (-F(8) - \sqrt{4} + 3!!) \\ := 5 \times (T(T(8)) + T(4) + T(T(3))).$$

$$3493 := F(3!)!/9 - F(4^{F(3)}) \\ := -T(T(T(3)))/\sqrt{9} + T(4 \times T(T(3))).$$

$$3538 := (F(8) + F(3!)) \times (5! + F(3)) \\ := T(T(8)) \times 3 + T \left(T \left(T \left(\sqrt{-5 + T(T(3))} \right) \right) \right).$$

$$3574 := -\sqrt{4} \times F(7) + 5 \times 3!! \\ := 4 + T(T(7) \times T(5 - 3)).$$

$$3592 := (2 \times \sqrt{9})! \times 5 - F(3!) \\ := -2^{\sqrt{9}} + 5 \times T(3)!.$$

$$3593 := (3!! - \sqrt{9}) \times 5 + F(3!) \\ := -T(T(3))/\sqrt{9} + 5 \times T(3)!.$$

$$3595 := 5 \times (-T(\sqrt{9}) + 5 + T(3)!) \\ := 5 \times (-F(\sqrt{9 - 5}) + 3!!).$$

$$3596 := (6! - F(\sqrt{9})) \times 5 + 3! \\ := -\sqrt{6!/T(9)} + 5 \times (T(3))!.$$

$$3599 := (9 - \sqrt{9})! \times 5 - F(F(3)) \\ := -9/9 + 5 \times T(3)!.$$

$$3684 := (4 + F(F(8) - 6)) \times 3! \\ := \sqrt{4} \times (8 \times T(T(6)) - T(3)).$$

$$3694 := (4 \times F(9) + F(F(F(6))))/3 \\ := T(T(T(4))) + \sqrt{9} \times 6! - T(3).$$

$$3729 := F(F(\sqrt{9})) + 2 \times F(F(7)) \times F(3!) \\ := 9 \times (T(T(2)) + T(T(7))) + T(T(3)).$$

$$3795 := 5 \times (\sqrt{9} \times F(7) + 3!!) \\ := T(5) + T(9) \times T(7) \times 3.$$

$$3857 := (F(7) + 5!) \times (F(8) + F(3!)) \\ := (-7 + T(T(5) \times \sqrt{T(8)})) - T(T(T(3))).$$

$$3879 := -(\sqrt{9})!! + 7! - F(8)^{F(3)} \\ := -T(T(9)) + 7! - \sqrt{T(8)} \times T(T(3)).$$

$$3897 := (-F(F(7)) + (\sqrt{9})!!) \times 8 + F(F(3)) \\ := 7! - T(T(9)) - T(8) \times 3.$$

$$3924 := 4 \times (F(2 \times F((\sqrt{9})!)) - 3!) \\ := T(T(\sqrt{4})) \times (-T(2 + 9) + T(3)!).$$

$$3936 := 6 \times (-F(3)^{(\sqrt{9})!} + 3!!) \\ := -6! + T(3 + 93).$$

$$3949 := F(F(\sqrt{9})) + 4 \times F(F(\sqrt{9}) \times F((3)!)) \\ := T(T(9 + 4)) - T(\sqrt{9}) - T(T(T(3))).$$

$$3976 := F(6) \times (-7! + 9!)/3!! \\ := T(T(6 + 7)) + T(T(\sqrt{9})) - T(T(T(3))).$$

$$3984 := (4! \times F(8) - (\sqrt{9})!) \times F(3!) \\ := T(T(6 + 7)) + T(T(\sqrt{9})) - T(T(T(3))).$$

$$3994 := 4^{(\sqrt{9})!} - F(9) \times 3 \\ := -\sqrt{4} + T(T(9) - 9) \times T(3).$$

$$4048 := 8 \times (4! - 0!)/(F(F(F(4)!)))! \\ := (T(T(\sqrt{T(8)})) - T(T(4))) \times (-0! + 4!).$$

$$4134 := (F(4)!! - 31) \times F(4)! \\ := T(\sqrt{4}) \times T(-3 + T(T(1 \times 4))).$$

$$4157 := F(F(7) + 5 + 1) - 4! \\ := T(T(7)) + T(T(\sqrt{5! + 1})) + T(T(T(4))).$$

$$4187 := F(F(7) + (\sqrt{8 + 1})!) + F(4)! \\ := T(T(7 + \sqrt{T(8)})) + 1^4.$$

$$4189 := (F((\sqrt{9})!) + F(F(8) - \sqrt{1 \times 4})) \\ := \sqrt{9} + T(T(8 + 1 + 4)).$$

$$4194 := (F(4)!! - F(9 - 1)) \times F(4)! \\ := T(4) + T(91) - \sqrt{4}.$$

$$4197 := (F(F(7)) \times (\sqrt{9})! + 1) \times F(4) \\ := 7 + T(91) + 4.$$

$$4229 := F(F(F((\sqrt{9})!)) - 2) + 2 \times 4! \\ := T(92) + T(T(2)) - T(T(4)).$$

$$4239 := F(9) + F(F(F(3!)) - 2) + 4! \\ := T(\sqrt{9}) \times T(3)! - T(2)^4.$$

$$4247 := -F(F(7)) + F(F(4)!)/(F(2) + F((F(4)!))) \\ := T(T(7 + T(T(\sqrt{4})))) + T(T(2)) + T(T(4)).$$

$$4254 := (F(4)!! - \sqrt{5! + F(2)}) \times F(4)! \\ := -4! + T(5! - T(T(2) + 4)).$$

$$4294 := F(4)! \times (\sqrt{9})!! - 2 - 4! \\ := T(T(4)) \times T(9 + T(2)) + 4.$$

$$4295 := 5! - (\sqrt{9})! + F(-2 + F(F(F(4)!))) \\ := T(5) + T(92) + \sqrt{4}.$$

$$4297 := 7! - (\sqrt{9})!! + F(2) - 4! \\ := 7 + (T(9 + T(2)) \times T(T(4))).$$

$$4299 := (\sqrt{9})! \times (\sqrt{9})!! - F(2 \times 4) \\ := T(9) + T(92) - 4!.$$

$$4307 := -F(7) + 03!! \times F(4)! \\ := -7 + (-0! + T(3)!) \times T(T(\sqrt{4})).$$

$$4312 := -2 + (-1 + 3!!) \times F(4)! \\ := T(T(2)) \times (-1 + T(3)!) - \sqrt{4}.$$

$$4313 := (3!! - 1) \times 3! - F(\sqrt{4}) \\ := -T(3) - 1 + T(3)! \times T(T(\sqrt{4})).$$

$$4315 := -5 + 1 \times 3!! \times F(4)! \\ := -5 + 1 \times T(3)! \times T(T(\sqrt{4})).$$

$$4319 := (\sqrt{9})! \times 1 \times 3!! - F(\sqrt{4}) \\ := -T(\sqrt{9})! - 1 + (3 + 4)!.$$

$$4321 := (1 + 2)! \times 3!! + F(\sqrt{4}) \\ := 1 + T(2) \times T(3)! \times \sqrt{4}.$$

$$4322 := F(2 + 2)! \times 3!! + \sqrt{4} \\ := T(T(2)) \times (2 \times 3)! + \sqrt{4}.$$

$$4326 := (6! \times T(2) + 3) \times \sqrt{4} \\ := (6! + F(2)) \times 3 \times \sqrt{4}.$$

$$4329 := \sqrt{9} + (F(2) + 3!!) \times F(4)! \\ := \sqrt{9} \times (2 \times T(3)! + T(\sqrt{4})).$$

$$4339 := (\sqrt{9} + 3!!) \times 3! + F(\sqrt{4}) \\ := (-T(\sqrt{9}) + T(3)!) \times T(3) + T(T(4)).$$

$$4341 := (1 + F(4)! + F(F(3!)) - F(4)!! \\ := T(T(-1 + 4)) + T(3)! \times T(T(\sqrt{4})).$$

$$4342 := -2 + (4 + 3!!) \times F(4)! \\ := T(T(2)) \times (T(\sqrt{4}) + T(3)!) + 4.$$

$$4345 := \sqrt{5^4} + 3!! \times F(4)! \\ := (T(5) + 4^3) \times T(T(4)).$$

$$4349 := (\sqrt{9})! \times F(4)!! + F(F(3!)) + F(F(4)!) \\ := T(T(\sqrt{9})) \times (-4! + T(T(T(3)))) + \sqrt{4}.$$

$$4351 := 1 + (5 + 3!!) \times F(4)! \\ := 1 + (5 + T(3)!) \times T(T(\sqrt{4})).$$

$$4353 := (3!! + 5) \times 3! + F(4) \\ := (T(3)! + 5) \times T(3) + T(\sqrt{4}).$$

$$4354 := 4 + (5 + 3!!) \times F(4)! \\ := -\sqrt{4} + T(5 + T(3))\sqrt{4}.$$

$$4358 := 8 + (5 + 3!!) \times F(4)! \\ := 8 + (5 + T(3)!) \times T(T(\sqrt{4})).$$

$$4359 := 9 + (5 + 3!!) \times F(4)! \\ := \sqrt{9} + T(5 + T(3))^{\sqrt{4}}.$$

$$4364 := -4 + (6! + F(3!)) \times F(4)! \\ := T(\sqrt{4})^6 \times T(3) - T(4).$$

$$4369 := T(96 - 3) - \sqrt{4} \\ := (\sqrt{9})! \times (F(6) + 3!!) + F(\sqrt{4}).$$

$$4374 := F(4)^7 \times 3!/F(4) \\ := (-T(4) + T(7)) \times \sqrt{3^{T(4)}}.$$

$$4376 := F(6) \times 7 + 3!! \times F(4)! \\ := T(T(6 + 7)) + T(T(T(3))) - \sqrt{4}.$$

$$4385 := F(F(F((-5 + 8)!))) - 3^{F(4)!} \\ := 5! + \sqrt{T(8)} \times T(3)! - T(T(4)).$$

$$4389 := F(F((\sqrt{9})!)) \times (F(F(F(8)/3)) - 4!) \\ := T(9) + \sqrt{T(8)} \times T(3)! + 4!.$$

$$4392 := (2 \times (\sqrt{9})! + 3!!) \times F(4)! \\ := -T(2) + T(93) + 4!.$$

$$4393 := F(F(F(3!))) - \sqrt{9^{F(3)}} + F(F(4)!) \\ := (T(3)! + \sqrt{9}) \times T(3) + T(T(4)).$$

$$4398 := (F(F(8)/\sqrt{9}) + 3!!) \times F(4)! \\ := \sqrt{T(8)} \times (9^3 + 4).$$

$$4399 := F((\sqrt{9})!)/9 - 3^4 \\ := 9 \times ((T(\sqrt{9}))! - T(T(T(3)))) - \sqrt{4}.$$

$$4414 := \sqrt{4} \times (-1 + F(4)!/F(F(F(4)!))) \\ := (-4 + T(T(1 + T(4)))) \times \sqrt{4}.$$

$$4428 := (F(F(8) + F(2)) + F(\sqrt{4}))/4 \\ := T(8) \times (T(2) + (T(4)/\sqrt{4})).$$

$$4438 := (F(8) + 3!!) \times F(4)! - F(F(4)!) \\ := T(\sqrt{T(8)}) + T(T(T(3))) + T(T(T(\sqrt{4}) + T(4))).$$

$$4439 := -9 \times (3!! + F(4)) + F(F(F(F(4)!))) \\ := T(T(9)) \times T(3) - T(T(T(4))) - T(T(T(T(\sqrt{4})))).$$

$$4444 := (F(F(F(4)!)) + F(4)!) \times F(4)! - \sqrt{4} \\ := 4 \times (T(T(\sqrt{4})))! + 4! + T(T(T(4))).$$

$$4447 := (F(7) + F(4)!) \times F(F(F(4)!)) - F(F(F(4)!)) \\ := 7! + \sqrt{4} - T(4! + T(4)).$$

$$4449 := ((\sqrt{9})!! + F(F(F(4)!))) \times F(4)! + F(4) \\ := T(94) - 4 \times 4.$$

$$4452 := (F(F(2 + 5)) - F(F(F(4)!))) \times F(F(F(4)!)) \\ := T(2) \times T(54) - T(\sqrt{4}).$$

$$4456 := F(6)!/(5 + 4) - 4! \\ := T(T(6)) + (5! - T(T(4)))^{\sqrt{4}}.$$

$$4459 := F((\sqrt{9})!)/(5 + 4) - F(F(F(4)!)) \\ := \sqrt{9} \times T(54) + 4.$$

$$4463 := 3! \times (6! + 4!) - F(\sqrt{4}) \\ := -3 + T(T(6) + T(T(4))) + T(T(T(4))).$$

$$4469 := -9 \times 6! + F(F(F(F(4)!))) + F(4) \\ := T(96 - \sqrt{4}) + 4.$$

$$4473 := F(F(3) \times 7) + 4^{F(4)!} \\ := T(T(3)) \times (T(T(7))/\sqrt{4} + T(4)).$$

$$4477 := 7! + F(7) - 4! \times 4! \\ := 7! - (T(T(7)) + T(T(\sqrt{4})))!/\sqrt{4}.$$

$$4479 := F((\sqrt{9})!)/(F(7) - 4) - F(\sqrt{4}) \\ := -T(T(\sqrt{9})) + T(7 - \sqrt{4}) \times T(4!).$$

$$4493 := F(3)!/9 + F(F(4) + 4) \\ := (-T(T(3)) + T(9) \times T(4)!)/T(\sqrt{4}).$$

$$4494 := F(F(F(4)!)) \times (9 \times 4! - \sqrt{4}) \\ := (T(4!) + T(T(\sqrt{9}))) \times (4! - T(4)).$$

$$4497 := -F(7) - F(F(F((\sqrt{9})!))) + F(4)!/F(4) \\ := T(7) + T(94) + 4.$$

$$4499 := (F((\sqrt{9})!))/9 - \sqrt{4} + F(F(F(4)!)) \\ := (-\sqrt{9} + T(9) \times T(4)!)/T(\sqrt{4}).$$

$$4559 := -F(F(F((\sqrt{9})!))) - 5! + 5^{F(4)!} \\ := T(95) - 5 + 4.$$

$$4634 := \sqrt{4} \times (3!! + F(F(F(6)) - 4)) \\ := -T(T(4 + 3)) + (T(6)/T(\sqrt{4}))!.$$

$$4644 := 4 \times (F(4)!! + F(F(6)))^{\sqrt{4}}$$

$$:= T(4! \times 4) - 6 \times \sqrt{4}.$$

$$4674 := -F(4)! + F(7) \times 6!/\sqrt{4}$$

$$:= T(4!) + 7! - T(\sqrt{6^4}).$$

$$4679 := (-F(\sqrt{9}) + F(7) \times 6!)/(\sqrt{4})$$

$$:= T(9) - T(T(7)) + (T(6)/T(\sqrt{4}))!.$$

$$4696 := F(6)!/9 + 6^{F(4)}$$

$$:= T(T(6)) + T(96 - \sqrt{4}).$$

$$4698 := (F(8) \times \sqrt{9} + 6!) \times F(4)!$$

$$:= T(T(8)) \times 9 - 6^4.$$

$$4704 := 4! \times (0! + F(7))^{\sqrt{4}}$$

$$:= (T((4 - (0)!)) \times (T(7)^{\sqrt{4}})).$$

$$4719 := \sqrt{9} \times (F(17) - 4!)$$

$$:= -T(T(\sqrt{9})) \times 1 + 7! - T(4!).$$

$$4744 := (F(4)!!/\sqrt{4} + F(F(7))) \times F(F(4)!)!$$

$$:= \sqrt{4} - T(4!) + 7! + \sqrt{4}.$$

$$4759 := -(\sqrt{9})! + 5 \times (F(F(7)) + F(4)!!)$$

$$:= T(T(9)) \times 5 - T(T(7)) - T(4).$$

$$4769 := -F(9) \times F(6) + 7! + F(\sqrt{4})$$

$$:= -\sqrt{T(\sqrt{9})^6} + 7! - T(T(4)).$$

$$4776 := 6! + F(7) \times F(7) \times 4!$$

$$:= -T(T(6))/7 + 7! - T(T(T(T(\sqrt{4})))).$$

$$4783 := -F(3)^8 + 7! - F(\sqrt{4})$$

$$:= 3 + (\sqrt{T(8)})! + T(T(7)) \times T(4).$$

$$4784 := F(4!)/F(8) \times F(7)/F(4)!$$

$$:= -\sqrt{4^8} + (T(7)/4)!.$$

$$4786 := F(6)!/8 - F(F(7)) - F(F(F(4)!))$$

$$:= (6! - T(8)) \times 7 - \sqrt{4}.$$

$$4787 := 7! - F(8) - F(F(7)) + F(\sqrt{4})$$

$$:= 7! - T(-8 + T(7) + \sqrt{4}).$$

$$4791 := F(1 + 9 + 7) \times F(4)$$

$$:= -T(1 + T(T(\sqrt{9}))) + 7! + 4.$$

$$4792 := F(2) + \sqrt{9} \times F(-7 + 4!)$$

$$:= T(2 \times 9) \times T(7) + 4.$$

$$4793 := F(3) + \sqrt{9} \times F(-7 + 4!)$$

$$:= -T(T(T(3))) - T(\sqrt{9}) + 7! - T(4).$$

$$4795 := 5 \times ((\sqrt{9})! + F(F(7)) + F(4)!!)$$

$$:= -5 + (9 + 7) \times T(4!).$$

$$4807 := 7! - F(0! + 8 + 4)$$

$$:= 7! - T(T(\sqrt{T(08)})) - \sqrt{4}.$$

$$4809 := (T(\sqrt{9}) + 0!)! - T(T(8 - \sqrt{4}))$$

$$:= F(F((\sqrt{9})!)) \times F(F(-0! + 8)) - 4.$$

$$4851 := \sqrt{(1 + 5!) \times F(8)^4}$$

$$:= T(-1 + T(5) + 84).$$

$$4863 := -F(-3! + F(F(6))) + F(F(8))/\sqrt{4}$$

$$:= T(T(3)) \times T(T(6)) + 8 + 4.$$

$$4869 := (F(F(9) - F(F(6)))) \times F(8) - 4!$$

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

$$4874 := F(\sqrt{4} + F(7)) \times 8 - F(4)!$$

$$:= \sqrt{4} \times T(T(7)) \times \sqrt{T(8)} + \sqrt{4}.$$

$$4879 := F((\sqrt{9})!) \times F(7 + 8) - F(\sqrt{4})$$

$$:= -T(T(9)) + 7! - T(T(8)) + T(T(T(4))).$$

$$4883 := F(-3! + F(8)) \times 8 + F(4)$$

$$:= T(T(T(3))) \times T(\sqrt{T(8)}) + 8 \times 4.$$

$$4885 := F(5 + 8) \times F(8) - F(F(4)!)$$

$$:= T(T(5 + 8)) - T(\sqrt{T(8)}) + (T(T(\sqrt{4})))!.$$

$$4891 := F(F(1 + (\sqrt{9})!)) \times F(8) - \sqrt{4}$$

$$:= 1 + ((T(\sqrt{9})!) - T(T(\sqrt{T(8)}))) \times T(4).$$

$$4898 := F(F(8)) \times F(F(\sqrt{9})) + 8! - F(4)!$$

$$:= -8 + T(98) + T(T(4)).$$

$$4917 := F(F(7)) \times F(-1 + 9) + 4!$$

$$:= 7! - (-1 + T(\sqrt{9}))! - T(\sqrt{4}).$$

$$4925 := 5 \times (-2 + F(F(\sqrt{9})^4))$$

$$:= -T(5) + T(T(2))! \times 9 - T(T(T(4))).$$

$$4934 := F(F(F(4)!)) + (F(3!) + 9)^{F(4)}$$

$$:= -T(T(\sqrt{4})) + T(3!) \times 9 - T(T(T(4))).$$

$$4946 := (6 + F(\sqrt{4}))! - 94$$

$$:= T((T(6) - T(4)) \times 9) - 4.$$

$$4948 := (8! - F(4)!)/F((\sqrt{9})!) - \sqrt{4}$$

$$:= T(8 + T(4 + 9)) - \sqrt{4}.$$

$$4949 := (-\sqrt{9}!! + F(F(4)!))/F((\sqrt{9})!) - F(\sqrt{4})$$

$$:= -T(9 + 4) + (9 - \sqrt{4})!.$$

$$4955 := 5 \times (F(-5 + F(F((\sqrt{9}!)))) + 4)$$

$$:= 5 + T(5 + 94).$$

$$4959 := (F(\sqrt{9}) + 5)! - \sqrt{9^4}$$

$$:= 9 + T(5 + 94).$$

$$4964 := -T(T(4)) - T(6) + (9 - \sqrt{4})!$$

$$:= F(4)^{F(6)} - F(F(9))/\sqrt{4}.$$

$$4965 := (5! + F(6)! - (\sqrt{9}!!))/F(F(4)!)$$

$$:= -T(56) + 9^4.$$

$$4969 := -9!/6! + F(F(F((\sqrt{9}!)))/\sqrt{4}$$

$$:= 9!/6! + T(94).$$

$$4972 := F(2) \times 7! - F(9) \times \sqrt{4}$$

$$:= -2 + 7! - T(9 + \sqrt{4}).$$

$$4978 := -8 + 7! - 9 \times F(4)!$$

$$:= -8 + 7! - 9 \times T(T(\sqrt{4})).$$

$$4979 := -F(9) + 7! - \sqrt{9} - 4!$$

$$:= -T(9) + 7! - T(\sqrt{9}) - T(4).$$

$$4982 := (-F(2) + 8)! - F(9) - 4!$$

$$:= -T(2) + (T(\sqrt{T(8)})/\sqrt{9})! - T(T(4)).$$

$$4984 := (F(4)! - 8) \times (9 - \sqrt{4})$$

$$:= (T(4)! - 8!)/(\sqrt{9 \times 4})!.$$

$$4986 := F(6)!/8 - 9 \times F(4)!$$

$$:= 6! \times \sqrt{T(8)} + T(9 \times 4).$$

$$4987 := 7! - F(8) - F(9) + \sqrt{4}$$

$$:= 7! - \sqrt{(8 + T(9))^{\sqrt{4}}}.$$

$$4988 := (-F(F(8)) + 8!/\sqrt{9}) \times \sqrt{4}$$

$$:= 8!/8 + \sqrt{9} - T(T(4)).$$

$$4992 := (-2 + 9)! - F(\sqrt{9}) \times 4!$$

$$:= 2^{T(\sqrt{9})} \times T(\sqrt{9} \times 4).$$

$$4994 := (F(F(F(F(4)!))) - F((\sqrt{9})!) \times ((\sqrt{9})!! + 4!))$$

$$:= T(4! + 9) \times 9 - T(T(4)).$$

$$4997 := 7! - F(9) - \sqrt{9^{\sqrt{4}}}$$

$$:= 7! + T(\sqrt{9}) - T(9) - 4.$$

$$5019 := ((\sqrt{9})! + 1)! - F(F(0! + 5))$$

$$:= (T(\sqrt{9}) + 1)! - T(0! + 5).$$

$$5038 := (F(8)/3)! - \sqrt{-0! + 5}$$

$$:= (T(\sqrt{T(8)})/3)! - \sqrt{\sqrt{0! + T(5)}}.$$

$$5127 := 7! - 2 + F(\sqrt{1 + 5!})$$

$$:= 7! + T(T(T(2))) + T(\sqrt{1 + 5!}).$$

$$5139 := -F(F((\sqrt{9}!)) + (3! + 1)! + 5!$$

$$:= -T(T(\sqrt{9})) + (T(3) + 1)! + 5!.$$

$$5147 := 7! - F(F(4)! + 1) + 5!$$

$$:= 7! + \sqrt{4} + T(-1 + T(5)).$$

$$5157 := 7! - F(5 - 1) + 5!$$

$$:= 7! - T(\sqrt{5 - 1}) + 5!.$$

$$5159 := (F(\sqrt{9}) + 5)! - 1 + 5!$$

$$:= T(T(9)) \times 5 - 1 - T(5).$$

$$5187 := 7 \times (F(8) + (1 + 5)!)$$

$$:= 7 \times T(T(8) + \sqrt{-1 + 5}).$$

$$5267 := F(F(7)) - 6 + (2 + 5)!$$

$$:= 7! + T(T(6)) - \sqrt{T(T(T(2)))} - 5.$$

$$5279 := (\sqrt{9})! + F(F(7)) + (2 + 5)!$$

$$:= T(T(T(\sqrt{9}))) + 7! + T(2) + 5.$$

$$5334 := (F(F(F(4)!)) \times (F(F(3!)) + F(F(F(3) + 5))))$$

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

$$5346 := (F(F(6)) + F(\sqrt{4})) \times 3^5$$

$$:= 6 \times (T(T(\sqrt{4}))! + T(3 + T(5))).$$

$$5349 := (F(F(F((\sqrt{9}!)))) - F(F(4)!))/F(3) - 5! \\ := \sqrt{9} \times (T(T(T(4))) + 3^5).$$

$$5379 := \sqrt{9} + 7! + F(3)!/5! \\ := -T(T(\sqrt{9})) + 7! + 3 \times 5!.$$

$$5394 := -F(4)! + 9 \times (3!! - 5!) \\ := T(T(\sqrt{4})) \times (T(T(9)) - T(T(T(3)) - 5)).$$

$$5439 := (-F(9) + F(F(F(3)!)))/F(\sqrt{4+5}) \\ := T(T(\sqrt{9})) \times (T(T(T(3))) + T(\sqrt{4+5})).$$

$$5445 := (5! + F(\sqrt{4})) \times 45 \\ := (T(5) \times 4! + T(\sqrt{4})) \times T(5).$$

$$5449 := F(F(F((\sqrt{9}!)))/\sqrt{4} - (-F(\sqrt{4}) + 5)! \\ := -T(T(T(\sqrt{9}))) + 4 \times (T(T(T(4))) - 5!).$$

$$5469 := (F((\sqrt{9}!) - F(F(F(6))))/(F(4) - 5) \\ := T(9) + T(T(6)) \times 4! - 5!.$$

$$5474 := 4! \times F(F(7)) + \sqrt{4} - 5! \\ := -T(T(\sqrt{4}))! - T(T(7)) + T(T(4)) \times 5!.$$

$$5489 := F(F((\sqrt{9}!)) + F(F(8)))/\sqrt{4} - 5 \\ := -T(T(\sqrt{9} + 8)) + T(T(T(4))) \times 5.$$

$$5635 := -5! + F(3!) \times 6! - 5 \\ := T(T(5) \times T(3)) + T(T(T(\sqrt{T(6)-5}))).$$

$$5649 := 9 + F(4)! \times F(6) - 5! \\ := (T(\sqrt{9}))! - T(T(T(\sqrt{4}))) + T(-T(6) + 5!).$$

$$5728 := F(8)^2 \times F(7) - 5 \\ := T(T(\sqrt{T(8)})) \times T(2) + 7! - 5.$$

$$5734 := F(4)! - F(F(3!)) + 7! - 5 \\ := T(T(\sqrt{4}))! - T(T(3)) + 7! + 5.$$

$$5739 := F((\sqrt{9}!) \times 3!! - F(F(7) - 5) \\ := (T(9)^3 - 7!)/T(5).$$

$$5744 := (F(4)! - \sqrt{4}) \times (F(7) - 5) \\ := T(T(\sqrt{4}))! - T(T(T(\sqrt{4}))) + 7! + 5.$$

$$5748 := 8 \times F(4)! - 7 - 5 \\ := \sqrt{T(8)} \times (T(T(4)) + T(7!/5!)).$$

$$5749 := (\sqrt{9}!)! - F(4)! + 7! - 5 \\ := T(\sqrt{9})! + 4 + 7! - T(5).$$

$$5789 := F(9) + 8!/7 - 5 \\ := T(T(9)) \times \sqrt{T(8)} - T(T(7)) - T(5).$$

$$5794 := -F(4!)/9 + F(F(F(7) - 5)) \\ := -\sqrt{4} + T(T(9)) \times T(7)/5.$$

$$5795 := 5 \times (-\sqrt{9}!) + F(F(7)) \times 5 \\ := (-5 + T(T(9)) \times T(7))/5.$$

$$5796 := F(F(6) \times \sqrt{9})/(F(7) - 5) \\ := -T(6) \times \sqrt{9} \times (T(7) - 5!).$$

$$5799 := (\sqrt{9}!)! + F(9) + 7! + 5 \\ := T(\sqrt{9}) \times T(T(9)) - T(T(7)) - 5.$$

$$5846 := -6! + F(4)^8 + 5 \\ := -6! + T(\sqrt{4})^8 + 5.$$

$$5894 := F(4!) - F(9) - 8! - 5! \\ := -4^{T(\sqrt{9})} + T(T(8)) \times T(5).$$

$$5922 := F(2+2)! \times F(F(F((\sqrt{9}!)) - 5) \\ := 2 \times (T(T(T(2) + 9)) - 5!).$$

$$5928 := -8! + F((F(2) + \sqrt{9})!) - 5! \\ := 8 \times T(-2 + T(9) - 5).$$

$$5934 := F(4!) - F(3)! + (\sqrt{9}!) - 5! \\ := T(T(T(T(\sqrt{4})))) \times T(T(T(3)))/9 + 5.$$

$$5944 := (F(4)! + F(F(4)!)) \times F((\sqrt{9}!)) + 5! \\ := 4 \times T(T(T(4))) - T(T(T(\sqrt{9}))) + T(5).$$

$$5946 := 6 \times (4 + F(F(F((\sqrt{9}!)) - 5)) \\ := 6 \times (-4! + T(T(9))) - 5!.$$

$$5949 := F(F((\sqrt{9}!)) + F(4!) - F((\sqrt{9}!)! - 5! \\ := 9 \times (T(4 \times 9) - 5).$$

$$5968 := 8 \times (F(F(6)) + (\sqrt{9}!)! + 5) \\ := 8 \times (6! + T(T(\sqrt{9})) + 5).$$

$$5979 := -F(F((\sqrt{9}!)) + 7! + F((\sqrt{9}!) \times 5! \\ := -T(T(\sqrt{9})) + (T(T(7)) - T(\sqrt{9})) \times T(5).$$

$$\begin{aligned}
 5997 &:= 7! - \sqrt{9} + F((\sqrt{9})!) \times 5! \\
 &:= 7! + T(T(9)) - T(-\sqrt{9} + T(5)).
 \end{aligned}$$

$$\begin{aligned}
 6045 &:= F(5 \times 4) - (06)! \\
 &:= T(5) \times (-T(\sqrt{4}) + T(T(0! + 6))).
 \end{aligned}$$

$$\begin{aligned}
 6194 &:= F(F(F(F(4)!)))/F(\sqrt{9}) + 1 + 6! \\
 &:= -T(4) + (T(T(9)) - 1) \times 6.
 \end{aligned}$$

$$\begin{aligned}
 6237 &:= (F(F(7)) + F(3!)^2) \times F(F(6)) \\
 &:= T(7 \times 3) \times \sqrt{T(2)^6}.
 \end{aligned}$$

$$\begin{aligned}
 6247 &:= -F(F(7)) + F(4)^2 \times 6! \\
 &:= 7 + T(\sqrt{4}) \times (T(2^6)).
 \end{aligned}$$

$$\begin{aligned}
 6279 &:= F(F((\sqrt{9})!)) \times F(7) \times (2 + F(F(6))) \\
 &:= T(9 \times 7) \times T(2) + T(T(6)).
 \end{aligned}$$

$$\begin{aligned}
 6441 &:= -(1 + 4)! + F(4)^{F(6)} \\
 &:= T(T(-1 + T(4))) \times T(T(\sqrt{4})) + T(T(6)).
 \end{aligned}$$

$$\begin{aligned}
 6444 &:= F(4)^{\sqrt{4}} \times (-4 + 6!) \\
 &:= T(4!) + \sqrt{4} T(4) \times 6.
 \end{aligned}$$

$$\begin{aligned}
 6448 &:= 8 \times (F(4)!! - 4) + 6! \\
 &:= (-8 + T(T(T(\sqrt{4})))) \times T(T(4) + T(6)).
 \end{aligned}$$

$$\begin{aligned}
 6462 &:= (-2 + 6!) \times (F(4) + 6) \\
 &:= (T(2) + 6) \times (-\sqrt{4} + 6!).
 \end{aligned}$$

$$\begin{aligned}
 6464 &:= F(4)!! - F(6) \times (\sqrt{4} - 6!) \\
 &:= -4 + T(T(6)/T(\sqrt{4})) \times T(T(6)).
 \end{aligned}$$

$$\begin{aligned}
 6467 &:= -F(7) + (6 + F(4)) \times 6! \\
 &:= T(7) \times T(T(6)) - T(T(\sqrt{4}))/6.
 \end{aligned}$$

$$\begin{aligned}
 6474 &:= -F(4)! + (F(7) - 4) \times 6! \\
 &:= (T(T(4)) + T(7)) \times T(\sqrt{4} \times 6).
 \end{aligned}$$

$$\begin{aligned}
 6495 &:= -5 \times F(-F(F(\sqrt{9})) + F(F(F(4)!))) + F(6)! \\
 &:= T(5) + \sqrt{9} \sqrt{4} \times 6!.
 \end{aligned}$$

$$\begin{aligned}
 6498 &:= -F(8) \times \sqrt{9} + F(4)^{F(6)} \\
 &:= T(8) + 9 \times (-\sqrt{4} + 6!).
 \end{aligned}$$

$$\begin{aligned}
 6499 &:= F(F(\sqrt{9})) + 9 \times (\sqrt{4} + (6)!) \\
 &:= 9 \times T(\sqrt{9})! - \sqrt{4} + T(6).
 \end{aligned}$$

$$\begin{aligned}
 6578 &:= -8! \times F(7)/5! + F(F(F(6))) \\
 &:= T(-\sqrt{T(8)} + T(7)) \times (5 + T(6)).
 \end{aligned}$$

$$\begin{aligned}
 6579 &:= F(\sqrt{9} + 7) \times 5! - F(F(6)) \\
 &:= T(T(9)) \times 7 - T(T(5) + T(6)).
 \end{aligned}$$

$$\begin{aligned}
 6624 &:= F(4!)/(F(2) + \sqrt{6 \times 6}) \\
 &:= T(\sqrt{4}) \times (-T(2) + T(66)).
 \end{aligned}$$

$$\begin{aligned}
 6639 &:= -9^{F(3)} + F(6)!/6 \\
 &:= T(\sqrt{9}) + 3 \times T(66).
 \end{aligned}$$

$$\begin{aligned}
 6645 &:= F(5 \times 4) - 6!/6 \\
 &:= (T(5) \times (\sqrt{4} + (T(6) \times T(6))))).
 \end{aligned}$$

$$\begin{aligned}
 6669 &:= 9 \times (F(F(6)) + (\sqrt{6 \times 6})!) \\
 &:= (\sqrt{9} + (6)) \times (6! + T(6)).
 \end{aligned}$$

$$\begin{aligned}
 6698 &:= (8! - (\sqrt{9})!)/6 - F(F(6)) \\
 &:= (8! - T(\sqrt{9}))/6 - T(6).
 \end{aligned}$$

$$\begin{aligned}
 6714 &:= -F(4)! + (1 + 7)!/6 \\
 &:= -T(T(\sqrt{4})) + (1 + 7)!/6.
 \end{aligned}$$

$$\begin{aligned}
 6739 &:= F((\sqrt{9})!)/3! + F(7) + 6 \\
 &:= 9 \times T(3)! + T(7) + T(T(6)).
 \end{aligned}$$

$$\begin{aligned}
 6783 &:= (3!!/8 + F(F(7))) \times F(F(6)) \\
 &:= (3\sqrt{T(8)} - T(T(7))) \times T(6).
 \end{aligned}$$

$$\begin{aligned}
 6794 &:= F(4)^{F((\sqrt{9})!)} + F(7 + 6) \\
 &:= T(4) \times (T(\sqrt{9})!) - T(7 + T(6)).
 \end{aligned}$$

$$\begin{aligned}
 6798 &:= 8!/(\sqrt{9})! + F(7) \times 6 \\
 &:= \sqrt{T(8)} \times T(T(9)) + T(7) \times T(6).
 \end{aligned}$$

$$\begin{aligned}
 6885 &:= 5! + F(F(8) - F(8 - 6)) \\
 &:= -T(5) \times (\sqrt{T(8)} - T(T(8) - 6)).
 \end{aligned}$$

$$\begin{aligned}
 6888 &:= 8 \times F(8) + 8!/6 \\
 &:= (((8)!/\sqrt{T(8)}) + (8 \times (6))).
 \end{aligned}$$

$$\begin{aligned}
 6891 &:= F(-1 + F(F((\sqrt{9})!))) + F(8) \times 6 \\
 &:= (1 + 9) \times T(T(8)) + T(T(6)).
 \end{aligned}$$

$$\begin{aligned}
 6928 &:= -8! \times 2 + F((\sqrt{9})!) \times F(F(F(6))) \\
 &:= (\sqrt{T(8)})! - 2 + T(T(9)) \times 6.
 \end{aligned}$$

$$\begin{aligned} 6933 &:= F(-F(F(3)) + F(F(3!))) + F((\sqrt{9})!) \times F(F(6)) \\ &:= 3 + T(3) \times T(T(9)) + 6!. \end{aligned}$$

$$\begin{aligned} 6938 &:= F(8 + 3!) + \sqrt{9}^{F(6)} \\ &:= 8 + T(3) \times T(T(9)) + 6!. \end{aligned}$$

$$\begin{aligned} 6966 &:= 6 \times (F(F(6))^{F(\sqrt{9})} + 6!) \\ &:= (T(6) \times 6 + T(T(9))) \times 6. \end{aligned}$$

$$\begin{aligned} 6969 &:= F(9) \times 6 + F(-F(F(\sqrt{9})) + F(F(6))) \\ &:= (T(\sqrt{9})!) - T(T(6)) + 9 \times 6!. \end{aligned}$$

$$\begin{aligned} 6974 &:= F(F(F(4)!)) + F(F(7)) + F((\sqrt{9})!)/6 \\ &:= \sqrt{4} \times (T(T(7)) + T(T(-9 + T(6))))). \end{aligned}$$

$$\begin{aligned} 6984 &:= 4! \times F(8) + 9 \times 6! \\ &:= 4! \times (\sqrt{T(8)} \times T(9) + T(6)). \end{aligned}$$

$$\begin{aligned} 7245 &:= 5 \times F(F(F(4)!))^2 + 7! \\ &:= (5 + \sqrt{4}) \times T(T(2 + 7)). \end{aligned}$$

$$\begin{aligned} 7384 &:= \sqrt{F(F(4)!)} \times (8! + F(3!)) \times F(7) \\ &:= 4 \times ((\sqrt{T(8)})! + T(3)! + T(T(7))). \end{aligned}$$

$$\begin{aligned} 7441 &:= (1 + F(4)!)^4 + 7! \\ &:= (1 + T(T(\sqrt{4})))^4 + 7!. \end{aligned}$$

$$\begin{aligned} 7447 &:= 7^4 + F(4)! + 7! \\ &:= 7^4 + T(T(\sqrt{4})) + 7!. \end{aligned}$$

$$\begin{aligned} 7449 &:= (-\sqrt{9} + 4! \times 4!) \times F(7) \\ &:= \sqrt{9} \times (-\sqrt{4} + T(T(4) \times 7)). \end{aligned}$$

$$\begin{aligned} 7464 &:= F(F(4)!) + (F(6) + 4!) \times F(F(7)) \\ &:= 4! \times (6! - T(\sqrt{4}) - T(T(7))). \end{aligned}$$

$$\begin{aligned} 7475 &:= 5 \times (-F(F(7)) + F(4)!) + 7! \\ &:= (-5 + T(7)) \times T(-T(\sqrt{4}) + T(7)). \end{aligned}$$

$$\begin{aligned} 7479 &:= F(\sqrt{9})^{F(7)} - F(4)! + 7 \\ &:= T(\sqrt{9}) \times T(T(7)) + T(\sqrt{4}) + 7!. \end{aligned}$$

$$\begin{aligned} 7488 &:= (\sqrt{8 + 8})! \times 4! \times F(7) \\ &:= 8 \times T(8) \times (-\sqrt{4} + T(7)). \end{aligned}$$

$$\begin{aligned} 7491 &:= (1 - F(9)) \times (F(4)! - F(F(7))) \\ &:= -1 \times T(T(9)) + T(T(T(\sqrt{4}))) \times T(T(7)). \end{aligned}$$

$$\begin{aligned} 7494 &:= F(4)!/(\sqrt{9})! - F(\sqrt{4}) - F(F(7)) \\ &:= T(T(4)) \times T(9) - T(T(T(\sqrt{4}))) + 7!. \end{aligned}$$

$$\begin{aligned} 7497 &:= F(7) \times 9 \times F(F(F(4)!)) + 7! \\ &:= (T(7) + T(T(\sqrt{9}))) \times T(4! - 7). \end{aligned}$$

$$\begin{aligned} 7539 &:= \sqrt{9} \times (F(F(3!)) \times 5! - 7) \\ &:= \sqrt{9} \times (T(T(3)) \times 5! - 7). \end{aligned}$$

$$\begin{aligned} 7599 &:= \sqrt{9} \times (F(F((\sqrt{9})!)) \times 5! + F(7)) \\ &:= T(9 \times 9) + T(5! - T(7)). \end{aligned}$$

$$\begin{aligned} 7629 &:= (\sqrt{9})!! + F(2 \times F(6)) \times 7 \\ &:= (T(T(9)) - T(T(T(2)))) \times (-6! + T(T(7))). \end{aligned}$$

$$\begin{aligned} 7665 &:= \sqrt{5^6} \times F(F(6)) + 7! \\ &:= \sqrt{5^6} \times T(6) + 7!. \end{aligned}$$

$$\begin{aligned} 7679 &:= ((\sqrt{9})!! + F(-7 + F(F(6)))) \times 7 \\ &:= T(T(\sqrt{9})) \times (T(T(7)) - T(6)) - T(T(7)). \end{aligned}$$

$$\begin{aligned} 7686 &:= F(F(6)) \times F(8) \times 6 + 7! \\ &:= T(6) \times \sqrt{T(8)} \times T(6) + 7!. \end{aligned}$$

$$\begin{aligned} 7694 &:= F(4)!/(\sqrt{9})! - F(F(6)) - F(7) \\ &:= T(4!) \times \sqrt{\sqrt{9^6}} - T(T(7)). \end{aligned}$$

$$\begin{aligned} 7749 &:= F(F((\sqrt{9})!)) \times (-F(F(4)!) + F(7 + 7)) \\ &:= 9 \times T(T(T(4))) - 7 - 7. \end{aligned}$$

$$\begin{aligned} 7759 &:= \sqrt{9} \times F(5 + F(7)) + 7 \\ &:= T(T(\sqrt{9}))!/(T(5)! \times 7!) + 7. \end{aligned}$$

$$\begin{aligned} 7844 &:= F(F(F((F(4)!))) - (F(4)! + 8!)/F(7) \\ &:= (-T(4) + T(T(T(T(\sqrt{4})))) \times (\sqrt{T(8)} + T(7))). \end{aligned}$$

$$\begin{aligned} 7854 &:= F(F((F(4)!)) \times (5! + F(8) + F(F(7))) \\ &:= T(T(T(\sqrt{4 + 5)))) \times (\sqrt{T(8)} + T(7)). \end{aligned}$$

$$\begin{aligned} 7899 &:= -F(F((\sqrt{9})!)) + (\sqrt{9} + 8)!/7! \\ &:= -T(T(\sqrt{9})) + ((\sqrt{9} + 8)!/7!). \end{aligned}$$

$$\begin{aligned} 7932 &:= 2 + F(3! + 9) \times F(7) \\ &:= -T(T(2))! + T(T(3)) \times (T(\sqrt{9}) + T(T(7))). \end{aligned}$$

$$\begin{aligned} 7935 &:= 5 + F(3! + 9) \times F(7) \\ &:= T(5) + (T(T(T(3)))/T(T(\sqrt{9})))!/7!. \end{aligned}$$

$$\begin{aligned} 7938 &:= F(8) \times 3! \times 9 \times 7 \\ &:= \sqrt{T(8)} \times T(T(3)) \times 9 \times 7. \end{aligned}$$

$$\begin{aligned} 7947 &:= 7! + F(4)!! + \sqrt{9^7} \\ &:= 7! + T(T(\sqrt{4}))! + \sqrt{9^7}. \end{aligned}$$

$$\begin{aligned} 7952 &:= -2 \times 5! + F(\sqrt{9})^{F(7)} \\ &:= T(T(T(2)))! / (T(5) + \sqrt{9})! - T(7). \end{aligned}$$

$$\begin{aligned} 7974 &:= 4 \times F(7) + F(9) \times F(F(7)) \\ &:= -(T(T(\sqrt{4})))! + T(T(7)) \times 9 + 7!. \end{aligned}$$

$$\begin{aligned} 7986 &:= F(6) \times 8 + F(9) \times F(F(7)) \\ &:= 6! + T(\sqrt{T(8)}) + T(T(9)) \times 7. \end{aligned}$$

$$\begin{aligned} 7994 &:= 4! \times \sqrt{9} + F(9) \times F(F(7)) \\ &:= T(4!) \times T(T(T(\sqrt{9}))/\sqrt{9}) - T(T(7)). \end{aligned}$$

$$\begin{aligned} 8043 &:= F(3)! / (4 + 0!) - F(8) \\ &:= T(T(T(T(3)))) / T(\sqrt{4}) + (-0! + 8)!. \end{aligned}$$

$$\begin{aligned} 8064 &:= 4 \times F(6)! / (-0! + F(8)) \\ &:= (\sqrt{4} + 6)! / (-0! + \sqrt{T(8)}). \end{aligned}$$

$$\begin{aligned} 8361 &:= -1 - F(6 \times 3) + F(F(8)) \\ &:= (1 + 6)! + T(\sqrt{3^6}). \end{aligned}$$

$$\begin{aligned} 8367 &:= F(F(7)) \times 6^{F(3)} - F(8) \\ &:= 7! + 6 + T(\sqrt{3^6}). \end{aligned}$$

$$\begin{aligned} 8379 &:= ((\sqrt{9})! + F(7)) \times F(F(3!)) \times F(8) \\ &:= 9 \times (T(7) + T(T(3) + T(8))). \end{aligned}$$

$$\begin{aligned} 8427 &:= (-7! + 2) / \sqrt{4} + F(F(8)) \\ &:= (T(T(7)) - T(2)) \times T(T(T(\sqrt{4}))) - T(8). \end{aligned}$$

$$\begin{aligned} 8496 &:= (6! + (\sqrt{9})! \sqrt{4+F(8)}) \\ &:= (6! / \sqrt{9} - 4) \times T(8). \end{aligned}$$

$$\begin{aligned} 8546 &:= (-F(F(6)) + F(\sqrt{4})) \times 5! + F(F(8)) \\ &:= T(6)^{T(\sqrt{4})} + 5 - (\sqrt{T(8)})!. \end{aligned}$$

$$\begin{aligned} 8594 &:= F(F(F(4)!)) \times (F((\sqrt{9})!) - 5!) + F(F(8)) \\ &:= -T(T(T(4))) + T(\sqrt{9})! \times T(5) - T(T(8)). \end{aligned}$$

$$\begin{aligned} 8629 &:= (9!/2 - T(T(6))) / T(\sqrt{T(8)}) \\ &:= -F(F(9)/2) - 6! + F(F(8)). \end{aligned}$$

$$\begin{aligned} 8684 &:= -F(4)! \times F(8 + 6) + F(F(8)) \\ &:= (\sqrt{4} + T(T(8))) \times (T(6) - 8). \end{aligned}$$

$$\begin{aligned} 8793 &:= -3!! \times \sqrt{9} + 7 + F(F(8)) \\ &:= T(T(T(3))) + T(T(\sqrt{9})) \times T(T(7)) + T(8). \end{aligned}$$

$$\begin{aligned} 8799 &:= -(\sqrt{9})!! \times \sqrt{9} + F(7) + F(F(8)) \\ &:= (-T(\sqrt{9})! + T(T(9))) \times T(7) - T(\sqrt{T(8)}). \end{aligned}$$

$$\begin{aligned} 8932 &:= 2 \times (-3!! \times 9 + F(F(8))) \\ &:= (T(T(T(T(2)))) \times (T(T(T(3)))) + T(T(T(\sqrt{9})))) / \sqrt{T(8)}. \end{aligned}$$

$$\begin{aligned} 8944 &:= \sqrt{4} \times (F(F(4)!)/9 - 8) \\ &:= (-T(4) + T(\sqrt{4} + T(9))) \times 8. \end{aligned}$$

$$\begin{aligned} 9048 &:= (F(8 + F(4)!)) \times (0! + \sqrt{9})! \\ &:= (T(8) + T(\sqrt{4})) \times (0! + T(T(T(\sqrt{9}))))). \end{aligned}$$

$$\begin{aligned} 9238 &:= F(8)^3 - 2 - F(F((\sqrt{9})!)) \\ &:= (T(\sqrt{T(8)})^3 - 2 - T(T(\sqrt{9}))). \end{aligned}$$

$$\begin{aligned} 9243 &:= F(F(3!))^{F(4)} - 2 \times 9 \\ &:= 3 \times T((4! + 2) \times \sqrt{9}). \end{aligned}$$

$$\begin{aligned} 9249 &:= F(F((\sqrt{9})!))^{F(4)} - 2 \times (\sqrt{9})! \\ &:= T(T(9) + T(4)) \times T(T(2)) + 9. \end{aligned}$$

$$\begin{aligned} 9253 &:= F(F(3!))^{5-2} - F((\sqrt{9})!) \\ &:= -3 - 5 + T(T(T(2)))^{\sqrt{9}}. \end{aligned}$$

$$\begin{aligned} 9282 &:= (F(2) + F(8)^2) \times F(F((\sqrt{9})!)) \\ &:= T(T(2)) \times (8^{T(2)} + T(T(9))). \end{aligned}$$

$$\begin{aligned} 9284 &:= F(F(F(F(4)!))) \times F(8 + F(2)) - 9! \\ &:= \sqrt{4} + T(\sqrt{T(8)})^{T(2)} + T(T(\sqrt{9})). \end{aligned}$$

$$\begin{aligned} 9285 &:= 5! \times F(8) + F(-F(2) + F(F((\sqrt{9})!))) \\ &:= T(5) \times (T(T(8)) - 2 - T(9)). \end{aligned}$$

$$\begin{aligned} 9288 &:= 8 \times (F(8)^2 + (\sqrt{9})!!) \\ &:= \sqrt{T(8)} \times T(8) \times (-2 + T(9)). \end{aligned}$$

$$\begin{aligned} 9294 &:= F(F(F(4)!))^{F(9)} - F(2) + F(9) \\ &:= -T(\sqrt{4}) + (T(T(9)) - 2) \times 9. \end{aligned}$$

$$\begin{aligned} 9324 &:= (F(F(F(4)!))^2 + 3) \times F(F((\sqrt{9})!)) \\ &:= T(\sqrt{4}) \times (T(2) + 3 \times T(T(9))). \end{aligned}$$

$$\begin{aligned}
9339 &:= F(9 - F(3)) \times 3!! - F(F((\sqrt{9})!)) \\
&:= T(9 + 3) + T(T(3))^{\sqrt{9}}. \\
9345 &:= 5 \times F(F(F(4)!)) \times F(F(3) + 9) \\
&:= (-5 \times T(T(4)) + T(3)!) \times T(T(\sqrt{9})). \\
9347 &:= F(7) \times (-4 + 3!! + \sqrt{9}) \\
&:= T(T(7)) \times (\sqrt{4} + T(T(3))) + 9. \\
9348 &:= F(F(8)) - F(\sqrt{4}) - F(F(3!) + 9) \\
&:= (T(\sqrt{T(8)}) + T(T(T(4)))) - 3 \times T(\sqrt{9}). \\
9352 &:= F(2 + 5) \times 3!! - F((\sqrt{9})!) \\
&:= T(-2 + T(5)) + T(T(3))^{\sqrt{9}}. \\
9354 &:= F(\sqrt{4} + 5) \times 3!! - (\sqrt{9})! \\
&:= (-\sqrt{4} + T(5)) \times T(3)! - T(\sqrt{9}). \\
9357 &:= F(7) \times 5! \times 3! - \sqrt{9} \\
&:= (T(7) - T(5)) \times T(3)! - \sqrt{9}. \\
9366 &:= (F(F(6)) - F(6)) \times 3!! + (\sqrt{9})! \\
&:= 6 \times \left(T(6) + T \left(T \left(T \left(\sqrt{T(3)!/T(9)} \right) \right) \right) \right). \\
9369 &:= (F(9) - F(F(6))) \times 3!! + 9 \\
&:= (T(T(9)) + 6) \times 3 \times \sqrt{9}. \\
9378 &:= F(8) + F(7) \times 3!! - \sqrt{9} \\
&:= T(T(8)) \times (7 + T(3)) + T(\sqrt{9})!. \\
9381 &:= F(-1 + 8) \times 3!! + F(F((\sqrt{9})!)) \\
&:= (-1 + \sqrt{T(8)})! + T(T(3))^{\sqrt{9}}. \\
9387 &:= (-F(7) \times F(8) + 3!!) \times F(F((\sqrt{9})!)) \\
&:= 7 \times (T(T(8)) + T(3)! - T(9)). \\
9394 &:= (4 + 9) \times 3!! + F(9) \\
&:= (T(T(4) \times T(\sqrt{9}))) \times T(T(T(3)))/T(9). \\
9397 &:= F(7) \times (\sqrt{9} + 3!!) - F(\sqrt{9}) \\
&:= T(7) + (T(T(9)) + T(3)) \times 9. \\
9424 &:= F(4)!! + 2^{F(F(4)!)} \times F(9) \\
&:= T(T(T(4))) + T(2) \times T(4! \times \sqrt{9}). \\
9425 &:= 5^2 \times F(F(4)! + F((\sqrt{9})!)) \\
&:= (5 + T(T(2)!) \times (4 + 9). \\
9429 &:= (F(F((\sqrt{9})!))^2 + F(F(4)!) \times F(F((\sqrt{9})!)) \\
&:= (9!/T(T(2))! - T(T(4))) \times T(T(\sqrt{9})). \\
9438 &:= F(F(8)/3) \times (F(4)! + (\sqrt{9})!) \\
&:= (\sqrt{T(8)} + T(3)!) \times (4 + 9). \\
9447 &:= F(7) \times (F(4)! + F(4)!) + 9 \\
&:= T(T(7)) \times 4! - T(4!) + \sqrt{9}. \\
9472 &:= \sqrt{2^{F(7)} \times (F(4)! + F(F(F((\sqrt{9})!)))} \\
&:= T(T(T(2))) \times T(T(7)) + T(-\sqrt{4} + T(9)). \\
9476 &:= (-F(6)! + 7!)/4! + F(F(F((\sqrt{9})!)) \\
&:= (6 + T(T(7))) \times (\sqrt{4} + T(T(\sqrt{9}))). \\
9486 &:= (6! - F(8)^{\sqrt{4}}) \times F(9) \\
&:= 6 \times ((\sqrt{T(8)})! + T(-4 + T(9))). \\
9494 &:= F(F(F(4)!))^{\sqrt{9}} + F(4 + 9) \\
&:= (\sqrt{4} + T(T(\sqrt{9}))^{T(\sqrt{4})}) + T(T(T(\sqrt{9}))). \\
9495 &:= (5! + T(9 + 4)) \times T(9) \\
&:= 5 \times ((F((\sqrt{9})!)/F(F(F(4)!))) - F(F((\sqrt{9})!))). \\
9498 &:= F(F(8)) - (\sqrt{9})!! - F(4)!! - F((\sqrt{9})!) \\
&:= T(T(\sqrt{T(8)})) + T(T(\sqrt{9}))^{T(\sqrt{4})} + T(\sqrt{9}). \\
9534 &:= 4^{3!} \times 5 - F(F(F((\sqrt{9})!)) \\
&:= T(T(T(\sqrt{4}))) \times T(T(3) \times 5) - T(T(T(\sqrt{9}))). \\
9548 &:= F(F(8)) - F(F((\sqrt{4} + 5))) \times (\sqrt{9})! \\
&:= T(T(\sqrt{T(8)})) \times (4 + 5!)/\sqrt{9}. \\
9587 &:= -F(7) + 8! \times 5/F(F((\sqrt{9})!)) \\
&:= -T(T(7)) + T(T(8)) \times T(5) + \sqrt{9}. \\
9594 &:= F(4)!!/9 \times 5! - (\sqrt{9})! \\
&:= T(4 \times \sqrt{9}) \times (5! + \sqrt{9}). \\
9599 &:= (\sqrt{9})!!/9 \times 5! - F(F(\sqrt{9})) \\
&:= (-9 + (T(\sqrt{9})!) \times 5!)/9. \\
9644 &:= -F(4)!^4 + F(F(F(6))) - (\sqrt{9})! \\
&:= 4 \times (-4 + T(69)). \\
9645 &:= 5! \times 4! + F(F(F(6)) - F(F(\sqrt{9}))) \\
&:= -T(5) + 4 \times T(69).
\end{aligned}$$

$$9647 := (7! \times F(4)! - F(F(F(6))))/F(\sqrt{9}) \\ := -T(7) - T(T(\sqrt{4}))! + T(T(6)) \times T(9).$$

$$9674 := F(F(F(F(4)!))) - (F(F(7)) - F(F(6))) \times (\sqrt{9})! \\ := \sqrt{4} \times 7! - T(T(T(6)/\sqrt{9})).$$

$$9699 := (-F((\sqrt{9})!)! + 9 \times F(F(F(6))))/(\sqrt{9})! \\ := (T(9) - \sqrt{9}) \times T(T(6)) - \sqrt{9}.$$

$$9723 := F(F(3!)) \times (2 \times F(F(7)) - \sqrt{9}) \\ := T(T(T(3))) \times T(T(2)) \times 7 + T(T(\sqrt{9})).$$

$$9744 := (F(4!) \times \sqrt{4} - 7!)/9 \\ := 4! \times T(4! + \sqrt{7+9}).$$

$$9753 := -F(3!) \times 5! - F(F(7)) + F(F(F((\sqrt{9})!))) \\ := (\sqrt{T(T(3)) - 5})! \times T(T(7)) + 9.$$

$$9774 := F(4)! \times (7 \times F(F(7)) - F(\sqrt{9})) \\ := -T(4!) + 7! + 7! - T(\sqrt{9}).$$

$$9786 := (6 + 8) \times F(F(7)) \times \sqrt{9} \\ := (-T(6) + (\sqrt{T(8)})!) \times (-7 + T(T(\sqrt{9}))).$$

$$9849 := -F((\sqrt{9})! + F(F(4)!)) + F(F(8)) - (\sqrt{9})! \\ := (-T(T(9)) + T(T(T(4)))) - T(8) \times T(T(\sqrt{9})).$$

$$9864 := 4! \times (F(6 + 8) + F(9)) \\ := (T(4) \times T(T(6)) - T(T(8))) \times T(\sqrt{9}).$$

$$9947 := 7^{F(4)} \times (F((\sqrt{9})!) + F(F((\sqrt{9})!))) \\ := -T(T(7)) + T(4) \times T(T(9)) + \sqrt{9}.$$

$$9954 := (4 \times 5! - (\sqrt{9})!) \times F(F((\sqrt{9})!)) \\ := (4 \times 5! - T(\sqrt{9})) \times T(T(\sqrt{9})).$$

$$9974 := F(4)!! - 7 + F(F((\sqrt{9})!))^{(\sqrt{9})} \\ := T(T(\sqrt{4}))! + (-7 + T(T(\sqrt{9})))^{(\sqrt{9})}.$$

$$9981 := F(1 \times 8)^{(\sqrt{9})} + (\sqrt{9})! \\ := T(T(1 \times 8)) + 9 \times T(T(9)).$$

$$9983 := 3!! + F(8)^{(\sqrt{9})} + F(\sqrt{9}) \\ := (-T(T(3)) + T(T(8)) \times T(9))/\sqrt{9}.$$

$$9984 := F(4)!! + F(8)^{(\sqrt{9})} + \sqrt{9} \\ := \sqrt{4^8} \times (T(9) - T(\sqrt{9})).$$

$$9985 := -5! \times 8 + F(F(F((\sqrt{9})!))) - F(F(\sqrt{9})) \\ := T(5) \times T(T(8)) - T(9)/9.$$

$$9989 := F((\sqrt{9})!) + F(8)^{(\sqrt{9})} + (\sqrt{9})! \\ := (T(9) \times T(T(8)) - \sqrt{9})/\sqrt{9}.$$

$$9993 := F(F(F(3!))) + F(9) - F(F((\sqrt{9})!) + F((\sqrt{9})!)) \\ := (T(T(T(3))) - 9) \times T(9) + \sqrt{9}.$$

$$9994 := T(4)^{\sqrt{T(\sqrt{9})!/T(9)}} - T(\sqrt{9}) \\ := F(F(F(F(4)!))) - (F(9) - (\sqrt{9})!) \times F(9).$$

$$9995 := -5! \times F((\sqrt{9})!) + F(F(F((\sqrt{9})!))) + 9 \\ := (5 + ((T(T(T(\sqrt{9}))) - 9) \times T(9))).$$

$$9996 := F(F(6)) \times ((\sqrt{9})! + F((\sqrt{9})!)) \times F(9) \\ := (T(T(6)) - 9) \times T(9) + T(\sqrt{9}).$$

$$9998 := (F(F(8)) + F(F((\sqrt{9})!))) \times F(9) - 9! \\ := 8 + (T(T(T(\sqrt{9}))) - 9) \times T(9).$$

3. PATTERNED NUMBERS

There are numbers those can be extended just multiplying by 10 without loss of properties, and so on. This types of numbers, we call **patterned numbers**. This kind of numbers first introduced by Madachy [4], 1966, pp. 174-175. This section deals with **selfie patterned numbers** having **Fibonacci sequence** and **triangular numbers** simultaneously.

$$48 := F(4)! \times 8 = T(T(\sqrt{4})) \times 8 \\ 480 := F(4)! \times 80 = T(T(\sqrt{4})) \times 80 \\ 4800 := F(4)! \times 800 = T(T(\sqrt{4})) \times 800 \\ 63 := F(F(6)) \times 3 = T(6) \times 3 \\ 630 := F(F(6)) \times 30 = T(6) \times 30 \\ 6300 := F(F(6)) \times 300 = T(6) \times 300$$

$$84 := F(8) \times 4 = T(\sqrt{T(8)}) \times 4$$

$$840 := F(8) \times 40 = T(\sqrt{T(8)}) \times 40$$

$$8400 := F(8) \times 400 = T(\sqrt{T(8)}) \times 400$$

$$147 := 1 \times F(F(F(4)!)) \times 7 = T(T(-1 + 4)) \times 7$$

$$1470 := 1 \times F(F(F(4)!)) \times 70 = T(T(-1 + 4)) \times 70$$

$$14700 := 1 \times F(F(F(4)!)) \times 700 = T(T(-1 + 4)) \times 700$$

$$315 := F(F(3!)) \times 15 = T(T(3)) \times 15$$

$$3150 := F(F(3!)) \times 150 = T(T(3)) \times 150$$

$$31500 := F(F(3!)) \times 1500 = T(T(3)) \times 1500$$

$$486 := \sqrt{F(4)^8} \times 6 = \left(\sqrt{T(\sqrt{4})^8} \right) \times 6$$

$$4860 := \sqrt{F(4)^8} \times 60 = \left(\sqrt{T(\sqrt{4})^8} \right) \times 60$$

$$48600 := \sqrt{F(4)^8} \times 600 = \left(\sqrt{T(\sqrt{4})^8} \right) \times 600$$

$$564 := (5! + F(F(6))) \times 4 = (5! + T(6)) \times 4$$

$$5640 := (5! + F(F(6))) \times 40 = (5! + T(6)) \times 40$$

$$56400 := (5! + F(F(6))) \times 400 = (5! + T(6)) \times 400$$

$$1165 := F(F(1 \times 1 + 6)) \times 5 = (1 + 1 + T(T(6))) \times 5$$

$$11650 := F(F(1 \times 1 + 6)) \times 50 = (1 + 1 + T(T(6))) \times 50$$

$$116500 := F(F(1 \times 1 + 6)) \times 500 = (1 + 1 + T(T(6))) \times 500$$

$$1365 := 13 \times F(F(6)) \times 5 = 13 \times T(6) \times 5$$

$$13650 := 13 \times F(F(6)) \times 50 = 13 \times T(6) \times 50$$

$$136500 := 13 \times F(F(6)) \times 500 = 13 \times T(6) \times 500$$

$$1575 := F(F(1 + 5)) \times 75 = T(1 + 5) \times 75$$

$$15750 := F(F(1 + 5)) \times 750 = T(1 + 5) \times 750$$

$$157500 := F(F(1 + 5)) \times 7500 = T(1 + 5) \times 7500$$

$$1645 := F(16)/F(4) \times 5 = (-1 + 6 \times T(T(4))) \times 5$$

$$16450 := F(16)/F(4) \times 50 = (-1 + 6 \times T(T(4))) \times 50$$

$$164500 := F(16)/F(4) \times 500 = (-1 + 6 \times T(T(4))) \times 500$$

$$1885 := F(1 + F(8) - 8) \times 5 = (-1 + T(\sqrt{T(8)} + T(\sqrt{T(8)}))) \times 5$$

$$18850 := F(1 + F(8) - 8) \times 50 = (-1 + T(\sqrt{T(8)} + T(\sqrt{T(8)}))) \times 50$$

$$188500 := F(1 + F(8) - 8) \times 500 = (-1 + T(\sqrt{T(8)} + T(\sqrt{T(8)}))) \times 500$$

$$2079 := (-2 + F(F(07))) \times 9 = T(T(2) \times 07) \times 9$$

$$20790 := (-2 + F(F(07))) \times 90 = T(T(2) \times 07) \times 90$$

$$207900 := (-2 + F(F(07))) \times 900 = T(T(2) \times 07) \times 900$$

$$\begin{aligned}
2435 &:= (-F(F(F(2) + F(4)!)) + 3!) \times 5 = ((T(T(2)))! - \sqrt{4} - T(T(T(3)))) \times 5 \\
24350 &:= (-F(F(F(2) + F(4)!)) + 3!) \times 50 = ((T(T(2)))! - \sqrt{4} - T(T(T(3)))) \times 50 \\
243500 &:= (-F(F(F(2) + F(4)!)) + 3!) \times 500 = ((T(T(2)))! - \sqrt{4} - T(T(T(3)))) \times 500 \\
2645 &:= (2 + F(F(6)))^{\sqrt{4}} \times 5 = (2 + T(6))^{\sqrt{4}} \times 5 \\
26450 &:= (2 + F(F(6)))^{\sqrt{4}} \times 50 = (2 + T(6))^{\sqrt{4}} \times 50 \\
264500 &:= (2 + F(F(6)))^{\sqrt{4}} \times 500 = (2 + T(6))^{\sqrt{4}} \times 500 \\
2688 &:= 2 \times F(6) \times F(8) \times 8 = 2 \times T(6) \times 8 \times 8 \\
26880 &:= 2 \times F(6) \times F(8) \times 80 = 2 \times T(6) \times 8 \times 80 \\
268800 &:= 2 \times F(6) \times F(8) \times 800 = 2 \times T(6) \times 8 \times 800 \\
3087 &:= F(F(3!)) \times F(08) \times 7 = T(T(3)) \times T(\sqrt{T(08)}) \times 7 \\
30870 &:= F(F(3!)) \times F(08) \times 70 = T(T(3)) \times T(\sqrt{T(08)}) \times 70 \\
308700 &:= F(F(3!)) \times F(08) \times 700 = T(T(3)) \times T(\sqrt{T(08)}) \times 700 \\
3325 &:= (3! - F(F(3!) + 2)) \times 5 = (T(3)! - T(T(T(3) - 2))) \times 5 \\
33250 &:= (3! - F(F(3!) + 2)) \times 50 = (T(3)! - T(T(T(3) - 2))) \times 50 \\
332500 &:= (3! - F(F(3!) + 2)) \times 500 = (T(3)! - T(T(T(3) - 2))) \times 500 \\
3375 &:= 3 \times (-F(3!) + F(F(7))) \times 5 = T(3 \times 3) \times 75 \\
33750 &:= 3 \times (-F(3!) + F(F(7))) \times 50 = T(3 \times 3) \times 750 \\
337500 &:= 3 \times (-F(3!) + F(F(7))) \times 500 = T(3 \times 3) \times 7500 \\
3485 &:= (3! - \sqrt{4} - F(8)) \times 5 = (T(T(3)) + T(4) + T(T(8))) \times 5 \\
34850 &:= (3! - \sqrt{4} - F(8)) \times 50 = (T(T(3)) + T(4) + T(T(8))) \times 50 \\
348500 &:= (3! - \sqrt{4} - F(8)) \times 500 = (T(T(3)) + T(4) + T(T(8))) \times 500 \\
3525 &:= (F(F(3!)) + 5!) \times 25 = (T(T(3)) + 5!) \times 25 \\
35250 &:= (F(F(3!)) + 5!) \times 250 = (T(T(3)) + 5!) \times 250 \\
352500 &:= (F(F(3!)) + 5!) \times 2500 = (T(T(3)) + 5!) \times 2500 \\
3528 &:= F(3 + 5)^2 \times 8 = (T(3) + T(5))^2 \times 8 \\
35280 &:= F(3 + 5)^2 \times 80 = (T(3) + T(5))^2 \times 80 \\
352800 &:= F(3 + 5)^2 \times 800 = (T(3) + T(5))^2 \times 800 \\
3545 &:= (3! - 5 - F(4!)) \times 5 = (T(3)! - T(5) + 4) \times 5 \\
35450 &:= (3! + 5 - F(4!)) \times 50 = (T(3)! - T(5) + 4) \times 50 \\
354500 &:= (3! + 5 - F(4!)) \times 500 = (T(3)! - T(5) + 4) \times 500 \\
3605 &:= (F(3) + 6! - 0!) \times 5 = (T(3)! + (6 \times 0!)) \times 5 \\
36050 &:= (F(3) + 6! - 0!) \times 50 = (T(3)! + (6 \times 0!)) \times 50 \\
360500 &:= (F(3) + 6! - 0!) \times 500 = (T(3)! + (6 \times 0!)) \times 500 \\
3635 &:= (3^6 - F(3)) \times 5 = (T(3)! + T(6)/3) \times 5 \\
36350 &:= (3^6 - F(3)) \times 50 = (T(3)! + T(6)/3) \times 50 \\
363500 &:= (3^6 - F(3)) \times 500 = (T(3)! + T(6)/3) \times 500
\end{aligned}$$

$$\begin{aligned}
3705 &:= (3!! + F(7 + 0!)) \times 5 = T(37 + 0!) \times 5 \\
37050 &:= (3!! + F(7 + 0!)) \times 50 = T(37 + 0!) \times 50 \\
370500 &:= (3!! + F(7 + 0!)) \times 500 = T(37 + 0!) \times 500 \\
3944 &:= (-F(F(3)) + F(F(\sqrt{9})^4)) \times 4 = (T(3) + T(T(9)) - T(T(4))) \times 4 \\
39440 &:= (-F(F(3)) + F(F(\sqrt{9})^4)) \times 40 = (T(3) + T(T(9)) - T(T(4))) \times 40 \\
394400 &:= (-F(F(3)) + F(F(\sqrt{9})^4)) \times 400 = (T(3) + T(T(9)) - T(T(4))) \times 400 \\
4293 &:= (F(4)!! \times 2 - 9) \times 3 = T(4! + 29) \times 3 \\
42930 &:= (F(4)!! \times 2 - 9) \times 30 = T(4! + 29) \times 30 \\
429300 &:= (F(4)!! \times 2 - 9) \times 300 = T(4! + 29) \times 300 \\
5187 &:= ((5 + 1)! + F(8)) \times 7 = T(\sqrt{5 - 1} + T(8)) \times 7 \\
51870 &:= ((5 + 1)! + F(8)) \times 70 = T(\sqrt{5 - 1} + T(8)) \times 70 \\
518700 &:= ((5 + 1)! + F(8)) \times 700 = T(\sqrt{5 - 1} + T(8)) \times 700 \\
5825 &:= F(5 + 8) \times 25 = 5 \times (T(T(\sqrt{T(8)})) + 2) \times 5 \\
58250 &:= F(5 + 8) \times 250 = 5 \times (T(T(\sqrt{T(8)})) + 2) \times 50 \\
582500 &:= F(5 + 8) \times 2500 = 5 \times (T(T(\sqrt{T(8)})) + 2) \times 500 \\
6615 &:= F(F(6)) \times F(F(6)) \times 15 = T(6) \times T(6) \times 15 \\
66150 &:= F(F(6)) \times F(F(6)) \times 150 = T(6) \times T(6) \times 150 \\
661500 &:= F(F(6)) \times F(F(6)) \times 1500 = T(6) \times T(6) \times 1500 \\
7875 &:= (F(F(7)) - 8) \times 7 \times 5 = T(-7 + T(\sqrt{T(8)})) \times 75 \\
78750 &:= (F(F(7)) - 8) \times 7 \times 50 = T(-7 + T(\sqrt{T(8)})) \times 750 \\
787500 &:= (F(F(7)) - 8) \times 7 \times 500 = T(-7 + T(\sqrt{T(8)})) \times 7500 \\
9425 &:= F((\sqrt{9})! + F(F(4)!)) \times 25 = (-T(\sqrt{9}) + T(T(T(4)) + T(T(2)))) \times 5 \\
94250 &:= F((\sqrt{9})! + F(F(4)!)) \times 250 = (-T(\sqrt{9}) + T(T(T(4)) + T(T(2)))) \times 50 \\
942500 &:= F((\sqrt{9})! + F(F(4)!)) \times 2500 = (-T(\sqrt{9}) + T(T(T(4)) + T(T(2)))) \times 500
\end{aligned}$$

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