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Factorial-Type Selfie Expressions With Fibonacci and Triangular Values

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Abstract

*This paper is an extension of author's previous work [15, 16] on **selfie expressions**. It brings numbers in such a way that both sides of the expressions are with same digits. This work brings expressions where one side with factorial, and other side with Fibonacci and/or with triangular numbers having same digit's order. This we have done in different ways. One expressions with Factorial, Fibonacci and Triangular values. Second, expressions with Factorial and Fibonacci values. Third, expressions with Factorial and Triangular numbers. The operations used are addition, subtraction and multiplication along with composite relation. The results are limited up to five terms expressions. Equality expressions with Fibonacci and Triangular values are given in another work [18]*

Contents

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1 Selfie Expressions

Selfie expressions are very much similar to **selfie numbers** [9]. Selfie numbers are represented by its own digits by use of some operations, while **selfie expressions** are the expressions where both sides have same digits, not necessarily same operations on both sides, i.e., **same digits equality expressions**. Below are different ways of expressing equalities with same digits on both sides:

- **Multiplicative Equalities**

$$abcd... \times efgh... = cbad... \times gfhe..\ \ \forall a, b, c, d, e, ... \in \mathbb{N}_+. \tag{1}$$

- **Power and Addition**

$$a^b + c^d + ... = ab + cd + ...,\ \ \forall a, b, c, d, .. \in \mathbb{N}. \tag{2}$$

- **Factorial and Power**

$$a! \times b! + (c! + d!) \times e! + ... = a^a + b^b - c^c \times (d^d - e^e) + ...,\ \ \forall a, b, c, d, e, ... \in \mathbb{N}_+,\ \text{etc.} \tag{3}$$

$$a! \times b! + (c! + d!) \times e! + ... = a^c + (b^d - c^a) \times d^e - e^b + ...,\ \ \forall a, b, c, d, e, ... \in \mathbb{N}_+,\ \text{etc.} \tag{4}$$

We observe that the (4) is different from the (3) in right side of the expression. In case (3), the power of digits is same as of bases. In case of (4), it is not necessary that the power is same as of digits, but is a permutation of same digits as of bases. See below more general way.

$$(a!, b!, c!, ...) = (a^a, b^b, c^c, ..)$$
$$(a!, b!, c!, ...) = (a, b, c, ..)^{(a,b,c,...)}.$$

The first expression is simplified form of (3) and the second expression is similar to (4).

Let us explain one by one, the idea of above four **selfie expressions**, i.e., (1)-(4).

1.1 Multiplicative Selfie Equalities

This subsection brings results based on the expression (1). By **multiplicative selfie equalities**, we understand that there are equalities, where each side is separated by operation of multiplications having same digits on both sides, not necessarily in same order. There are many ways of writing these kind of numbers explained in following subsections.

1.1.1 First Type

In this case, we have multiplicative equalities with equal number of digits on both sides and also in each multiplicative factor. The operation of multiplications is with number and its reverse forming a palindromic-type expression. For example, Based on idea of expressions are written in such a way that numbers formed by same digits multiplied by its reverse are equal to another group of multiplicative factors with same digits but of different numbers. See below some examples:

$\diamond$ $37468 \times 86473 = 47386 \times 68374$.
$\diamond$ $37596 \times 69573 = 39756 \times 65793$.
$\diamond$ $39648 \times 84693 = 48396 \times 69384$.
$\diamond$ $45495 \times 59454 = 49545 \times 54594$.
$\diamond$ $46069 \times 96064 = 64096 \times 69046$.
$\diamond$ $120024 \times 420021 = 210042 \times 240012$.
$\diamond$ $102204 \times 402201 = 201402 \times 204102$.
$\diamond$ $130026 \times 620031 = 260013 \times 310062$.
$\diamond$ $120036 \times 630021 = 210063 \times 360012$.
$\diamond$ $102306 \times 603201 = 201603 \times 306102$.

1.1.2 Second Type

The second case is similar to first one, having the same number of digits in each multiplicative factor but not forming a palindromic-type expression. For example,

$\diamond$ $2017 \times 3404 = 1702 \times 4034$
$\diamond$ $2017 \times 6808 = 1702 \times 8068$.
$\diamond$ $1729 \times 3584 = 1792 \times 3458$.
$\diamond$ $1729 \times 3854 = 1927 \times 3458$.
$\diamond$ $1729 \times 4358 = 2179 \times 3458$.
$\diamond$ $1729 \times 4732 = 2197 \times 3724$.
$\diamond$ $1729 \times 5438 = 2719 \times 3458$.
$\diamond$ $1729 \times 5781 = 1927 \times 5187$.

1.1.3 Third Type

The third case is similar to second one, but there is no rule with order of digits. Only thing is that on both sides of the equality sign, there are same digits. There are many numbers, but we have written only those with more than one equality sign. See below examples,

$\diamond$ $162 \times 8064 = 216 \times 6048 = 648 \times 2016$.
$\diamond$ $162 \times 8073 = 207 \times 6318 = 702 \times 1863$.
$\diamond$ $17 \times 35945 = 35 \times 17459 = 395 \times 1547$.
$\diamond$ $176 \times 7469 = 194 \times 6776 = 776 \times 1694$.
$\diamond$ $18 \times 39879 = 189 \times 3798 = 378 \times 1899$.
$\diamond$ $18 \times 41553 = 54 \times 13851 = 513 \times 1458$.

$\diamond$ $1782 \times 43956 = 2178 \times 35964 = 3564 \times 21978 = 4356 \times 17982$.
$\diamond$ $18 \times 2830464 = 486 \times 104832 = 1404 \times 36288 = 3024 \times 16848$.
$\diamond$ $18 \times 5204736 = 162 \times 578304 = 3456 \times 27108 = 4518 \times 20736$.
$\diamond$ $198 \times 179982 = 297 \times 119988 = 1188 \times 29997 = 1782 \times 19998$.
$\diamond$ $198 \times 339966 = 396 \times 169983 = 1683 \times 39996 = 3366 \times 19998$.
$\diamond$ $2 \times 12089121 = 11 \times 2198022 = 222 \times 108911 = 1221 \times 19802$.

Due to large quantity of numbers, we worked only with double or higher equality signs. Some times these expressions with single equality are famous as **vamp numbers**.

1.2 Power and Addition

Following the idea of expression (2) the author wrote the numbers **2017** [10] and **1729** [11] as:

$$\begin{aligned}
\mathbf{2017} &:= 4^4 + 41^2 + 77^0 + 79^1 && = 44 + 412 + 770 + 791.\\
&:= 1^4 + 44^2 + 77^0 + 79^1 && = 14 + 442 + 770 + 791.\\
&:= 2^4 + 2^8 + 4^2 + 12^3 + 180^0 && = 24 + 28 + 42 + 123 + 1800.\\
&:= 1^1 + 3^6 + 5^4 + 5^4 + 6^2 + 180^0 && = 11 + 36 + 54 + 54 + 62 + 1800.
\end{aligned}$$

$$\begin{aligned}
\mathbf{1729} &:= 2^7 + 40^2 + 130^0 && = 27 + 402 + 1300.\\
&:= 2^6 + 40^2 + 64^1 + 66^0 && = 26 + 402 + 641 + 660.\\
&:= 1^6 + 41^2 + 46^1 + 84^0 && = 16 + 412 + 461 + 840.
\end{aligned}$$

Below are more examples,

$$\begin{aligned}
\mathbf{81} &:= 2^3 + 2^6 + 3^2 = 23 + 26 + 32.\\
\mathbf{99} &:= 2^3 + 3^3 + 4^3 = 23 + 33 + 43.\\
\mathbf{121} &:= 2^3 + 2^6 + 7^2 = 23 + 26 + 72.\\
\mathbf{170} &:= 2^6 + 5^2 + 9^2 = 26 + 52 + 92.\\
\mathbf{246} &:= 2^2 + 11^2 + 11^2 = 22 + 112 + 112.
\end{aligned}$$

$$\begin{aligned}
\mathbf{246} &:= 5^2 + 5^2 + 14^2 = 52 + 52 + 142.\\
\mathbf{266} &:= 4^2 + 9^2 + 13^2 = 42 + 92 + 132.\\
\mathbf{286} &:= 6^2 + 9^2 + 13^2 = 62 + 92 + 132.\\
\mathbf{306} &:= 8^2 + 11^2 + 11^2 = 82 + 112 + 112.\\
&:= 9^2 + 9^2 + 12^2 = 92 + 92 + 122.
\end{aligned}$$

In the above examples, the equality expressions are formed by three terms on both sides, while the numbers 2017 and 1729 are with **different terms expressions**. More detailed study can be seen at author's work [14, 15]. In these works, instead of using only positive sign, both positive and negative signs are used. For more study on numbers refer historical work [1, 2, 3].

1.3 Factorial and Power

Recently, author [15, 16] worked on results arising due to (3) and (4). This we have done in three different ways. One without any repetition of digits. The second we have done with repetition of digits. Third with permutable powers. Both sides of the equality are with the operations as, addition, subtraction, and multiplication along with composite relation. See below some examples in each case:

1.3.1 Different Digits

$$\begin{aligned}
\mathbf{144} &:= (2! - 1!) \times 3! \times 4! = -2^2 \times (1^1 + 3^3) + 4^4.\\
\mathbf{147} &:= 1! + 2! + 3! \times 4! = -1^1 - 2^2 \times 3^3 + 4^4.\\
\mathbf{148} &:= (1! + 4!) \times 3! - 2! = 1^1 \times 4^4 - 3^3 \times 2^2.\\
\mathbf{152} &:= 2! + 3! \times (1! + 4!) = 2^2 \times (-3^3 + 1^1) + 4^4.\\
\mathbf{286} &:= (-1! + 3! \times 4!) \times 2! = -1^1 + 3^3 + 4^4 + 2^2.\\
\mathbf{287} &:= -1! + 2! \times 3! \times 4! = 1^1 \times 2^2 + 3^3 + 4^4.\\
\mathbf{288} &:= 1! \times 2! \times 3! \times 4! = 1^1 + 2^2 + 3^3 + 4^4.
\end{aligned}$$

1.3.2 Repetition of Digits

$$\begin{aligned}
\mathbf{108} &:= 2! \times (3! + 4! + 4!) && = 2^2 \times 3^3 + 4^4 - 4^4 \\
&:= 3! \times (3! + 3! \times 2!) && = (3^3 + 3^3 - 3^3) \times 2^2 \\
&:= -5! + 2! \times (5! - 3!) && = (5^5 + 2^2 - 5^5) \times 3^3 \\
&:= (-3! + 5!) \times 2! - 5! && = 3^3 \times (5^5 + 2^2 - 5^5) \\
&:= (2! \times 3! + 3!) \times 3! \times 1! && = (2^2 + 3^3 - 3^3) \times 3^3 \times 1^1 \\
&:= (1! \times 1! + 2!) \times 3! \times 3! && = (-1^1 - 1^1 + 2^2) \times (3^3 + 3^3) \\
&:= (1! \times 3! + 3! + 3!) \times 3! && = 1^1 \times 3^3 + 3^3 + 3^3 + 3^3 \\
&:= (4! + 3! \times 1! + 4!) \times 2! && = (4^4 + 3^3 \times 1^1 - 4^4) \times 2^2 \\
&:= (-3! + 5! \times 1!) \times 2! - 5! && = (5^5 \times 1^1 + 3^3 - 5^5) \times 2^2.
\end{aligned}$$

$$\begin{aligned}
\mathbf{1008} &:= ((4! - 2!) \times 4! - 4!) \times 2! = (4^4 - 2^2 - 4^4 + 4^4) \times 2^2 \\
&:= (2! + 2! + 4!) \times 3! \times 3! && = 2^2 \times (-2^2 + 4^4) - 3^3 + 3^3 \\
&:= (2! - 1! + 3!) \times 3! \times 4! && = -2^2 + (1^1 + 3^3) \times 3^3 + 4^4 \\
&:= 2! \times (2! \times (5! + 5!) + 4!) = 2^2 \times (-2^2 - 5^5 + 5^5 + 4^4).
\end{aligned}$$

1.3.3 Permutable Power

In the above two subsections powers on left side are the same as of bases, below are examples, where powers permutations of bases:

$$\begin{aligned}
\mathbf{3648} &:= 1! \times 6! + (2! + 5!) \times 4! = (1^5 + 6^2) \times 2^6 + 5^1 \times 4^4. \\
&:= 1! \times 6! + (5! + 2!) \times 4! = (1^4 \times 6^2 + 5^1) \times 2^6 + 4^5.
\end{aligned}$$

$$\begin{aligned}
\mathbf{3649} &:= 1! + 4! \times (2! + 5!) + 6! && = 1^4 + 4^5 + 2^6 \times (5^1 + 6^2). \\
\mathbf{3690} &:= (1! + 2! + 5!) \times (3! + 4!) = (1^2 + 2^1) \times (5^3 + 3^4 + 4^5). \\
\mathbf{3744} &:= (1! \times 3! + 5!) \times 4! + 6! && = (1^6 \times 3^5 + 5^3 + 4^4) \times 6^1. \\
\mathbf{3745} &:= 1! + (3! + 5!) \times 4! + 6! && = 1^6 + (3^5 + 5^3 + 4^4) \times 6^1.
\end{aligned}$$

$$\begin{aligned}
\mathbf{3840} &:= (1! \times 4! + 2! + 3!) \times 5! = (1^4 + 4^3) \times (2^1 + 3^2) + 5^5. \\
&\qquad\qquad = 1^4 \times 4^3 \times (2^5 + 3^1 + 5^2). \\
&:= 1! \times 5! \times (4! + 2!) + 6! = (1^5 + 5^1) \times 4^4 + 2^6 \times 6^2.
\end{aligned}$$

$$\begin{aligned}
\mathbf{4320} &:= (2! - 1!) \times 3! \times 6! = (-2^3 - 1^2 + 3^6) \times 6^1. \\
&\qquad\qquad = 2^1 \times (1^6 + 3^2) \times 6^3. \\
&:= (2! - 1!) \times 7! - 6! = (2^7 - 1^6 - 7^1) \times 6^2.
\end{aligned}$$

$$\begin{aligned}
\mathbf{4326} &:= 3! \times (2! - 1! + 6!) = (3^6 - 2^3) \times 1^2 \times 6^1.\\
\mathbf{4332} &:= 1! \times 3! \times (2! + 6!) = (1^2 + 3^6 - 2^3) \times 6^1.\\
\mathbf{4608} &:= 3! \times (4! \times 2! + 6!) = 3^3 \times 4^4 - 2^6 \times 6^2.\\
\mathbf{4800} &:= 1! \times 7! - 2! \times 5! \quad = (-1^7 + 7^1) \times 2^5 \times 5^2.\\
\mathbf{5050} &:= 2! \times (3! - 1!) + 7! = (2^7 - 3^3) \times (1^1 + 7^2).\\
\mathbf{5058} &:= (2! + 1!) \times 3! + 7! = 2^1 \times (-1^2 + 3^7 + 7^3).
\end{aligned}$$

For more details refer author's work [16].

2 Fibonacci and Triangular Values

This section brings definition and idea of **Fibonacci and Triangular Values**. Also connections with **selfie numbers** are given in with some examples. Later these sequences are used to extend **selfie expressions** with some basic operations.

2.1 Selfie Numbers with Fibonacci Sequence

Fibonacci sequence numbers are well known in literature. [4, 5]. This sequence is defined as

$$F(0) = 0, \quad F(1) = 1, \quad F(n+1) = F(n) + F(n-1), \quad n \geq 1.$$

Initial values of Fibonacci sequence are given by

$F(1) = 1$	$F(6) = 8$	$F(11) = 89$	$F(16) = 987$
$F(2) = 1$	$F(7) = 13$	$F(12) = 144$	$F(17) = 1597$
$F(3) = 2$	$F(8) = 21$	$F(13) = 233$	$F(18) = 2584$
$F(4) = 3$	$F(9) = 34$	$F(14) = 377$	$F(19) = 4181$
$F(5) = 5$	$F(10) = 55$	$F(15) = 610$	$F(20) = 6765$, etc,

Below are examples of selfie numbers with **Fibonacci sequence** values:

$$\begin{aligned}
\mathbf{235} &:= 2 + F(F(F(3) + 5)).\\
\mathbf{256} &:= 2^5 \times F(6).\\
\mathbf{4427} &:= (F(4) + 4^2) \times F(F(7)).\\
\mathbf{4649}3 &:= F(4 \times 6) + (-4 + 9)^3.
\end{aligned}$$

$$\begin{aligned}
\mathbf{63} &:= 3 \times F(F(6)).\\
\mathbf{882} &:= 2 \times F(8) \times F(8).\\
\mathbf{1631} &:= F(13) \times (6 + 1).\\
\mathbf{54128} &:= 8 \times (F(2) + F(1 \times 4 \times 5)).
\end{aligned}$$

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 [6, 7, 8].

2.2 Selfie Numbers with Triangle Numbers

The general formula to write these numbers is given by

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

Initial values of triangular sequence are given by

$T(1) = 1$ $T(6) = 21$ $T(11) = 66$ $T(16) = 136$
$T(2) = 3$ $T(7) = 28$ $T(12) = 78$ $T(17) = 153$
$T(3) = 6$ $T(8) = 36$ $T(13) = 91$ $T(18) = 171$
$T(4) = 10$ $T(9) = 45$ $T(14) = 105$ $T(19) = 190$
$T(5) = 15$ $T(10) = 55$ $T(15) = 120$ $T(20) = 210$, etc,

Below are examples of **selfie numbers** with **Triangular numbers**. See below:

1069 $:= T(10) - T(6) + T(T(9))$.
1081 $:= T(1 + T(08 + 1))$.
2887 $:= T(T(T(T(2)))) + T(T(8) + T(8)) + T(7)$.
4965 $:= T(-4 + 9) + T(-T(6) + T(T(5)))$.
4999 $:= 49 + T(99)$.
99545 $:= T(9) + T(9) \times T(T(T(5) - 4)) + 5$.
99546 $:= T(9) + T(9) \times T(T(T(5) - 4)) + 6$.

874 $:= T(T(T(4))) - T(T(7) + 8)$.
0105 $:= 50 + T(10)$.
1155 $:= -T(T(5)) + T(51 - 1)$.
1224 $:= T(T(T(4)) - T(T(2))) - 2 + 1$.
2418 $:= T(81) - T(42)$.
99632 $:= 2 + (3 + T(T(6) + T(9))) \times T(9)$.
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 [17].

In this work our aim is to extend the results similar to **selfie expressions** given in section 1.3. This we have done by replacing right side expressions of power either with Fibonacci sequence values, or with Triangular numbers or with both. The results are limited upto 5 terms expressions, using only the values of $F(1), ...F(9)$ and/or $T(1), ..., T(9)$ with same digit order as of section 1.3

3 Factorial-Fibonacci-Triangular Selfie Expressions

In this section, we shall give equality expressions with factorial, Fibonacci sequence values and triangular numbers in the same expression, where the main digits follows the same order. We have very few results. See below examples,

- **Two-Terms Expressions**

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

- **Three-Terms Expressions**

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

- **Four-Terms Expressions**

0 $:= (1! - 3!) \times 4! + 5! = F(1) \times F(3) + F(4) - F(5) = T(1) - T(3) - T(4) + T(5)$.
$:= 4! \times (1! - 3!) + 5! = F(4) \times F(1) + F(3) - F(5) = T(4) - T(1) + T(3) - T(5)$.

$\mathbf{1} := 1! + 3! \times 5! - 6! \quad = -F(1) \times F(3) - F(5) + F(6) = T(1) + T(3) + T(5) - T(6).$
$:= -6! + 3! \times 5! + 1! = F(6) - F(3) - F(5) \times F(1) \quad = -T(6) + T(3) + T(5) + T(1).$

$\mathbf{6} := -(1! + 2!) \times 3! + 4! = F(1) \times F(2) + F(3) + F(4) = -T(1) + T(2) - T(3) + T(4).$

$\mathbf{12} := -1! \times 2! \times 3! + 4! \quad = (F(1) + F(2) + F(3)) \times F(4) \quad = -T(1) - T(2) + T(3) + T(4).$
$:= 3! \times (-2! + 4!) - 5! = -F(3) - F(2) + F(4) \times F(5) = T(3) \times (-T(2) - T(4) + T(5)).$
$:= 3! \times (2! + 5!) - 6! \quad = -F(3) + F(2) + F(5) + F(6) = T(3) \times T(2) + T(5) - T(6).$

$\mathbf{18} := 3! \times (-1! + 4!) - 5! = F(3) + F(1) + F(4) \times F(5) \quad = -T(3) - T(1) + T(4) + T(5).$
$\mathbf{22} := -2! + 4! \times 3! - 5! \quad = F(2) + F(4) \times (F(3) + F(5)) = T(2) + T(4) - T(3) + T(5).$

$\mathbf{24} := 3! \times 5! + 4! - 6! \quad = F(3) \times (F(5) + F(4)) + F(6) \quad = T(3) \times (T(5) + T(4) - T(6)).$
$:= -1! \times 5! + 4! \times 3! = (-F(1) + F(5)) \times F(4) \times F(3) = (-T(1) + T(5) - T(4)) \times T(3).$

$\mathbf{25} := 1! + 3! \times 4! - 5! \quad = (F(1) \times F(3) + F(4)) \times F(5) = (T(1) - T(3)) \times (T(4) - T(5)).$
$\mathbf{30} := (1! + 4!) \times 3! - 5! = (F(1) + F(4) + F(3)) \times F(5) = -T(1) + T(4) + T(3) + T(5).$

$\mathbf{120} := 5! \times (1! + 3!) - 6! = F(5) \times (F(1) + F(3)) \times F(6) = T(5) - (T(1) - T(3)) \times T(6).$

• Five-Terms Expressions

$\mathbf{0} := (-1! + 2! - 3!) \times 4! + 5! = (F(1) + F(2)) \times (F(3) + F(4) - F(5)) = (T(1) + T(2) + T(3) - T(4)) \times T(5).$
$:= (1! - 2!) \times 3! \times 5! + 6! \quad = F(1) + F(2) - F(3) \times F(5) + F(6) \quad = (T(1) + T(2)) \times (T(3) + T(5) - T(6)).$
$:= ((1! - 3!) \times 4! + 5!) \times 6! \; = (F(1) + F(3)) \times (F(4) + F(5) - F(6)) = (T(1) - T(3) - T(4) + T(5)) \times T(6).$
$:= ((1! - 3!) \times 4! + 5!) \times 7! \; = F(1) \times F(3) - F(4) \times F(5) + F(7) \quad = (T(1) - T(3) - T(4) + T(5)) \times T(7).$
$:= ((1! - 3!) \times 4! + 5!) \times 8! \; = (F(1) \times F(3) + F(4) - F(5)) \times F(8) \; = (T(1) - T(3) - T(4) + T(5)) \times T(8).$
$:= ((1! - 3!) \times 4! + 5!) \times 9! \; = (F(1) \times F(3) + F(4) - F(5)) \times F(9) \; = (T(1) + T(3) - T(4)) \times T(5) + T(9).$
$:= -2! \times 4! \times 5! + 7! + 6! \; = (F(2) + F(4)) \times (F(5) - F(7) + F(6)) = (T(2) + T(4) + T(5) - T(7)) \times T(6).$
$:= (-2! \times 4! + 3!) \times 5! + 7! = (F(2) + F(4)) \times F(3) + F(5) - F(7) \; = T(2) - T(4) - T(3) - T(5) + T(7).$
$:= (-2! + 1! - 3!) \times 6! + 7! = (F(2) + F(1) - F(3)) \times F(6) \times F(7) \; = T(2) \times (T(1) + T(3) + T(6) - T(7)).$
$:= (-5! + 2! \times 4!) \times 7! + 9! = F(5) \times F(2) - F(4) \times F(7) + F(9) \quad = (T(5) + T(2) + T(4) - T(7)) \times T(9).$
$:= -7! \times 5! + 3! \times 8! + 9! \; = F(7) - F(5) - F(3) \times F(8) + F(9) \quad = T(7) \times (T(5) - T(3) + T(8) - T(9)).$
$:= 4! \times 5! + (2! - 3!) \times 6! \; = (F(4) + F(5)) \times (F(2) - F(3)) + F(6) = (T(4) - T(5)) \times T(2) - T(3) + T(6).$
$:= 8! \times (3! - 4!) + 2! \times 9! \; = F(8) \times (F(3) - F(4) + F(2)) \times F(9) \; = (-T(8) + T(3) + T(4) \times T(2)) \times T(9).$

$\mathbf{1} := -1! + 2! - 3! \times 5! + 6! = F(1) + F(2) + F(3) + F(5) - F(6) \quad = T(1) + T(2) \times (T(3) + T(5) - T(6)).$
$:= 1! + (2! + 3!) \times 7! - 8! \; = (F(1) + F(2)) \times (-F(3) + F(7)) - F(8) = T(1) \times T(2) + T(3) + T(7) - T(8).$
$:= 1! + 3! \times (5! + 6!) - 7! \; = -F(1) + F(3) - F(5) - F(6) + F(7) \quad = -T(1) - T(3) + T(5) + T(6) - T(7).$

$\mathbf{2} := (1! + 3!) \times 6! + 2! - 7! = -(F(1) + F(3) + F(6)) \times F(2) + F(7) \; = T(1) \times T(3) + T(6) + T(2) - T(7).$
$:= (1! - 3!) \times 4! + 2! + 5! = F(1) + F(3) + F(4) + F(2) - F(5) \quad = -T(1) \times T(3) - T(4) + T(2) + T(5).$
$:= 1! \times 2! + 3! \times 5! - 6! \quad = (F(1) + F(2)) \times (-F(3) - F(5) + F(6)) = -T(1) + T(2) - T(3) - T(5) + T(6).$
$:= 2! + (5! + 6!) \times 3! - 7! = F(2) \times F(5) + F(6) + F(3) - F(7) \quad = T(2) \times T(5) - T(6) + T(3) - T(7).$

$\mathbf{3} := 1! + 2! + 3! \times 5! - 6! \quad = F(1) + F(2) - F(3) - F(5) + F(6) \quad = T(1) \times T(2) + T(3) + T(5) - T(6).$
$\mathbf{4} := (1! + 5!) \times 3! - 2! - 6! = (F(1) + F(5)) \times F(3) \times F(2) - F(6) = T(1) + T(5) + T(3) + T(2) - T(6).$

$\mathbf{6} := (-1! + 4! - 2!) \times 3! - 5! = -(F(1) + F(4)) \times F(2) + F(3) \times F(5) = -T(1) + T(4) - T(2) \times T(3) + T(5).$
$:= (-1! + 2! - 5!) \times 3! + 6! = (F(1) + F(2) + F(5)) \times F(3) - F(6) \quad = T(1) \times T(2) \times (T(5) - T(3)) - T(6).$

$\mathbf{8} := (1! + 5!) \times 3! + 2! - 6! \quad = -F(1) - F(5) + F(3) \times (-F(2) + F(6)) = -T(1) - T(5) + T(3) - T(2) + T(6).$
$\mathbf{10} := (1! - 3!) \times (4! - 2!) + 5! = F(1) + F(3) + F(4) - F(2) + F(5) \qquad = (T(1) - T(3)) \times (T(4) + T(2) - T(5)).$

$\mathbf{11} := -1! + (-2! + 4!) \times 3! - 5! = -F(1) - F(2) + F(4) + F(3) \times F(5) = (-T(1) + T(2)) \times T(4) + T(3) - T(5).$
$:= -1! + 3! \times (2! + 5!) - 6! \quad = -F(1) - F(3) + F(2) + F(5) + F(6) = -T(1) - T(3) + T(2) \times (-T(5) + T(6)).$

$\mathbf{12} := (1! \times 4! - 2!) \times 3! - 5! \quad = F(1) + F(4) + F(2) + F(3) + F(5) \qquad = (T(1) + T(4)) \times T(2) - T(3) - T(5).$
$:= -(2! + 5!) \times 3! + 4! + 6! = -(F(2) + F(5)) \times F(3) + F(4) \times F(6) \quad = T(2) \times (T(5) + T(3) - T(4)) - T(6).$
$:= (2! + 5! + 6!) \times 3! - 7! \quad = -F(2) - F(5) - F(6) + F(3) \times F(7) \quad = (T(2) - T(5)) \times (T(6) + T(3) - T(7)).$
$:= 1! \times 3! \times (5! + 2!) - 6! \quad = (F(1) + F(3)) \times (-F(5) + F(2) + F(6)) = (-T(1) + T(3)) \times T(5) - T(2) \times T(6).$

$\mathbf{13} := 1! - (2! - 4!) \times 3! - 5! = (F(1) + F(2)) \times F(4) + F(3) + F(5) = -T(1) + T(2) - T(4) + T(3) + T(5).$
$:= 1! + 3! \times (2! + 5!) - 6! = (F(1) \times F(3) - F(2)) \times F(5) + F(6) = T(1) - T(3) - T(2) \times (T(5) - T(6)).$

$\mathbf{14} := (1! + 3!) \times (2! + 6!) - 7! = (F(1) + F(3)) \times (F(2) + F(6)) - F(7) \quad = (T(1) + T(3)) \times T(2) + T(6) - T(7).$
$\mathbf{16} := (-1! + 4!) \times 3! - 2! - 5! = (F(1) + F(4)) \times (-F(3) + F(2) + F(5)) = T(1) \times T(4) - T(3) - T(2) + T(5).$

$\mathbf{18} := (1! + 2! + 5!) \times 3! - 6! \quad = (F(1) + F(2) - F(5)) \times (F(3) - F(6)) \quad = T(1) \times T(2) \times T(5) - T(3) - T(6).$
$:= (1! + 4! - 2!) \times 3! - 5! \quad = F(1) \times F(4) + (F(2) + F(3)) \times F(5) \quad = (T(1) + T(4)) \times (-T(2) + T(3)) - T(5).$
$:= -3! \times (1! + 5!) + 4! + 6! = (F(3) + F(1)) \times (-F(5) + F(4) + F(6)) = T(3) \times (-T(1) + T(5) + T(4) - T(6)).$

$\mathbf{20} := (1! + 4!) \times (2! - 3!) + 5! = (F(1) + F(4)) \times (-F(2) + F(3)) \times F(5) = -T(1) + T(4) \times T(2) + T(3) - T(5).$
$\mathbf{21} := -1! - 2! + 3! \times 4! - 5! \quad = F(1) - (F(2) - F(3) - F(4)) \times F(5) \qquad = -T(1) + T(2) - T(3) + T(4) + T(5).$

$\mathbf{22} := -1! \times 2! + 3! \times 4! - 5! = (F(1) + F(2)) \times (F(3) \times F(4) + F(5)) = T(1) \times T(2) - T(3) + T(4) + T(5).$
$:= -2! - 3! \times 5! + 4! + 6! = F(2) + F(3) - F(5) + F(4) \times F(6) \quad = T(2) \times T(3) + T(5) + T(4) - T(6).$

$\mathbf{23} := -1! - 3! \times 5! + 4! + 6! = -F(1) \times F(3) + F(5) \times (-F(4) + F(6)) = T(1) + T(3) - T(5) + T(4) + T(6).$
$:= 1! - 2! + 3! \times 4! - 5! \quad = -F(1) - F(2) + (F(3) + F(4)) \times F(5) \quad = T(1) + T(2) - T(3) + T(4) + T(5).$

$\mathbf{24} := 1! \times 3! \times 5! + 4! - 6! \qquad = F(1) \times F(3) \times (F(5) + F(4)) + F(6) \qquad = T(1) \times T(3) \times (T(5) + T(4) - T(6)).$
$:= (-1! \times 3! + 2!) \times 4! + 5! = (F(1) + F(3)) \times F(2) \times (F(4) + F(5)) \quad = T(1) + T(3) \times T(2) - T(4) + T(5).$
$:= (1! + 3!) \times 6! + 4! - 7! \quad = (F(1) + F(3)) \times (-F(6) + F(4) + F(7)) = T(1) + T(3) - T(6) + T(4) + T(7).$
$:= (2! + 3!) \times 7! + 4! - 8! \quad = -(F(2) + F(3)) \times F(7) + F(4) \times F(8) \quad = T(2) \times (T(3) + T(7) + T(4) - T(8)).$
$:= 3! \times (5! + 6!) + 4! - 7! \quad = -F(3) - F(5) - F(6) + F(4) \times F(7) \quad = T(3) + T(5) + T(6) + T(4) - T(7).$

$\mathbf{25} := 1! + 3! \times 5! + 4! - 6! \quad = F(1) \times F(3) + F(5) \times F(4) + F(6) \quad = T(1) + T(3) \times (T(5) + T(4) - T(6)).$
$:= -1! + 2! + 3! \times 4! - 5! = (F(1) \times F(2) \times F(3) + F(4)) \times F(5) = (T(1) - T(2) + T(3)) \times T(4) - T(5).$

$\mathbf{26} := 1! \times 2! + 3! \times 4! - 5! = (F(1) + F(2)) \times (-F(3) + F(4) \times F(5)) = -T(1) - T(2) + T(3) \times (-T(4) + T(5)).$
$:= 4! + 2! + 3! \times 5! - 6! = (F(4) + F(2) - F(3)) \times (F(5) + F(6)) \quad = -T(4) + T(2) \times (T(3) - T(5) + T(6)).$

$\mathbf{27} := 1! + 2! + 3! \times 4! - 5! \quad = F(1) + F(2) + (F(3) + F(4)) \times F(5) \quad = -T(1) - T(2) + T(3) + T(4) + T(5).$
$\mathbf{28} := (1! + 4!) \times 3! - 2! - 5! = (F(1) + F(4)) \times (F(3) \times F(2) + F(5)) = -T(1) - T(4) - T(3) + T(2) \times T(5).$

$\mathbf{30} := -(1! + 2!) \times (3! + 4!) + 5! = (F(1) \times F(2) + F(3) + F(4)) \times F(5) \quad = (T(1) - T(2) - T(3) + T(4)) \times T(5).$
$:= 3! \times (1! + 5!) + 4! - 6! \quad = (F(3) + F(1)) \times (F(5) - F(4) + F(6)) = T(3) \times (T(1) + T(5) + T(4) - T(6)).$

$\mathbf{32} := (1! + 4!) \times 3! + 2! - 5! \quad = (F(1) + F(4)) \times F(3) \times (-F(2) + F(5)) = -T(1) + (T(4) + T(3)) \times T(2) - T(5).$
$\mathbf{34} := (1! + 3!) \times (4! - 2!) - 5! \; = -F(1) + (F(3) \times F(4) + F(2)) \times F(5) \quad = (T(1) + T(3)) \times (T(4) - T(2)) - T(5).$
$\mathbf{35} := -1! + (2! + 4!) \times 3! - 5! = (F(1) + F(2) + F(4) + F(3)) \times F(5) \quad = T(1) + T(2) + T(4) + T(3) + T(5).$

$\mathbf{36} := (1! \times 4! + 2!) \times 3! - 5! = (F(1) + F(4)) \times (-F(2) + F(3) \times F(5)) = -(T(1) - T(4)) \times T(2) - T(3) + T(5).$
$:= (2! + 5!) \times 3! + 4! - 6! = (F(2) + F(5)) \times F(3) + F(4) \times F(6) \quad = -T(2) \times T(5) + T(3) \times T(4) + T(6).$

$\mathbf{42} := (1! + 2! + 4!) \times 3! - 5! \quad = (F(1) + F(2)) \times F(4) \times (F(3) + F(5)) = -T(1) \times T(2) + T(4) \times T(3) - T(5).$
$\mathbf{46} := -2! + (1! + 3!) \times 4! - 5! = F(2) + (F(1) + F(3)) \times F(4) \times F(5) \quad = T(2) \times (T(1) + T(3)) + T(4) + T(5).$

$\mathbf{48} := (1! - 3! + 2!) \times 4! + 5! \quad = (F(1) + F(3)) \times (F(2) + F(4) \times F(5)) = T(1) \times T(3) \times (T(2) - T(4) + T(5)).$
$:= 2! \times 4! + 3! \times 5! - 6! \quad = (F(2) + F(4)) \times F(3) \times F(5) + F(6) \quad = (-T(2) + T(4)) \times T(3) - T(5) + T(6).$
$:= (3! + 1!) \times (4! - 5!) + 6! = (F(3) + F(1)) \times (F(4) + F(5) + F(6)) = T(3) \times (-T(1) + T(4)) + T(5) - T(6).$

$\mathbf{50} := (1! + 3!) \times 4! + 2! - 5! \quad = ((F(1) + F(3)) \times F(4) + F(2)) \times F(5) = T(1) - T(3) + T(4) + T(2) \times T(5).$
$\mathbf{60} := -1! \times 2! \times (3! + 4!) + 5! = (F(1) + F(2) + F(3)) \times F(4) \times F(5) \quad = (T(1) - T(2)) \times T(3) \times (T(4) - T(5)).$
$\mathbf{96} := (1! + 3!) \times 5! - 4! - 6! \quad = ((F(1) + F(3)) \times F(5) - F(4)) \times F(6) = T(1) \times T(3) \times (-T(5) + T(4) + T(6)).$

$\mathbf{120} := (-1! + 2! - 3!) \times 5! + 6! = (F(1) \times F(2) + F(3)) \times F(5) \times F(6) = (T(1) + T(2)) \times (-T(3) + T(5) + T(6)).$
$:= (2! + 3!) \times 7! + 5! - 8! \quad = F(2) \times F(3) + F(7) + F(5) \times F(8) \quad = T(2) + T(3) \times T(7) - T(5) - T(8).$

$\mathbf{132} := -3! \times (2! + 5! - 4!) + 6! = F(3) \times (F(2) + F(5)) \times (F(4) + F(6)) = (T(3) - T(2) - T(5)) \times (T(4) - T(6)).$

$\mathbf{144} := 1! \times 3! \times (4! + 5!) - 6! \quad = (F(1) + F(3) + F(4) \times F(5)) \times F(6) \quad = (-T(1) \times T(3) + T(4)) \times (T(5) + T(6)).$
$:= (2! - 3!) \times (4! + 5!) + 6! = (F(2) + F(3) + F(4) \times F(5)) \times F(6) \quad = (T(2) + T(3)) \times (T(4) - T(5) + T(6)).$
$:= 3! \times (4! + 6! + 5!) - 7! \quad = (-F(3) + F(4)) \times F(6) \times (F(5) + F(7)) = T(3) \times (-T(4) + T(6) - T(5) + T(7)).$

$\mathbf{150} := (1! + 4! + 5!) \times 3! - 6! \quad = F(1) \times F(4) \times F(5) \times (F(3) + F(6)) \quad = (T(1) + T(4)) \times T(5) + T(3) - T(6).$
$\mathbf{168} := (1! + 3!) \times (4! + 6!) - 7! \; = -F(1) + (F(3) + F(4) + F(6)) \times F(7) \quad = (T(1) - T(3) - T(4) + T(6)) \times T(7).$
$\mathbf{192} := -2! \times (4! \times 3! + 5!) + 6! = (-F(2) + (F(4) + F(3)) \times F(5)) \times F(6) = T(2) + T(4) \times (T(3) + T(5)) - T(6).$
$\mathbf{216} := (2! + 3!) \times 5! - 4! - 6! \quad = (-F(2) + F(3) \times F(5)) \times F(4) \times F(6) \quad = -T(2) - T(3) + T(5) + T(4) \times T(6).$
$\mathbf{240} := (5! - 4!) \times (1! - 3!) + 6! \; = F(5) \times F(4) \times F(1) \times F(3) \times F(6) \quad = T(5) \times (-T(4) - T(1) + T(3) + T(6)).$
$\mathbf{264} := (2! + 3!) \times 5! + 4! - 6! \quad = (F(2) + F(3) \times F(5)) \times F(4) \times F(6) \quad = (T(2) + T(3) + T(5)) \times (-T(4) + T(6)).$
$\mathbf{288} := 2! \times ((5! + 4!) \times 3! - 6!) \; = (F(2) + F(5)) \times F(4) \times F(3) \times F(6) \quad = T(2) + T(5) + T(4) \times (T(3) + T(6)).$
$\mathbf{480} := -2! \times 5! - 6! \times 3! + 7! \quad = (-F(2) + F(5)) \times F(6) \times (F(3) + F(7)) = T(2) + T(5) - T(6) \times (T(3) - T(7)).$
$\mathbf{576} := -3! \times (4! + 6!) \times 1! + 7! = F(3) \times F(4) \times F(6) \times (-F(1) + F(7)) \quad = T(3) + T(4) + (T(6) - T(1)) \times T(7).$

$$\begin{aligned}\mathbf{600} &:= -5! - 3! \times 6! \times 1! + 7! \quad = F(5) \times (F(3) + F(6)) \times (-F(1) + F(7)) = -T(5) + T(3) + T(6) \times (T(1) + T(7)).\\ &:= -5! + 6! \times (2! + 3!) - 7! = F(5) \times F(6) \times F(2) \times (F(3) + F(7)) \quad = T(5) \times (T(6) - T(2) - T(3) + T(7)).\end{aligned}$$

$$\begin{aligned}\mathbf{624} &:= -3! \times 6! + 4! - 5! + 7! = (-F(3) + F(6)) \times (F(4) + F(5)) \times F(7) = -T(3) + T(6) \times T(4) + T(5) \times T(7).\\ \mathbf{720} &:= -5! \times 4! + 7! - 2! \times 6! = F(5) \times (F(4) + F(7)) \times (F(2) + F(6)) \quad = -T(5) + (T(4) + T(7) - T(2)) \times T(6).\\ \mathbf{864} &:= 4! + 5! + 7! - 3! \times 6! \quad = F(4) \times (F(5) + F(7)) \times F(3) \times F(6) \quad = T(4) \times T(5) + (T(7) + T(3)) \times T(6).\\ \mathbf{960} &:= -3! \times 6! + 5! \times 2! + 7! = F(3) \times F(6) \times F(5) \times (-F(2) + F(7)) \quad = -T(3) + T(6) \times (T(5) + T(2) + T(7)).\end{aligned}$$

$$\mathbf{1560} := -(3! - 1!) \times 6! + 5! + 7! = (F(3) + F(1)) \times F(6) \times F(5) \times F(7) = T(3) \times (T(1) - T(6)) \times (T(5) - T(7)).$$

- **Note 1.**

We have only three values, where **factorial**, **power** and **triangular numbers** are equal with same digit's order.

$$\begin{aligned}\mathbf{1} &:= 1! = 1^1 \quad = T(1).\\ \mathbf{3} &:= 1! + 2! = -1^1 + 2^2 \quad = T(1) \times T(2).\\ \mathbf{2760} &:= (-1! + 5! + 2! - 3!) \times 4! = -1^1 + 5^5 - 2^2 \times 3^3 - 4^4 \quad = (T(1) + T(5) \times T(2)) \times T(3) \times T(4).\end{aligned}$$

4 Selfie Expressions with Selected Operations

4.1 Positive Sign

Below are few examples of **factorial-triangular selfie expressions** only with positive sign.

$$\begin{aligned}\mathbf{6} &:= 3! \quad = T(3).\\ \mathbf{7} &:= 1! + 3! \quad = T(1) + T(3).\\ \mathbf{9} &:= 1! + 2! + 3! \quad = T(1) \times T(2) + T(3).\\ \mathbf{18} &:= (1! + 2!) \times 3! \quad = T(1) \times T(2) \times T(3).\\ \mathbf{36} &:= 3! \times 2! + 4! \quad = T(3) + T(2) \times T(4).\\ \mathbf{150} &:= 3! + 4! + 5! \quad = T(3) \times (T(4) + T(5)).\\ \mathbf{37} &:= 1! + 3! \times 2! + 4! \quad = T(1) + T(3) + T(2) \times T(4).\\ \mathbf{78} &:= (1! + 2!) \times 4! + 3! \quad = (T(1) \times T(2) + T(4)) \times T(3).\\ \mathbf{90} &:= (1! + 2!) \times (3! + 4!) = (T(1) \times T(2) + T(3)) \times T(4).\\ \mathbf{150} &:= 1! \times 3! + 4! + 5! \quad = T(1) \times T(3) \times (T(4) + T(5)).\\ \mathbf{151} &:= 1! + 3! + 4! + 5! \quad = T(1) + T(3) \times (T(4) + T(5)).\\ \mathbf{168} &:= 2! \times 1! \times 4! + 5! \quad = T(2) + (T(1) + T(4)) \times T(5).\\ \mathbf{300} &:= 2! \times (3! + 5! + 4!) \quad = T(2) \times (T(3) \times T(5) + T(4)).\\ \mathbf{960} &:= 1! \times 6! + 2! \times 5! \quad = (T(1) + T(6) \times T(2)) \times T(5).\end{aligned}$$

$\mathbf{2160} := 2! \times 6! + 3! \times 5! = (T(2) + T(6)) \times T(3) \times T(5).$
$\mathbf{1008} := (2! \times 3!) \times 4! + 6! = T(2) \times (T(3) + T(4)) \times T(6).$

$\mathbf{174} := 3! \times 1! + 2! \times 4! + 5! = T(3) \times (T(1) + T(2)) + T(4) \times T(5).$
$\mathbf{198} := (2! + 1!) \times 4! + 3! + 5! = T(2) \times (T(1) + T(4) \times T(3)) + T(5).$
$\mathbf{270} := 1! \times 3! + 4! + 2! \times 5! = T(1) \times T(3) \times (T(4) \times T(2) + T(5)).$
$\mathbf{271} := 1! + 3! + 4! + 2! \times 5! = T(1) + T(3) \times (T(4) \times T(2) + T(5)).$
$\mathbf{276} := 3! \times (4! + 2!) \times 1! + 5! = T(3) \times (T(4) \times T(2) + T(1) + T(5)).$
$\mathbf{294} := 2! \times (4! \times 1! + 5!) + 3! = (T(2) + T(4) + T(1)) \times (T(5) + T(3)).$
$\mathbf{295} := 1! + 3! + 2! \times (5! + 4!) = (T(1) + T(3) \times T(2)) \times T(5) + T(4).$
$\mathbf{300} := 2! \times (3! \times 1! + 4! + 5!) = (T(2) + T(3) + T(1) + T(4)) \times T(5).$

$\mathbf{301} := 1! + 2! \times (4! + 3!) + 5! = T(1) + T(2) \times (T(4) + T(3) \times T(5)).$
$\mathbf{385} := 1! + 3! \times 4! + 2! \times 5! = (T(1) + T(3)) \times (T(4) + T(2) \times T(5)).$
$\mathbf{390} := 4! + 3! + (2! + 1!) \times 5! = T(4) \times (T(3) \times (T(2) + T(1)) + T(5)).$
$\mathbf{420} := (1! + 4!) \times 2! \times 3! + 5! = (T(1) \times T(4) + T(2) \times T(3)) \times T(5).$
$\mathbf{450} := (1! + 2!) \times (3! + 4! + 5!) = T(1) \times T(2) \times T(3) \times (T(4) + T(5)).$
$\mathbf{456} := (1! + 3!) \times 2! \times 4! + 5! = T(1) \times T(3) + (T(2) \times T(4)) \times T(5).$
$\mathbf{540} := 2! \times ((4! + 1!) \times 3! + 5!) = (T(2) \times T(4) \times T(1) + T(3)) \times T(5).$

$\mathbf{576} := 2! \times (4! \times (3! + 1!) + 5!) = (T(2) \times T(4) + T(3)) \times (T(1) + T(5)).$
$\mathbf{756} := 1! \times 3! \times 2! + 4! + 6! = (T(1) \times T(3) + T(2) \times T(4)) \times T(6).$
$\mathbf{757} := 1! + 3! \times 2! + 4! + 6! = T(1) + (T(3) + T(2) \times T(4)) \times T(6).$
$\mathbf{768} := 2! \times 4! + 3! \times 1! \times 5! = T(2) \times (T(4) + T(3)) \times (T(1) + T(5)).$
$\mathbf{810} := (1! + 2!) \times (4! + 3!) + 6! = T(1) \times T(2) \times T(4) \times (T(3) + T(6)).$
$\mathbf{966} := 3! + 5! \times 1! \times 2! + 6! = T(3) + T(5) \times (T(1) + T(2) \times T(6)).$
$\mathbf{972} := (3! \times 1! + 5!) \times 2! + 6! = T(3) + (T(1) + T(5) \times T(2)) \times T(6).$

$\mathbf{1008} := 6! + 4! \times 3! \times 2! \times 1! = T(6) \times (T(4) + T(3)) \times T(2) \times T(1).$
$\mathbf{1009} := 6! + 4! \times 3! \times 2! + 1! = T(6) \times (T(4) + T(3)) \times T(2) + T(1).$
$\mathbf{1590} := 4! + 5! + 3! + 2! \times 6! = T(4) \times (T(5) + T(3) \times (T(2) + T(6))).$
$\mathbf{1710} := 2! \times (5! + 6!) + 3! + 4! = (T(2) \times T(5) + T(6) \times T(3)) \times T(4).$
$\mathbf{1728} := 3! \times (4! \times 2! + 5!) + 6! = (T(3) + T(4)) \times T(2) \times (T(5) + T(6)).$
$\mathbf{1968} := 2! \times (5! + 6! + 4! \times 3!) = (T(2) + T(5) \times T(6) + T(4)) \times T(3).$
$\mathbf{2160} := 1! \times 3! \times 5! \times 2! + 6! = T(1) \times T(3) \times T(5) \times (T(2) + T(6)).$

$\mathbf{2161} := 1! + 3! \times 5! + 2! \times 6! = T(1) + T(3) \times T(5) \times (T(2) + T(6)).$
$\mathbf{2166} := 3! \times (1! + 5!) + 2! \times 6! = T(3) \times (T(1) + T(5) \times (T(2) + T(6))).$
$\mathbf{2286} := 3! + 6! \times (1! + 2!) + 5! = (T(3) \times T(6) + T(1)) \times (T(2) + T(5)).$
$\mathbf{2448} := 2! \times (5! + 4!) \times 3! + 6! = (T(2) + T(5)) \times (T(4) + T(3) \times T(6)).$
$\mathbf{3168} := 2! \times (3! \times (4! + 5!) + 6!) = T(2) \times T(3) + (T(4) \times T(5)) \times T(6).$
$\mathbf{3840} := 1! \times 5! \times (4! + 2!) + 6! = (T(1) + T(5)) \times T(4) \times (T(2) + T(6)).$
$\mathbf{3888} := (5! + 2! \times 3!) \times 4! + 6! = (T(5) + T(2)) \times (T(3) + T(4) \times T(6)).$

$$\mathbf{3960} := 5! \times (1! + 4! + 2!) + 6! = T(5) \times (T(1) + T(4)) \times (T(2) + T(6)).$$
$$\mathbf{4320} := 1! \times 5! \times (4! + 3!) + 6! = (T(1) + T(5)) \times T(4) \times (T(3) + T(6)).$$
$$\mathbf{5040} := 5! \times (3! \times 2! + 4!) + 6! = (T(5) + T(3) + T(2)) \times T(4) \times T(6).$$
$$\mathbf{5100} := (3! + 4! \times 1!) \times 2! + 7! = T(3) \times T(4) \times (T(1) + T(2) \times T(7)).$$
$$\mathbf{5220} := (3! + 4!) \times 2! + 7! + 5! = T(3) \times (T(4) \times T(2) + T(7)) \times T(5).$$
$$\mathbf{5310} := 3! + 2! \times 5! + 4! + 7! \quad = T(3) \times T(2) \times (T(5) + T(4) \times T(7)).$$

$$\mathbf{5760} := 3! \times ((5! \times 1!) \times 2! + 6!) = T(3) \times T(5) \times (T(1) + T(2) \times T(6)).$$
$$\mathbf{5905} := 5! + 4! + 1! + 6! + 7! \quad = T(5) + T(4) \times (T(1) + T(6) \times T(7)).$$
$$\mathbf{5916} := 3! \times (4! + 2!) + 6! + 7! \quad = T(3) + T(4) \times (T(2) + T(6) \times T(7)).$$
$$\mathbf{6048} := (5! + 4!) \times 2! + 6! + 7! \quad = (T(5) \times (T(4) + T(2)) + T(6)) \times T(7).$$
$$\mathbf{6516} := (3! + 6!) \times 2! + 7! + 4! \quad = T(3) + T(6) \times (T(2) + T(7)) \times T(4).$$
$$\mathbf{7560} := (1! + 2! + 3!) \times (5! + 6!) = (T(1) + T(2)) \times T(3) \times T(5) \times T(6).$$

$$\mathbf{12240} := (7! + 3! \times 5!) \times 2! + 6! = (T(7) + T(3)) \times T(5) \times (T(2) + T(6)).$$
$$\mathbf{13104} := 7! \times 2! + (3! + 5!) \times 4! = T(7) \times T(2) \times (T(3) + T(5) \times T(4)).$$
$$\mathbf{25200} := (1! + 3!) \times 4! \times 5! + 7! = T(1) \times T(3) \times T(4) \times T(5) \times T(7).$$
$$\mathbf{30240} := 4! \times (5! + 6!) + 2! \times 7! = T(4) \times (T(5) + T(6)) \times T(2) \times T(7).$$

$$\mathbf{725760} := 8! \times 3! + 4! \times 7! + 9! \quad = (T(8) \times (T(3) + T(4)) \times T(7)) \times T(9).$$

4.2 Multiplication with Fibonacci and Triangular Numbers

We have few examples when all the terms with Fibonacci or triangular numbers are with multiplication sign.

$$\mathbf{1} := -1! + 2! = F(1) \times F(2).$$
$$\mathbf{1560} := (1! - 4!) \times 5! - 6! + 7! = F(1) \times F(4) \times F(5) \times F(6) \times F(7).$$

$$\mathbf{6} := 1! \times 3! = T(1) \times T(3).$$
$$\mathbf{18} := (1! + 2!) \times 3! = T(1) \times T(2) \times T(3).$$

$$\mathbf{2700} := (1! + 4!) \times (5! - 2! \times 3!) = T(1) \times T(4) \times T(5) \times T(2) \times T(3).$$
$$\mathbf{25200} := (1! + 3!) \times 4! \times 5! + 7! \quad = T(1) \times T(3) \times T(4) \times T(5) \times T(7).$$
$$\mathbf{181440} := (3! - 2! + 4!) \times 7! + 8! \quad = T(3) \times T(2) \times T(4) \times T(7) \times T(8).$$
$$\mathbf{453600} := (2! + 5! - 4!) \times 7! - 8! \quad = T(2) \times T(5) \times T(4) \times T(7) \times T(8).$$
$$\mathbf{816480} := 3! \times (2! \times 8! - 7!) + 9! \quad = T(3) \times T(2) \times T(8) \times T(7) \times T(9).$$
$$\mathbf{1360800} := (4! - 2!) \times (7! + 8!) + 9! = T(4) \times T(2) \times T(7) \times T(8) \times T(9).$$
$$\mathbf{4082400} := (3! + 5!) \times (8! - 7!) - 9! = T(3) \times T(5) \times T(8) \times T(7) \times T(9).$$

5 Factorial-Fibonacci Selfie Expressions

In this case we have very few examples, as we considered factorial and Fibonacci values equality expressions following the same order of digits on both sides of the equalities. Numbers appearing in section 5 are not included here.

- **Two-Terms Expressions**

$$\begin{aligned}
\mathbf{1} &:= -1! + 2! && = F(1) \times F(2).\\
\mathbf{2} &:= 2! + 3! \times 5! - 6! && = F(2) \times F(3) \times F(5) - F(6).\\
\mathbf{6} &:= (1! + 5!) \times 3! - 6! && = F(1) - F(5) + F(3) + F(6).
\end{aligned}$$

- **Four-Terms Expressions**

$$\begin{aligned}
\mathbf{10} &:= -(1! + 3!) \times 2! + 4! = F(1) + (F(3) + F(2)) \times F(4).\\
&:= 4! - 2! \times (1! + 3!) \quad = (F(4) + F(2) + F(1)) \times F(3).
\end{aligned}$$

- **Five-Terms Expressions**

$$\begin{aligned}
\mathbf{24} &:= (-3! + 2!) \times 4! + 5! = (F(3) + F(2)) \times (F(4) + F(5)).\\
\mathbf{26} &:= 2! + 3! \times 4! - 5! \quad = F(2) + (F(3) + F(4)) \times F(5).\\
\mathbf{36} &:= -5! + (2! + 4!) \times 3! = (F(5) + F(2)) \times F(4) \times F(3).
\end{aligned}$$

$$\begin{aligned}
\mathbf{36} &:= (1! \times 2! + 4!) \times 3! - 5! = F(1) + (F(2) + F(4) \times F(3)) \times F(5).\\
&:= 4! + (2! + 5!) \times 3! - 6! = (F(4) + F(2)) \times F(5) + F(3) \times F(6).
\end{aligned}$$

$$\begin{aligned}
\mathbf{37} &:= 1! + 3! \times (4! + 2!) - 5! = F(1) + F(3) \times F(4) \times (F(2) + F(5)).\\
\mathbf{42} &:= (4! + 2! + 1!) \times 3! - 5! = F(4) \times (F(2) + F(1)) \times (F(3) + F(5)).\\
\mathbf{46} &:= 2! \times (4! \times 3! - 1! - 5!) = F(2) + F(4) \times (F(3) + F(1)) \times F(5).
\end{aligned}$$

$$\begin{aligned}
\mathbf{48} &:= (1! + 3!) \times (4! - 5!) + 6! = (F(1) + F(3)) \times (F(4) + F(5) + F(6)).\\
&:= 4! \times 2! + 5! \times 3! - 6! \quad = (F(4) + F(2)) \times F(5) \times F(3) + F(6).\\
&:= 4! \times (2! + 1! - 3!) + 5! \quad = F(4) \times (F(2) + (F(1) + F(3)) \times F(5)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{50} &:= 2! \times (3! \times 4! + 1! - 5!) \quad = ((F(2) + F(3)) \times F(4) + F(1)) \times F(5).\\
\mathbf{60} &:= -(3! + 4!) \times 2! \times 1! + 5! = (F(3) \times F(4)) \times (F(2) + F(1)) \times F(5).\\
\mathbf{96} &:= -4! + 5! \times (1! + 3!) - 6! = (F(4) \times F(5) + F(1)) \times (-F(3) + F(6)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{120} &:= (1! + 3!) \times 6! + 5! - 7! \quad = (F(1) - F(3) \times F(6)) \times (F(5) - F(7)).\\
&:= (3! + 2! - 1!) \times 5! - 6! \quad = (F(3) + F(2)) \times F(1) \times F(5) \times F(6).\\
&:= 5! + 8! - (3! + 2!) \times 7! \quad = (F(5) \times F(8) + F(3)) \times F(2) + F(7).\\
&:= -7! \times (2! + 3!) + 8! + 5! = F(7) \times F(2) + F(3) + F(8) \times F(5).
\end{aligned}$$

$$\mathbf{142} := 3! \times (4! + 5!) - 2! - 6! = -F(3) + F(4) \times (F(5) + F(2)) \times F(6).$$

$$\begin{aligned}
\mathbf{144} &:= (1! \times 4! + 5!) \times 3! - 6! \quad = (F(1) + F(4) + F(5)) \times F(3) \times F(6).\\
&:= (6! + 4! + 5!) \times 3! - 7! \quad = F(6) \times F(4) \times (-F(5) - F(3) + F(7)).\\
&:= (4! + 5!) \times (2! - 3!) + 6! = (F(4) + F(5) + F(2)) \times F(3) \times F(6).
\end{aligned}$$

$\mathbf{146} := 3! \times (4! + 5!) + 2! - 6! \quad = F(3) + F(4) \times (F(5) + F(2)) \times F(6).$
$\mathbf{192} := -2! \times (3! \times 4! + 5!) + 6! = (F(2) + F(3)) \times (F(4) + F(5)) \times F(6).$
$\mathbf{216} := -4! + 5! \times (3! + 2!) - 6! = F(4) \times (F(5) \times F(3) - F(2)) \times F(6).$

$\mathbf{240} := (-1! + 3!) \times (4! - 5!) + 6! = (F(1) + F(3) + F(4)) \times F(5) \times F(6).$
$:= 7! + (3! + 2!) \times (5! - 6!) \quad = (F(7) \times F(3) - F(2) + F(5)) \times F(6).$

$\mathbf{288} := (3! + 1!) \times (5! + 4!) - 6! = F(3) \times (F(1) + F(5)) \times F(4) \times F(6).$
$:= 4! \times ((5! + 2!) \times 3! - 6!) = F(4) \times (F(5) + F(2)) \times F(3) \times F(6).$

$\mathbf{576} := -3! \times (6! + 4!) \times 1! + 7! = F(3) \times F(6) \times F(4) \times (-F(1) + F(7)).$
$:= -4! - 5! + 7! - 3! \times 6! \quad = -F(4) + F(5) \times (F(7) + F(3)) \times F(6).$
$:= 7! \times 1! - (4! + 6!) \times 3! \quad = (F(7) - F(1)) \times F(4) \times F(6) \times F(3).$

$\mathbf{598} := -2! - 5! - 6! \times 3! + 7! = ((F(2) + F(5)) \times F(6) - F(3)) \times F(7).$
$\mathbf{599} := -1! - 5! + 7! - 3! \times 6! = -F(1) + F(5) \times (F(7) + F(3)) \times F(6).$
$\mathbf{600} := -1! \times 5! + 7! - 3! \times 6! = F(1) \times F(5) \times (F(7) + F(3)) \times F(6).$
$\mathbf{601} := 1! - 5! + 7! - 3! \times 6! \quad = F(1) + F(5) \times (F(7) + F(3)) \times F(6).$
$\mathbf{624} := -3! \times 6! - 5! + 4! + 7! = (-F(3) + F(6)) \times (F(5) + F(4)) \times F(7).$
$\mathbf{672} := -3! \times 6! - 4! \times 2! + 7! = F(3) \times F(6) \times F(4) \times (F(2) + F(7)).$
$\mathbf{702} := (1! - 6!) \times 3! - 4! + 7! \ = (F(1) + F(6)) \times F(3) \times F(4) \times F(7).$

$\mathbf{720} := (2! \times 5! + 6!) \times 3! - 7! \quad = (F(2) + F(5)) \times F(6) \times (F(3) + F(7)).$
$:= -(3! + 4!) \times 5! + 7! - 6! = (F(3) + F(4)) \times (F(5) + F(7)) \times F(6).$
$:= -2! \times 6! - 5! \times 4! + 7! \quad = (F(2) + F(6)) \times F(5) \times (F(4) + F(7)).$

$\mathbf{744} := (4! - 6!) \times 3! + 7! - 5! \ = F(4) \times F(6) \times (F(3) \times F(7) + F(5)).$
$\mathbf{816} := -4! + 5! - 3! \times 6! + 7! = (F(4) + F(5)) \times (-F(3) + F(6) \times F(7)).$
$\mathbf{864} := -3! \times 6! + 4! + 5! + 7! = F(3) \times F(6) \times F(4) \times (F(5) + F(7)).$
$\mathbf{960} := 5! \times 2! + 7! - 3! \times 6! \quad = F(5) \times (-F(2) + F(7)) \times F(3) \times F(6).$

$\mathbf{1440} := 4! \times 5! \times 2! - 7! + 6! = F(4) \times F(5) \times (-F(2) + F(7)) \times F(6).$
$:= 1! \times 7! - 4! \times 5! - 6! = (-F(1) + F(7)) \times F(4) \times F(5) \times F(6).$

$\mathbf{1560} := (1! - 4!) \times 5! - 6! + 7! = F(1) \times F(4) \times F(5) \times F(6) \times F(7).$
$:= (7! - 6! \times 3!) \times 2! + 5! = F(7) \times F(6) \times (F(3) + F(2)) \times F(5).$
$:= 7! + (1! - 3!) \times 6! + 5! = F(7) \times (F(1) + F(3)) \times F(6) \times F(5).$

$\mathbf{1680} := -5! \times (4! - 2!) + 7! - 6! = F(5) \times F(4) \times (F(2) + F(7)) \times F(6).$
$\mathbf{9240} := 8! - 5! - 6! - 7! \times 3! \quad = F(8) \times F(5) \times F(6) \times (F(7) - F(3)).$

6 Factorial-Triangular Selfie Expressions

In this case we have examples of factorial and triangular selfie expressions with positive and negative signs, where the digits follows the same order on both sides. The example given in section 4.1 are also written again to have a complete list.

- **Single-Term Expressions**

$$\mathbf{6} := 3! = T(3).$$

- **Two-Terms Expressions**

$$\mathbf{5} := -1! + 3! = -T(1) + T(3).$$
$$\mathbf{6} := 1! \times 3! \quad = T(1) \times T(3).$$
$$\mathbf{7} := 1! + 3! \quad = T(1) + T(3).$$

- **Three-Terms Expressions**

$$\mathbf{8} := 1! \times 2! + 3! = -T(1) + T(2) + T(3).$$
$$\mathbf{9} := 1! + 2! + 3! = T(1) \times T(2) + T(3).$$

$$\mathbf{10} := (-1! + 3!) \times 2! = T(1) + T(3) + T(2).$$

$$\mathbf{12} := 1! \times 2! \times 3! \quad = (-T(1) + T(2)) \times T(3).$$
$$:= -2! \times 3! + 4! = T(2) \times (-T(3) + T(4)).$$

$$\mathbf{17} := -1! - 3! + 4! = T(1) + T(3) + T(4).$$
$$\mathbf{18} := (1! + 2!) \times 3! \ = T(1) \times T(2) \times T(3).$$
$$\mathbf{27} := 1! + 4! + 2! \quad = (-T(1) + T(4)) \times T(2).$$
$$\mathbf{28} := -2! + 3! + 4! = T(2) \times T(3) + T(4).$$
$$\mathbf{36} := 3! \times 2! + 4! \quad = T(3) + T(2) \times T(4).$$
$$\mathbf{42} := 2! \times 4! - 3! \quad = (-T(2) + T(4)) \times T(3).$$
$$\mathbf{90} := -3! + 5! - 4! = (-T(3) + T(5)) \times T(4).$$

$$\mathbf{108} := -3! \times 2! + 5! = T(3) \times (T(2) + T(5)).$$
$$\mathbf{150} := 3! + 4! + 5! \quad = T(3) \times (T(4) + T(5)).$$

- **Four-Terms Expressions**

$$\mathbf{11} := -1! - 2! \times 3! + 4! = -T(1) + T(2) \times (-T(3) + T(4)).$$
$$\mathbf{13} := 1! - 2! \times 3! + 4! \quad = -T(1) \times T(2) + T(3) + T(4).$$
$$\mathbf{14} := (1! - 3!) \times 2! + 4! \ = T(1) + T(3) - T(2) + T(4).$$
$$\mathbf{15} := -1! - 3! + 4! - 2! = (T(1) - T(3) + T(4)) \times T(2).$$
$$\mathbf{16} := -1! \times 2! - 3! + 4! = (T(1) + T(2)) \times (-T(3) + T(4)).$$
$$\mathbf{18} := (1! - 2!) \times 3! + 4! \ = -T(1) + T(2) + T(3) + T(4).$$

19 $:= -1! + 2! - 3! + 4! = T(1) \times T(2) + T(3) + T(4).$
20 $:= 1! \times 2! - 3! + 4! \quad = T(1) + T(2) + T(3) + T(4).$
21 $:= 1! + 4! + 2! - 3! \quad = (-T(1) + T(4)) \times T(2) - T(3).$
27 $:= -1! - 2! + 3! + 4! = -T(1) + T(2) \times T(3) + T(4).$
28 $:= -1! \times 2! + 3! + 4! = T(1) \times T(2) \times T(3) + T(4).$
29 $:= 1! - 2! + 3! + 4! \quad = T(1) + T(2) \times T(3) + T(4).$

30 $:= (-1! + 2!) \times 3! + 4! = (-T(1) \times T(2) + T(3)) \times T(4).$
31 $:= -1! + 2! + 3! + 4! \quad = T(1) - (T(2) - T(3)) \times T(4).$
32 $:= 1! \times 2! + 3! + 4! \quad = (-T(1) + T(2)) \times (T(3) + T(4)).$
33 $:= 1! + 4! + 2! + 3! \quad = (T(1) + T(4)) \times (-T(2) + T(3)).$
34 $:= 2! \times (-1! - 3! + 4!) = (T(2) + T(1)) \times T(3) + T(4).$
35 $:= -1! + 3! \times 2! + 4! \quad = -T(1) + T(3) + T(2) \times T(4).$

36 $:= 1! \times 2! \times (4! - 3!) \quad = (-T(1) - T(2) + T(4)) \times T(3).$
37 $:= 1! + 3! \times 2! + 4! \quad = T(1) + T(3) + T(2) \times T(4).$
40 $:= -3! + 2! \times (-1! + 4!) = (T(3) - T(2) + T(1)) \times T(4).$
41 $:= -1! - 3! + 2! \times 4! \quad = -T(1) + T(3) \times (-T(2) + T(4)).$
42 $:= -1! \times 3! + 2! \times 4! \quad = T(1) \times T(3) \times (-T(2) + T(4)).$
43 $:= 1! + 2! \times 4! - 3! \quad = (T(1) - T(2) + T(4)) \times T(3).$

48 $:= -(2! + 1!) \times 4! + 5! = T(2) \times (T(1) + T(4)) + T(5).$
48 $:= 2! \times (3! \times 4! - 5!) \quad = T(2) + T(3) \times T(4) - T(5).$
53 $:= -1! + 3! + 4! \times 2! \quad = (-T(1) + T(3)) \times T(4) + T(2).$
56 $:= 2! \times (1! + 4!) + 3! \quad = -T(2) - T(1) + T(4) \times T(3).$
58 $:= (-1! + 3! + 4!) \times 2! = T(1) + T(3) \times T(4) - T(2).$
60 $:= -2! \times (4! + 3!) + 5! = -T(2) \times T(4) + T(3) \times T(5).$

62 $:= 2! \times (1! + 3! + 4!) \quad = T(2) - T(1) + T(3) \times T(4).$
70 $:= -(4! + 1!) \times 2! + 5! = T(4) + (T(1) + T(2)) \times T(5).$
72 $:= -2! \times 1! \times 4! + 5! \quad = T(2) \times (-T(1) + T(4) + T(5)).$
78 $:= (1! + 2!) \times 4! + 3! \quad = (T(1) \times T(2) + T(4)) \times T(3).$
89 $:= -1! - 4! - 3! + 5! \quad = -T(1) + T(4) \times (-T(3) + T(5)).$

90 $:= (1! + 2!) \times (3! + 4!) = (T(1) \times T(2) + T(3)) \times T(4).$
$:= -1! \times 3! + 5! - 4! \quad = (-T(1) \times T(3) + T(5)) \times T(4).$

91 $:= 1! - 4! - 3! + 5! = T(1) + T(4) \times (-T(3) + T(5)).$
98 $:= 2! - 4! \times 1! + 5! = (T(2) - T(4)) \times (T(1) - T(5)).$

$\mathbf{100} := (3! - 2!) \times (1! + 4!) = (T(3) + T(2) + T(1)) \times T(4).$
$\mathbf{101} := -1! - 4! + 3! + 5! = T(1) + T(4) + T(3) \times T(5).$
$\mathbf{102} := -(2! + 1!) \times 3! + 5! = -T(2) + (T(1) + T(3)) \times T(5).$
$\mathbf{107} := -1! - 3! \times 2! + 5! = -T(1) + T(3) \times (T(2) + T(5)).$
$\mathbf{108} := 1! \times 5! - 2! \times 3! = (T(1) \times T(5) + T(2)) \times T(3).$
$\mathbf{109} := 1! - 3! \times 2! + 5! = T(1) + T(3) \times (T(2) + T(5)).$

$\mathbf{114} := (1! - 2!) \times (-5! + 3!) = (T(1) + T(2) + T(5)) \times T(3).$
$\mathbf{120} := (1! - 2! + 3!) \times 4! = (-T(1) + T(2) \times T(3) \times T(4)).$
$\mathbf{126} := -3! \times (1! - 2!) + 5! = (T(3) + T(1)) \times (T(2) + T(5)).$
$\mathbf{132} := -2! \times 3! + 4! + 5! = -T(2) \times T(3) + T(4) \times T(5).$
$\mathbf{134} := (1! + 3!) \times 2! + 5! = -T(1) + (T(3) + T(2)) \times T(5).$
$\mathbf{143} := 1! + 5! + 4! - 2! = (-T(1) + T(5)) \times T(4) + T(2).$

$\mathbf{144} := 3! \times (4! + 5!) - 6! = (-T(3) + T(4)) \times (T(5) + T(6)).$
$\mathbf{146} := 1! \times 2! + 4! + 5! = -T(1) - T(2) + T(4) \times T(5).$
$\mathbf{147} := 1! + 2! + 4! + 5! = -T(1) \times T(2) + T(4) \times T(5).$
$\mathbf{149} := -1! + 3! + 4! + 5! = -T(1) + T(3) \times (T(4) + T(5)).$

$\mathbf{150} := 1! \times 3! + 4! + 5! = T(1) \times T(3) \times (T(4) + T(5)).$
$:= 3! \times (-1! + 2! + 4!) = (T(3) - T(1)) \times T(2) \times T(4).$

$\mathbf{151} := 1! + 3! + 4! + 5! = T(1) + T(3) \times (T(4) + T(5)).$
$\mathbf{162} := (1! + 4! + 2!) \times 3! = (-T(1) + T(4)) \times T(2) \times T(3).$
$\mathbf{168} := 2! \times 1! \times 4! + 5! = T(2) + (T(1) + T(4)) \times T(5).$
$\mathbf{168} := 2! \times 3! \times 4! - 5! = T(2) \times T(3) + T(4) \times T(5).$

$\mathbf{170} := (4! + 1!) \times 2! + 5! = T(4) \times (-T(1) + T(2) + T(5)).$
$:= 2! + (3! + 1!) \times 4! = (T(2) \times T(3) - T(1)) \times T(4).$

$\mathbf{174} := 3! + 4! \times 2! + 5! = -T(3) + T(4) \times (T(2) + T(5)).$
$\mathbf{180} := 2! \times (3! + 4!) + 5! = T(2) \times (-T(3) + T(4)) \times T(5).$
$\mathbf{186} := 2! \times (5! - 4!) - 3! = (T(2) + T(5)) \times T(4) + T(3).$
$\mathbf{190} := 2! \times (5! - 1! - 4!) = (T(2) + T(5) + T(1)) \times T(4).$
$\mathbf{194} := (1! + 5! - 4!) \times 2! = -T(1) + T(5) \times (T(4) + T(2)).$
$\mathbf{210} := 2! \times 5! - 4! - 3! = (T(2) \times T(5) - T(4)) \times T(3).$

$\mathbf{240} := (-1! + 3!) \times 4! + 5! = (T(1) \times T(3) + T(4)) \times T(5).$
$:= (3! - 1!) \times 2! \times 4! = T(3) \times (T(1) + T(2)) \times T(4).$

$\mathbf{252} := (1! \times 5! + 3!) \times 2! = (-T(1) + T(5)) \times T(3) \times T(2).$
$\mathbf{270} := 2! \times 5! + 3! + 4! \quad = T(2) \times (T(5) - T(3)) \times T(4).$
$\mathbf{300} := 2! \times (3! + 5! + 4!) = T(2) \times (T(3) \times T(5) + T(4)).$

$\mathbf{360} := (-1! - 2! + 3!) \times 5! = (T(1) + T(2)) \times T(3) \times T(5).$
$:= 6! - (1! + 2!) \times 5! \quad = (T(6) \times T(1) + T(2)) \times T(5).$

$\mathbf{432} := 3! \times (5! - 4! \times 2!) \quad = (-T(3) + T(5) \times T(4)) \times T(2).$
$\mathbf{456} := (3! - 2!) \times 5! - 4! \quad = T(3) + T(2) \times T(5) \times T(4).$
$\mathbf{468} := -(3! + 5!) \times 2! + 6! = T(3) \times (T(5) + T(2) \times T(6)).$
$\mathbf{486} := -2! \times 5! + 3! + 6! \quad = (T(2) + T(5)) \times (T(3) + T(6)).$
$\mathbf{528} := 2! \times (4! - 5!) + 6! \quad = T(2) + (T(4) + T(5)) \times T(6).$

$\mathbf{588} := 3! \times (2! - 4!) + 6! \quad = (T(3) \times T(2) + T(4)) \times T(6).$
$\mathbf{600} := -5! - 6! \times 3! + 7! \quad = F(5) \times F(6) \times (F(3) + F(7)).$
$\mathbf{624} := (-3! + 2!) \times 4! + 6! = -T(3) + (T(2) \times T(4)) \times T(6).$
$\mathbf{630} := 3! + 4! - 5! + 6! \quad = T(3) \times (-T(4) + T(5)) \times T(6).$
$\mathbf{693} := -1! - 4! - 2! + 6! \quad = (T(1) + T(4)) \times T(2) \times T(6).$

$\mathbf{714} := -(1! + 6!) \times 3! + 7! = T(1) \times T(6) \times (T(3) + T(7)).$
$\mathbf{750} := 3! \times (1! + 5!) + 4! \quad = (T(3) - T(1)) \times T(5) \times T(4).$
$\mathbf{756} := 2! \times (4! - 3!) + 6! \quad = (T(2) \times T(4) + T(3)) \times T(6).$
$\mathbf{840} := -3! \times 6! + 5! + 7! \quad = (-T(3) + T(6) + T(5)) \times T(7).$
$\mathbf{960} := 1! \times 6! + 2! \times 5! \quad = (T(1) + T(6) \times T(2)) \times T(5).$

$\mathbf{1008} := (2! \times 3!) \times 4! + 6! \quad = T(2) \times (T(3) + T(4)) \times T(6).$
$\mathbf{2160} := 2! \times 6! + 3! \times 5! \quad = (T(2) + T(6)) \times T(3) \times T(5).$
$\mathbf{3612} := 2! \times (3! - 6!) + 7! \quad = (T(2) + T(3) \times T(6)) \times T(7).$
$\mathbf{5040} := -(1! + 3!) \times 7! + 8! = (-T(1) + T(3)) \times T(7) \times T(8).$

- **Five-Terms Expressions**

$\mathbf{0} := (2! \times 4! - 5!) \times 7! + 9! = (T(2) + T(4) + T(5) - T(7)) \times T(9).$
$:= 9! \times 2! + 8! \times (3! - 4!) = (-T(9) + T(2) + T(8) + T(3)) \times T(4).$
$:= 6! + 7! - 2! \times 4! \times 5! \quad = (T(6) - T(7) - T(2) + T(4)) \times T(5).$

$\mathbf{1} := 7! \times (2! + 3!) + 1! - 8! = T(7) + T(2) + T(3) \times T(1) - T(8).$

$$\begin{aligned}
\mathbf{21} &:= 3! \times 4! - 1! - 2! - 5! && = -T(3) + T(4) - T(1) + T(2) + T(5).\\
\mathbf{22} &:= 1! \times 3! \times 4! - 5! - 2! && = T(1) + T(3) - (T(4) - T(5)) \times T(2).\\
\mathbf{25} &:= 1! + 4! + 3! \times 5! - 6! && = -T(1) - T(4) + T(3) \times (-T(5) + T(6)).\\
\mathbf{26} &:= 4! \times 1! \times 3! + 2! - 5! && = -T(4) + (T(1) + T(3)) \times T(2) + T(5).\\
\mathbf{27} &:= 1! + 4! \times 3! + 2! - 5! && = (T(1) \times T(4) - T(3)) \times T(2) + T(5).\\
\mathbf{32} &:= 2! + 3! \times (4! + 1!) - 5! && = T(2) \times (T(3) + T(4)) - T(1) - T(5).\\
\mathbf{34} &:= (1! + 3!) \times (-2! + 4!) - 5! && = (T(1) + T(3)) \times (-T(2) + T(4)) - T(5).\\
\mathbf{35} &:= -1! - 5! + 3! \times (2! + 4!) && = T(1) + T(5) + T(3) + T(2) + T(4).\\
\\
\mathbf{36} &:= 2! \times (3! \times (-1! + 4!) - 5!) && = (T(2) + T(3)) \times (-T(1) - T(4) + T(5)).\\
\mathbf{37} &:= 1! + (4! + 2!) \times 3! - 5! && = T(1) \times T(4) - T(2) \times (T(3) - T(5)).\\
\mathbf{42} &:= (1! + 4! + 2!) \times 3! - 5! && = (T(1) + T(4)) \times T(2) - T(3) + T(5).\\
\mathbf{46} &:= 2! \times (3! \times 4! - 1! - 5!) && = -(T(2) - T(3)) \times T(4) + T(1) + T(5).\\
\mathbf{47} &:= -1! + 2! \times (3! \times 4! - 5!) && = (-T(1) + T(2)) \times (T(3) + T(4)) + T(5).\\
\mathbf{48} &:= (1! + 2! - 3!) \times 4! + 5! && = T(1) \times T(2) + T(3) \times T(4) - T(5).\\
\mathbf{49} &:= 1! - (5! - 3! \times 4!) \times 2! && = T(1) - T(5) + T(3) \times T(4) + T(2).\\
\mathbf{50} &:= 2! - 5! + (1! + 3!) \times 4! && = T(2) \times T(5) + T(1) - T(3) + T(4).\\
\\
\mathbf{54} &:= 3! - (1! + 2!) \times 4! + 5! && = T(3) \times (T(1) + T(2) - T(4) + T(5)).\\
\mathbf{58} &:= -(1! + 3! + 4!) \times 2! + 5! && = (T(1) + T(3)) \times T(4) + T(2) - T(5).\\
\mathbf{59} &:= -1! - 2! \times (4! + 3!) + 5! && = -T(1) - T(2) \times T(4) + T(3) \times T(5).\\
\mathbf{60} &:= 1! \times 5! - 2! \times (3! + 4!) && = (T(1) \times T(5) - T(2) - T(3)) \times T(4).\\
\mathbf{61} &:= 1! - (3! + 4!) \times 2! + 5! && = T(1) \times T(3) + T(4) + T(2) \times T(5).\\
\mathbf{62} &:= (1! + 3!) \times (2! + 4!) - 5! && = -T(1) + T(3) \times (T(2) + T(4)) - T(5).\\
\mathbf{64} &:= -(1! + 4!) \times 2! - 3! + 5! && = T(1) + (T(4) + T(2)) \times T(3) - T(5).\\
\mathbf{65} &:= -1! - 3! - 2! \times 4! + 5! && = (-T(1) + T(3) + T(2)) \times T(4) - T(5).\\
\\
\mathbf{66} &:= -1! \times 4! \times 2! - 3! + 5! && = (T(1) + T(4)) \times (-T(2) - T(3) + T(5)).\\
\mathbf{67} &:= -2! \times 4! - 3! + 1! + 5! && = T(2) + (T(4) - T(3)) \times (T(1) + T(5)).\\
\mathbf{68} &:= -2! \times (4! - 1!) - 3! + 5! && = T(2) - T(4) - (T(1) - T(3)) \times T(5).\\
\mathbf{71} &:= -1! + (2! + 3!) \times 4! - 5! && = -T(1) - T(2) + T(3) \times T(4) + T(5).\\
\mathbf{72} &:= 1! \times 4! \times (2! + 3!) - 5! && = (T(1) + T(4) - T(2)) \times (-T(3) + T(5)).\\
\mathbf{73} &:= 1! + (2! + 3!) \times 4! - 5! && = T(1) - T(2) + T(3) \times T(4) + T(5).\\
\mathbf{76} &:= -(1! + 4!) \times 2! + 3! + 5! && = -T(1) - T(4) - T(2) + T(3) \times T(5).\\
\mathbf{77} &:= -2! \times 4! - 1! + 3! + 5! && = -(T(2) + T(4)) \times T(1) + T(3) \times T(5).\\
\\
\mathbf{78} &:= -1! \times 2! \times 4! + 3! + 5! && = T(1) \times T(2) + T(4) \times T(3) + T(5).\\
\mathbf{79} &:= 1! - 2! \times 4! - 3! + 5! && = (T(1) + T(2)) \times (T(4) + T(3)) + T(5).\\
\mathbf{80} &:= 3! + (1! - 4!) \times 2! + 5! && = (T(3) - T(1)) \times (T(4) + T(2)) + T(5).\\
\mathbf{82} &:= -(1! + 3!) \times 2! - 4! + 5! && = T(1) + T(3) + T(2) \times (T(4) + T(5)).\\
\mathbf{83} &:= -1! - 4! - 2! \times 3! + 5! && = -T(1) \times T(4) + T(2) + T(3) \times T(5).\\
\mathbf{84} &:= -1! \times 2! \times 3! + 5! - 4! && = T(1) + T(2) + T(3) \times T(5) - T(4).\\
\mathbf{85} &:= 1! - 2! \times 3! - 4! + 5! && = (T(1) + T(2) + T(3)) \times T(4) - T(5).
\end{aligned}$$

86 $:= 2! \times (1! - 4! + 3!) + 5! = -T(2) - T(1) + T(4) \times (-T(3) + T(5))$.
87 $:= -1! - 2! - 4! - 3! + 5! = -T(1) \times T(2) + T(4) \times (-T(3) + T(5))$.
88 $:= -1! \times 2! - 4! - 3! + 5! = T(1) - T(2) - T(4) \times (T(3) - T(5))$.
89 $:= 1! - 2! - 3! - 4! + 5! = -T(1) + T(2) \times T(3) \times (-T(4) + T(5))$.
90 $:= (1! - 2!) \times 4! - 3! + 5! = (-T(1) + T(2) + T(4) - T(3)) \times T(5)$.
91 $:= -1! - 3! - 4! + 2! + 5! = T(1) + T(3) \times (T(4) \times T(2) - T(5))$.
92 $:= 1! \times 2! - 3! - 4! + 5! = -T(1) + T(2) \times (T(3) + T(4) + T(5))$.

93 $:= 1! + 2! - 3! - 4! + 5! = T(1) \times T(2) \times (T(3) + T(4) + T(5))$.
94 $:= 2! \times (-1! + 5!) - 3! \times 4! = (T(2) + T(1)) \times (T(5) + T(3)) + T(4)$.
95 $:= -1! - 3! \times 4! + 2! \times 5! = (-T(1) + T(3)) \times T(4) + T(2) \times T(5)$.
96 $:= -1! \times 4! \times 3! + 2! \times 5! = (-T(1) + T(4)) \times (T(3) + T(2)) + T(5)$.
97 $:= 1! - 4! \times 3! + 2! \times 5! = -T(1) - T(4) + T(3) \times (T(2) + T(5))$.
98 $:= (1! + 5!) \times 2! - 3! \times 4! = (T(1) \times T(5) + T(2)) \times T(3) - T(4)$.
99 $:= -1! - 2! - 4! + 3! + 5! = (T(1) + T(2) + T(4)) \times T(3) + T(5)$.

100 $:= -1! \times 2! + 3! - 4! + 5! = (T(1) - T(2) + T(3)) \times (T(4) + T(5))$.
102 $:= (1! - 2!) \times 4! + 3! + 5! = -T(1) + T(2) + T(4) + T(3) \times T(5)$.
103 $:= 2! - 1! - 4! + 3! + 5! = T(2) \times T(1) + T(4) + T(3) \times T(5)$.
104 $:= 1! \times 2! + 3! - 4! + 5! = -T(1) + (T(2) + T(3)) \times T(4) + T(5)$.
105 $:= 1! + 2! + 3! - 4! + 5! = (T(1) \times T(2) + T(3)) \times T(4) + T(5)$.
106 $:= (-1! + 3!) \times 2! - 4! + 5! = (T(1) + T(3)) \times (T(2) + T(4)) + T(5)$.

108 $:= 2! \times 3! \times 1! - 4! + 5! = T(2) \times T(3) \times (T(1) - T(4) + T(5))$.
109 $:= 1! + 5! + 3! \times 2! - 4! = (T(1) + T(5)) \times T(3) + T(2) + T(4)$.
110 $:= (1! + 3!) \times 2! - 4! + 5! = (T(1) - T(3)) \times (T(2) - T(4) - T(5))$.
114 $:= 3! \times (1! + 2!) - 4! + 5! = -T(3) + (T(1) - T(2) + T(4)) \times T(5)$.
120 $:= (1! - 3!) \times 4! + 2! \times 5! = (T(1) - T(3) + T(4) + T(2)) \times T(5)$.
122 $:= 5! \times (1! + 3!) + 2! - 6! = T(5) - T(1) - T(3) \times (T(2) - T(6))$.
126 $:= -(1! + 2!) \times 3! + 4! + 5! = -(T(1) + T(2)) \times T(3) + T(4) \times T(5)$.

130 $:= (-1! + 3!) \times (2! - 5!) + 6! = T(1) + T(3) \times (T(2) + T(5)) + T(6)$.
$:= 4! - (1! + 3!) \times 2! + 5! = T(4) \times (T(1) - T(3) + T(2) + T(5))$.

131 $:= -2! \times 3! - 1! + 4! + 5! = -T(2) \times T(3) - T(1) + T(4) \times T(5)$.

132 $:= -1! \times 2! \times 3! + 4! + 5! = -T(1) \times T(2) \times T(3) + T(4) \times T(5)$.
132 $:= 3! \times (4! + 5! - 2!) - 6! = (T(3) - T(4)) \times (-T(5) + T(2) - T(6))$.

$$\mathbf{133} := 1! - 2! \times 3! + 4! + 5! = T(1) - T(2) \times T(3) + T(4) \times T(5).$$
$$\mathbf{134} := -2! \times (3! - 1!) + 5! + 4! = (T(2) + T(3)) \times (T(1) + T(5)) - T(4).$$
$$\mathbf{135} := -1! - 2! - 3! + 4! + 5! = T(1) \times T(2) \times (T(3) \times T(4) - T(5)).$$
$$\mathbf{136} := -1! \times 2! - 3! + 4! + 5! = T(1) + T(2) \times (T(3) \times T(4) - T(5)).$$
$$\mathbf{137} := -2! - 3! + 4! + 1! + 5! = T(2) - T(3) - T(4) \times (T(1) - T(5)).$$

$$\mathbf{138} := (1! - 2!) \times 3! + 4! + 5! = (T(1) - T(2)) \times T(3) + T(4) \times T(5).$$
$$\mathbf{138} := (-1! + 4! + 5!) \times 3! - 6! = (T(1) + T(4)) \times T(5) - T(3) - T(6).$$
$$\mathbf{140} := 1! \times 2! - 3! + 4! + 5! = -T(1) - T(2) - T(3) + T(4) \times T(5).$$
$$\mathbf{141} := 1! + 2! - 3! + 4! + 5! = -T(1) \times T(2) - T(3) + T(4) \times T(5).$$
$$\mathbf{143} := -1! + 3! \times (4! + 5!) - 6! = -T(1) + (-T(3) + T(4)) \times (T(5) + T(6)).$$

$$\mathbf{144} := (2! \times 3! - 1!) \times 4! - 5! = T(2) + T(3) + (-T(1) + T(4)) \times T(5).$$
$$:= 3! \times (4! + 5! + 6!) - 7! = T(3) \times (-T(4) - T(5) + T(6) + T(7)).$$

$$\mathbf{145} := 1! + (5! + 4!) \times 3! - 6! = (T(1) + T(5)) \times T(4) + T(3) - T(6).$$
$$\mathbf{146} := 2! + 3! \times (5! + 4!) - 6! = (T(2) + T(3)) \times T(5) - T(4) + T(6).$$
$$\mathbf{147} := -1! - 2! + 3! + 4! + 5! = T(1) \times T(2) - T(3) + T(4) \times T(5).$$
$$\mathbf{148} := -1! \times 2! + 3! + 4! + 5! = T(1) + T(2) - T(3) + T(4) \times T(5).$$
$$\mathbf{149} := -2! + 3! + 4! + 1! + 5! = T(2) + T(3) - T(4) \times (T(1) - T(5)).$$

$$\mathbf{150} := (-1! + 2!) \times 3! + 4! + 5! = (-T(1) + T(2)) \times (T(3) \times T(4) + T(5)).$$
$$:= 3! \times (1! + 4! + 5!) - 6! = T(3) + (T(1) + T(4)) \times T(5) - T(6).$$

$$\mathbf{151} := 2! + 3! + 4! - 1! + 5! = -T(2) - T(3) + T(4) \times (T(1) + T(5)).$$
$$\mathbf{152} := 1! \times 2! + 3! + 4! + 5! = -T(1) - T(2) + T(3) + T(4) \times T(5).$$
$$\mathbf{153} := 1! + 2! + 3! + 4! + 5! = -T(1) \times T(2) + T(3) + T(4) \times T(5).$$
$$\mathbf{154} := (3! - 1!) \times 2! + 4! + 5! = T(3) + T(1) - T(2) + T(4) \times T(5).$$
$$\mathbf{155} := -1! + 2! \times 3! + 4! + 5! = (-T(1) + T(2) \times T(3)) \times T(4) - T(5).$$

$$\mathbf{156} := 2! \times 3! \times 1! + 4! + 5! = -T(2) - T(3) + (T(1) + T(4)) \times T(5).$$
$$:= (2! + 4! + 5!) \times 3! - 6! = (T(2) + T(4)) \times (-T(5) + T(3) + T(6)).$$

$$\mathbf{157} := 2! \times 3! + 4! + 1! + 5! = T(2) - T(3) + T(4) \times (T(1) + T(5)).$$
$$\mathbf{158} := (1! + 3!) \times 2! + 4! + 5! = -T(1) + T(3) + T(2) + T(4) \times T(5).$$
$$\mathbf{160} := (4! - 1!) \times 2! - 3! + 5! = T(4) + (T(1) + T(2) + T(3)) \times T(5).$$
$$\mathbf{162} := (1! + 2!) \times 3! + 4! + 5! = (-T(1) + T(2)) \times T(3) + T(4) \times T(5).$$
$$\mathbf{163} := 1! + 5! + 4! \times 2! - 3! = (T(1) + T(5)) \times T(4) - T(2) + T(3).$$
$$\mathbf{164} := (1! + 4!) \times 2! - 3! + 5! = -T(1) + T(4) \times T(2) \times T(3) - T(5).$$
$$\mathbf{166} := (-1! + 3! \times 4!) \times 2! - 5! = T(1) + T(3) \times T(4) \times T(2) - T(5).$$
$$\mathbf{167} := -1! + 2! \times 3! \times 4! - 5! = -T(1) + T(2) \times T(3) + T(4) \times T(5).$$

$$\begin{aligned}
\mathbf{168} &:= 1! \times 2! \times 3! \times 4! - 5! \quad = T(1) \times T(2) \times T(3) + T(4) \times T(5). \\
&:= (3! + 1!) \times (6! + 4!) - 7! = (-T(3) - T(1) + T(6)) \times T(4) + T(7).
\end{aligned}$$

$$\begin{aligned}
\mathbf{169} &:= 1! + 2! \times 3! \times 4! - 5! \quad = T(1) + T(2) \times T(3) + T(4) \times T(5). \\
\mathbf{170} &:= (4! \times 3! + 1!) \times 2! - 5! \quad = T(4) \times (T(3) - T(1) - T(2) + T(5)). \\
\mathbf{173} &:= 3! - 1! + 4! \times 2! + 5! \quad = -T(3) - T(1) + T(4) \times (T(2) + T(5)). \\
\mathbf{174} &:= (1! + 2!) \times (-3! + 4!) + 5! = (T(1) + T(2)) \times T(3) + T(4) \times T(5). \\
\mathbf{175} &:= 1! + 3! + 2! \times 4! + 5! \quad = (T(1) + T(3) \times T(2)) \times T(4) - T(5). \\
\mathbf{176} &:= 3! + (4! + 1!) \times 2! + 5! \quad = (T(3) + T(4)) \times (-T(1) - T(2) + T(5)). \\
\mathbf{178} &:= 2! \times (-3! - 1! - 4! + 5!) \quad = T(2) + (T(3) + T(1)) \times (T(4) + T(5)). \\
\mathbf{179} &:= -1! + 2! \times (3! + 4!) + 5! \quad = -T(1) + T(2) \times (-T(3) + T(4)) \times T(5).
\end{aligned}$$

$$\begin{aligned}
\mathbf{180} &:= (1! \times 3! + 4!) \times 2! + 5! \quad = (-T(1) \times T(3) + T(4)) \times T(2) \times T(5). \\
\mathbf{181} &:= 1! + 2! \times (3! + 4!) + 5! \quad = T(1) - T(2) \times (T(3) - T(4)) \times T(5). \\
\mathbf{182} &:= 2! \times (3! + 4! + 1!) + 5! \quad = (T(2) - T(3) - T(4)) \times (T(1) - T(5)). \\
\mathbf{184} &:= 2! \times (5! - 1! - 4!) - 3! \quad = (T(2) + T(5) + T(1)) \times T(4) - T(3). \\
\mathbf{185} &:= -1! - 3! + 2! \times (-4! + 5!) = (-T(1) + T(3) \times T(2)) \times T(4) + T(5). \\
\mathbf{186} &:= (2! + 1!) \times 4! - 3! + 5! \quad = -T(2) + (-T(1) + T(4)) \times (T(3) + T(5)). \\
\mathbf{187} &:= 1! + 2! \times (5! - 4!) - 3! \quad = T(1) + (T(2) + T(5)) \times T(4) + T(3). \\
\mathbf{188} &:= (1! + 5! - 4!) \times 2! - 3! \quad = (-T(1) + T(5)) \times (T(4) + T(2)) + T(3).
\end{aligned}$$

$$\begin{aligned}
\mathbf{192} &:= (-2! - 1! + 3!) \times 4! + 5! = T(2) \times (-T(1) + T(3) \times T(4)) + T(5). \\
&:= (3! + 2!) \times (4! + 7!) - 8! \ = (T(3) - T(2) \times T(4)) \times (T(7) - T(8)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{196} &:= 3! - 2! \times (4! + 1! - 5!) \quad = T(3) \times T(2) \times T(4) + T(1) + T(5). \\
\mathbf{197} &:= 3! - 1! + (5! - 4!) \times 2! \quad = (T(3) - T(1) + T(5)) \times T(4) - T(2). \\
\mathbf{198} &:= (2! + 1!) \times 4! + 3! + 5! \quad = T(2) \times (T(1) + T(4) \times T(3)) + T(5). \\
\mathbf{200} &:= 3! + 2! \times (1! - 4! + 5!) \quad = (T(3) + T(2) - T(1)) \times (T(4) + T(5)). \\
\mathbf{202} &:= (-1! - 3! + 5!) \times 2! - 4! \quad = T(1) + T(3) + T(5) \times (T(2) + T(4)). \\
\mathbf{203} &:= 2! \times (5! - 3!) - 1! - 4! \quad = T(2) + (T(5) + T(3) - T(1)) \times T(4). \\
\mathbf{204} &:= (1! \times 3! - 4! + 5!) \times 2! \quad = (T(1) + T(3) + T(4)) \times (T(5) - T(2)). \\
\mathbf{205} &:= -4! + 1! + 2! \times (-3! + 5!) = T(4) \times (T(1) + T(2) \times T(3)) + T(5).
\end{aligned}$$

$$\begin{aligned}
\mathbf{206} &:= 2! \times (1! - 4! + 3! + 5!) \quad = -T(2) - T(1) + T(4) \times (T(3) + T(5)). \\
\mathbf{208} &:= -3! - 4! + 2! \times (-1! + 5!) = (T(3) + T(4) - T(2)) \times (T(1) + T(5)). \\
\mathbf{209} &:= -1! - 3! - 4! + 2! \times 5! \quad = -T(1) + T(3) \times (-T(4) + T(2) \times T(5)). \\
\mathbf{210} &:= -1! \times 3! - 4! + 2! \times 5! \quad = (T(1) + T(3) + T(4) - T(2)) \times T(5). \\
\mathbf{211} &:= 1! - 3! - 4! + 2! \times 5! \quad = T(1) - T(3) \times (T(4) - T(2) \times T(5)). \\
\mathbf{212} &:= 2! \times (1! + 5!) - 3! - 4! \quad = T(2) - T(1) + (T(5) + T(3)) \times T(4). \\
\mathbf{215} &:= 4! \times (-2! + 3!) - 1! + 5! \quad = -T(4) + T(2) \times (T(3) - T(1)) \times T(5).
\end{aligned}$$

$$\begin{aligned}
\mathbf{216} &:= (3!+2!)\times 5!-4!-6! = -T(3)-T(2)+T(5)+T(4)\times T(6).\\
&:= 1!\times 4!\times(3!-2!)+5! = (-T(1)+T(4))\times(T(3)+T(2)+T(5)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{221} &:= 2!\times 5!-1!+3!-4! &&= -T(2)+(T(5)-T(1))\times(T(3)+T(4)).\\
\mathbf{222} &:= 2!\times 1!\times 5!+3!-4! &&= T(2)\times(-T(1)+T(5)+T(3)\times T(4)).\\
\mathbf{223} &:= 2!\times 5!+1!+3!-4! &&= T(2)+(T(5)+T(1)+T(3))\times T(4).\\
\mathbf{228} &:= (3!\times 1!+5!)\times 2!-4! &&= T(3)\times((T(1)+T(5))\times T(2)-T(4)).\\
\mathbf{230} &:= (1!+3!+5!)\times 2!-4! &&= (-T(1)+T(3)+T(5)+T(2))\times T(4).\\
\mathbf{238} &:= -2!-(1!-3!)\times 4!+5! &&= -T(2)+T(1)+(T(3)+T(4))\times T(5).
\end{aligned}$$

$$\begin{aligned}
\mathbf{240} &:= (1!-2!+3!)\times 4!+5! &&= (T(1)+T(2))\times(-T(3)+T(4))\times T(5).\\
&:= 1!\times 5!\times(3!+2!)-6! &&= (T(1)+T(5)-T(3))\times(T(2)+T(6)).\\
&:= -(3!+2!)\times(6!-5!)+7! &&= T(3)+(T(2)-T(6))\times(T(5)-T(7)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{242} &:= 2!-(1!-3!)\times 4!+5! &&= T(2)-T(1)+(T(3)+T(4))\times T(5).\\
\mathbf{248} &:= (1!+5!)\times(2!+3!)-6! &&= -T(1)+T(5)\times T(2)\times T(3)-T(6).\\
\mathbf{250} &:= (3!-1!)\times(2!+4!)+5! &&= (T(3)+T(1)+T(2))\times(T(4)+T(5)).\\
\mathbf{252} &:= (-1!\times 2!+4!)\times 3!+5! &&= (-T(1)+T(2)+T(4))\times(T(3)+T(5)).\\
\mathbf{253} &:= (-2!+4!)\times 3!+1!+5! &&= -T(2)+(T(4)+T(3))\times(T(1)+T(5)).\\
\mathbf{254} &:= 2!\times(5!+1!-3!)+4! &&= (T(2)\times T(5)-T(1))\times T(3)-T(4).\\
\mathbf{257} &:= -1!-3!+5!\times 2!+4! &&= (-T(1)+T(3)\times T(5))\times T(2)-T(4).
\end{aligned}$$

$$\begin{aligned}
\mathbf{258} &:= (-2!+1!+4!)\times 3!+5! &&= T(2)+(T(1)+T(4)+T(3))\times T(5).\\
\mathbf{259} &:= 1!+4!-3!+2!\times 5! &&= -T(1)-T(4)+T(3)\times T(2)\times T(5).\\
\mathbf{260} &:= (4!-1!)\times 3!+2!+5! &&= -T(4)\times T(1)+T(3)\times T(2)\times T(5).\\
\mathbf{261} &:= -1!-2!+4!\times 3!+5! &&= (T(1)-T(2)\times T(4))\times(T(3)-T(5)).\\
\mathbf{262} &:= 4!\times 3!-2!\times 1!+5! &&= T(4)-T(3)\times T(2)\times(T(1)-T(5)).\\
\mathbf{263} &:= -2!+1!+5!+3!\times 4! &&= T(2)\times(T(1)+T(5)\times T(3))-T(4).
\end{aligned}$$

$$\begin{aligned}
\mathbf{264} &:= (3!+2!)\times 5!+4!-6! = (T(3)+T(2)+T(5))\times(-T(4)+T(6)).\\
&:= 3!\times 4!\times(2!-1!)+5! = T(3)\times(T(4)\times T(2)-T(1)+T(5)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{265} &:= 4!\times 3!+2!-1!+5! &&= T(4)+(T(3)\times T(2)-T(1))\times T(5).\\
\mathbf{266} &:= 2!+3!\times 4!\times 1!+5! &&= (T(2)+T(3)+T(4))\times(-T(1)+T(5)).\\
\mathbf{267} &:= 2!+1!+4!\times 3!+5! &&= T(2)\times(-T(1)+T(4)\times(-T(3)+T(5))).\\
\mathbf{269} &:= -1!+3!+4!+2!\times 5! &&= -T(1)+T(3)\times(T(4)\times T(2)+T(5)).\\
\mathbf{270} &:= 1!\times 3!+4!+2!\times 5! &&= T(1)\times T(3)\times(T(4)\times T(2)+T(5)).\\
\mathbf{271} &:= 1!+3!+4!+2!\times 5! &&= T(1)+T(3)\times(T(4)\times T(2)+T(5)).\\
\mathbf{272} &:= 3!\times(4!+1!)+2!+5! &&= (T(3)+T(4))\times(-T(1)+T(2)+T(5)).
\end{aligned}$$

$\mathbf{274} := 2! \times (5! - 1! + 3!) + 4! = (T(2) \times T(5) - T(1)) \times T(3) + T(4).$
$\mathbf{275} := -1! + 3! \times (4! + 2!) + 5! = (-T(1) + T(3)) \times (T(4) + T(2) \times T(5)).$
$\mathbf{276} := 3! \times (2! + 4!) \times 1! + 5! = T(3) \times (T(2) \times T(4) + T(1) + T(5)).$
$\mathbf{277} := 1! + (3! + 5!) \times 2! + 4! = (-T(1) + T(3) \times T(5)) \times T(2) + T(4).$
$\mathbf{278} := (1! + 5! + 3!) \times 2! + 4! = (T(1) + T(5)) \times T(3) \times T(2) - T(4).$

$\mathbf{280} := (4! - 1! + 5!) \times 2! - 3! = T(4) \times T(1) + T(5) \times T(2) \times T(3).$
$\mathbf{281} := -1! - 3! + 2! \times (5! + 4!) = T(1) + T(3) \times T(2) \times T(5) + T(4).$
$\mathbf{282} := 2! \times (4! \times 1! + 5!) - 3! = T(2) \times (T(4) - (T(1) - T(5)) \times T(3)).$
$\mathbf{284} := (1! + 5! + 4!) \times 2! - 3! = -T(1) + T(5) \times (T(4) + T(2) + T(3)).$
$\mathbf{286} := (1! + 3!) \times 4! - 2! + 5! = T(1) + (T(3) + T(4) + T(2)) \times T(5).$

$\mathbf{288} := -(1! + 2!) \times (4! + 5!) + 6! = (T(1) - T(2) + T(4)) \times (T(5) + T(6)).$
$:= (1! + 2! - 3!) \times (4! - 5!) = (T(1) - T(2)) \times (T(3) - T(4) \times T(5)).$
$:= -3! \times (1! + 2!) \times 4! + 6! = -T(3) + (T(1) + T(2) + T(4)) \times T(6).$
$:= 2! \times (3! \times (4! + 5!) - 6!) = (T(2) \times T(3) - T(4)) \times (T(5) + T(6)).$

$\mathbf{294} := 3! - (2! + 1!) \times (4! - 5!) = -T(3) + (T(2) - T(1)) \times T(4) \times T(5).$
$\mathbf{295} := 1! + 3! + 2! \times (5! + 4!) = (T(1) + T(3) \times T(2)) \times T(5) + T(4).$
$\mathbf{298} := 2! \times (3! + 5! - 1! + 4!) = T(2) \times T(3) \times (T(5) + T(1)) + T(4).$
$\mathbf{299} := -1! + 2! \times (4! + 3! + 5!) = -T(1) + T(2) \times (T(4) + T(3) \times T(5)).$
$\mathbf{300} := 1! \times 2! \times (3! + 4! + 5!) = (T(1) + T(2) + T(3) + T(4)) \times T(5).$
$\mathbf{301} := 1! + 2! \times (4! + 3! + 5!) = T(1) + T(2) \times (T(4) + T(3) \times T(5)).$
$\mathbf{304} := (2! + 3!) \times (4! - 1!) + 5! = (T(2) + T(3) + T(4)) \times (T(1) + T(5)).$
$\mathbf{306} := (1! + 2!) \times (5! - 4! + 3!) = (-T(1) + T(2)) \times T(5) \times T(4) + T(3).$

$\mathbf{312} := (1! + 2!) \times 3! \times 4! - 5! = (-T(1) + T(2)) \times (T(3) + T(4) \times T(5)).$
$:= -3! \times 4! \times 2! - 5! + 6! = T(3) \times T(4) - (T(2) - T(5)) \times T(6).$

$\mathbf{318} := (2! + 1!) \times (5! - 3!) - 4! = T(2) \times ((T(1) + T(5)) \times T(3) + T(4)).$
$\mathbf{320} := (4! + 1!) \times (2! + 3!) + 5! = T(4) \times (-T(1) + T(2) \times T(3) + T(5)).$
$\mathbf{330} := -3! - 4! + (1! + 2!) \times 5! = T(3) \times (T(4) \times T(1) + T(2) \times T(5)).$

$\mathbf{336} := -(1! + 2!) \times 5! - 4! + 6! = (T(1) + T(2) \times (T(5) - T(4))) \times T(6).$
$:= -2! \times 5! - 3! \times 4! + 6! = (-T(2) + T(5) - T(3) + T(4)) \times T(6).$
$:= 4! \times (2! + 3! + 1!) + 5! = (T(4) \times T(2) - T(3)) \times (-T(1) + T(5)).$

$\mathbf{342} := -(3! + 5!) \times (1! + 2!) + 6! = T(3) + (T(5) - T(1)) \times (T(2) + T(6)).$
$\mathbf{354} := -3! - (2! + 1!) \times 5! + 6! = T(3) \times T(2) + (T(1) + T(5)) \times T(6).$

$$\begin{aligned}
\mathbf{360} &:= (1!+2!+3!)\times 5!-6! = (T(1)+T(2)+T(3))\times(T(5)+T(6)).\\
&:= (3!-1!)\times 2!\times 4!+5! = (-T(3)\times T(1)+T(2)\times T(4))\times T(5).
\end{aligned}$$

$$\begin{aligned}
\mathbf{366} &:= 3!-5!\times(1!+2!)+6! \quad = T(3)+T(5)\times T(1)\times(T(2)+T(6)).\\
\mathbf{378} &:= (1!+2!)\times(3!-5!)+6! = (-T(1)\times T(2)+T(3)+T(5))\times T(6).\\
\mathbf{380} &:= (3!-2!)\times(5!-1!-4!) = (-T(3)+T(2)\times T(5)-T(1))\times T(4).
\end{aligned}$$

$$\begin{aligned}
\mathbf{384} &:= -(1!+3!)\times 4!\times 2!+6! = (T(1)\times T(3)+T(4))\times(T(2)+T(6)).\\
&:= 3!\times 4!+2!\times 1!\times 5! \quad = (-T(3)+T(4)\times T(2))\times(T(1)+T(5)).\\
&:= 4!-(1!+2!)\times 5!+6! \quad = (T(4)-T(1))\times T(2)\times T(5)-T(6).
\end{aligned}$$

$$\begin{aligned}
\mathbf{385} &:= 1!+3!\times 4!+2!\times 5! \quad = (T(1)+T(3))\times(T(4)+T(2)\times T(5)).\\
\mathbf{390} &:= (1!+4!)\times 3!+2!\times 5! \quad = T(1)\times T(4)\times(-T(3)+T(2)\times T(5)).\\
\mathbf{408} &:= -(1!+2!\times 3!)\times 4!+6! = (T(1)-T(2))\times(T(3)-T(4)\times T(6)).\\
\mathbf{414} &:= 3!\times(2!\times 4!+1!)+5! \quad = -T(3)+T(2)\times T(4)\times(-T(1)+T(5)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{420} &:= (1!+4!)\times 2!\times 3!+5! \quad = (T(1)\times T(4)+T(2)\times T(3))\times T(5).\\
&:= -(1!+4!)\times 2!\times 3!+6! = (T(1)+T(4)+T(2)+T(3))\times T(6).\\
&:= -2!\times(4!+5!+3!)+6! = (T(2)+T(4)+T(5))\times(-T(3)+T(6)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{426} &:= -3!\times(4!\times 2!+1!)+6! = T(3)+T(4)\times(T(2)-T(1))\times T(6).\\
&:= 3!\times(-2!\times 4!-1!+5!) = T(3)-T(2)\times T(4)\times(T(1)-T(5)).
\end{aligned}$$

$$\mathbf{430} := -(1!+4!+5!)\times 2!+6! = T(1)+T(4)\times T(5)\times T(2)-T(6).$$

$$\begin{aligned}
\mathbf{431} &:= -4!\times 2!\times 3!-1!+6! \quad = -T(4)+T(2)\times(T(3)+T(1))\times T(6).\\
&:= -1!+(-2!\times 4!+5!)\times 3! = -T(1)+T(2)\times(T(4)\times T(5)-T(3)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{432} &:= -1!\times 2!\times 3!\times 4!+6! \quad = (-T(1)+T(2))\times(T(3)+T(4)\times T(6)).\\
&:= (-1!\times 2!\times 4!+5!)\times 3! = T(1)\times T(2)\times(T(4)\times T(5)-T(3)).\\
&:= -(1!\times 4!+5!)\times 2!+6! = (T(1)-T(4)-T(5))\times(T(2)-T(6)).\\
&:= -(2!\times 4!+6!)\times 3!+7! = -T(2)\times T(4)+T(6)\times(-T(3)+T(7)).\\
&:= 2!\times(-3!+5!)\times 4!-7! = (T(2)+T(3)+T(5))\times(-T(4)+T(7)).\\
&:= (2!+3!)\times(4!+5!)-6! \quad = T(2)\times(-T(3)+T(4))\times(T(5)+T(6)).\\
&:= -4!\times(1!+3!)-5!+6! = -T(4)+T(1)+(T(3)+T(5))\times T(6).
\end{aligned}$$

$$\mathbf{433} := 1!-(2!\times 4!-5!)\times 3! = T(1)+T(2)\times(T(4)\times T(5)-T(3)).$$

$$\begin{aligned}
\mathbf{438} &:= (2!+1!)\times(5!+4!)+3! = T(2)\times((-T(1)+T(5))\times T(4)+T(3)).\\
&:= 3!-(4!+5!)\times 2!+6! \quad = T(3)\times T(4)+(T(5)+T(2))\times T(6).\\
&:= 3!\times(1!-4!\times 2!)+6! \quad = T(3)\times T(1)\times(T(4)+T(2)\times T(6)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{444} &:= ((1!-4!)\times 2!+5!)\times 3! = T(1)\times T(4)\times T(2)\times T(5)-T(3).\\
&:= -2!\times(5!+3!)-4!+6! = (-T(2)+T(5))\times(T(3)+T(4)+T(6)).\\
&:= 3!\times(1!-4!)\times 2!+6! = T(3)\times(T(1)+T(4)+T(2)\times T(6)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{450} &:= -(1!+4!)\times 3!-5!+6! = -T(1)+T(4)+(T(3)+T(5))\times T(6).\\
&:= -2!\times 5!-3!-4!+6! = (T(2)+T(5))\times(-T(3)+T(4)+T(6)).\\
&:= (1!+2!)\times(3!+4!+5!) = T(1)\times T(2)\times T(3)\times(T(4)+T(5)).
\end{aligned}$$

$$\mathbf{454} := -2!-4!\times 3!-5!+6! = T(2)+T(4)+(T(3)+T(5))\times T(6).$$

$$\begin{aligned}
\mathbf{455} &:= -4!-2!\times 5!-1!+6! = (T(4)+T(2))\times(T(5)-T(1)+T(6)).\\
&:= -1!+(3!-2!)\times 5!-4! = -T(1)+T(3)+(T(2)\times T(5))\times T(4).
\end{aligned}$$

$$\begin{aligned}
\mathbf{456} &:= (1!+3!)\times 2!\times 4!+5! = T(1)\times T(3)+T(2)\times T(4)\times T(5).\\
&:= -3!\times 1!\times 4!+6!-5! = T(3)-(T(1)-T(4)-T(6))\times T(5).\\
&:= -1!\times 4!-2!\times 5!+6! = (-T(1)+T(4)\times T(2))\times T(5)+T(6).\\
&:= -5!-3!\times(6!+4!)+7! = (-T(5)+T(3)+T(6))\times(T(4)+T(7)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{457} &:= 1!+(3!-2!)\times 5!-4! = T(1)+T(3)+T(2)\times T(5)\times T(4).\\
\mathbf{458} &:= -4!\times 3!-5!+2!+6! = -T(4)+T(3)\times(T(5)+T(2)\times T(6)).\\
\mathbf{460} &:= (1!+5!)\times(-2!+3!)-4! = (T(1)-T(5)\times(T(2)-T(3)))\times T(4).
\end{aligned}$$

$$\begin{aligned}
\mathbf{462} &:= (1!-4!)\times 3!-5!+6! = (T(1)+T(4))\times(T(3)+T(5)+T(6)).\\
&:= -2!\times 5!-4!+3!+6! = (T(2)+T(5)+T(4)-T(3))\times T(6).
\end{aligned}$$

$$\mathbf{467} := -1!-(3!+5!)\times 2!+6! = -T(1)+T(3)\times(T(5)+T(2)\times T(6)).$$

$$\begin{aligned}
\mathbf{468} &:= -(1!\times 3!+5!)\times 2!+6! = T(1)\times T(3)\times(T(5)+T(2)\times T(6)).\\
&:= (2!-4!)\times 3!-5!+6! = (T(2)+T(4))\times T(3)\times(-T(5)+T(6)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{469} &:= 1!-(3!+5!)\times 2!+6! = T(1)+T(3)\times(T(5)+T(2)\times T(6)).\\
\mathbf{474} &:= -3!\times 1!-5!\times 2!+6! = T(3)\times(T(1)+T(5)+T(2)\times T(6)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{480} &:= (-1!+3!)\times 5!\times 2!-6! = (-T(1)+T(3)+T(5))\times(T(2)+T(6)).\\
&:= (1!-2!+3!)\times(-4!+5!) = (-T(1)+T(2))\times(T(3)+T(4))\times T(5).\\
&:= 2!\times 4!\times(1!-3!)+6! = T(2)\times T(4)\times(T(1)-T(3)+T(6)).\\
&:= -2!\times 5!-3!\times 6!+7! = -(T(2)+T(5))\times T(3)+T(6)\times T(7).
\end{aligned}$$

485 $:= -1! - 2! \times 5! + 3! + 6! = -T(1) + (T(2) + T(5)) \times (T(3) + T(6))$.
486 $:= -1! \times 2! \times 5! + 3! + 6! = (T(1) \times T(2) + T(5)) \times (T(3) + T(6))$.
487 $:= 1! - 2! \times 5! + 3! + 6! = T(1) + (T(2) + T(5)) \times (T(3) + T(6))$.
500 $:= (1! - 5!) \times (2! - 3!) + 4! = (-T(1) + T(5) \times T(2) + T(3)) \times T(4)$.
503 $:= -2! \times 5! + 4! - 1! + 6! = T(2) + (T(5) + T(4)) \times (-T(1) + T(6))$.

504 $:= -(1! + 3! + 2!) \times 4! + 6! = (-T(1) \times T(3) + T(2) \times T(4)) \times T(6)$.
$:= -(3! - 2!) \times 4! - 5! + 6! = T(3) \times ((-T(2) + T(4)) \times T(5) - T(6))$.
$:= 1! \times 4! - 2! \times 5! + 6! = (T(1) + T(4) + T(2)) \times (T(5) + T(6))$.
$:= 3! \times 4! + (2! + 1!) \times 5! = (T(3) + T(4) \times T(2)) \times (-T(1) + T(5))$.

506 $:= (1! - 5!) \times 2! + 4! + 6! = (T(1) + T(5) \times T(2)) \times (-T(4) + T(6))$.
510 $:= 4! - 2! \times 5! + 3! + 6! = T(4) \times ((-T(2) + T(5)) \times T(3) - T(6))$.
516 $:= -2! \times (3! + 5! - 4!) + 6! = -T(2) - T(3) + (T(5) + T(4)) \times T(6)$.
522 $:= -3! + (4! - 5!) \times 2! + 6! = T(3) \times (T(4) \times T(5) - T(2) \times T(6))$.

527 $:= -1! + 2! \times (4! - 5!) + 6! = -T(1) + T(2) + (T(4) + T(5)) \times T(6)$.
$:= -1! - (2! + 3!) \times 4! + 6! = (-T(1) + T(2) \times T(3)) \times (T(4) + T(6))$.

528 $:= (1! \times 4! - 5!) \times 2! + 6! = (T(1) + T(4)) \times (-T(5) + T(2) \times T(6))$.
$:= -(3! + 2!) \times 4! \times 1! + 6! = (-T(3) + T(2) \times T(4)) \times (T(1) + T(6))$.
$:= (2! + 3!) \times (-4! + 6!) - 7! = T(2) \times (-T(3) + T(4) \times T(6) - T(7))$.

529 $:= 1! - 2! \times (5! - 4!) + 6! = T(1) + T(2) + (T(5) + T(4)) \times T(6)$.
534 $:= 3! - 2! \times (5! - 4!) + 6! = T(3) + T(2) + (T(5) + T(4)) \times T(6)$.

540 $:= -(3! + 4!) \times 2! - 5! + 6! = T(3) \times T(4) \times (T(2) - T(5) + T(6))$.
$:= 2! \times ((1! + 4!) \times 3! + 5!) = (-T(2) - T(1) + T(4)) \times T(3) \times T(5)$.

546 $:= -2! \times 4! - 3! - 5! + 6! = (T(2) + T(4)) \times (T(3) + T(5) + T(6))$.

552 $:= -1! \times 4! \times 2! + 6! - 5! = (-T(1) + T(4)) \times T(2) \times T(6) - T(5)$.
$:= -2! \times 3! \times 4! + 6! + 5! = -T(2) + (T(3) + T(4) + T(6)) \times T(5)$.
$:= -(3! - 1! + 2!) \times 4! + 6! = T(3) \times (-T(1) + T(2) \times (T(4) + T(6)))$.

553 $:= -2! \times 4! - 5! + 1! + 6! = T(2) + (T(4) + T(5)) \times (T(1) + T(6))$.

558 $:= 3! - 5! - 2! \times 4! + 6! = (T(3) + T(5) - T(2)) \times (T(4) + T(6))$.
$:= -3! \times (1! + 2! + 4!) + 6! = T(3) \times T(1) \times T(2) \times (T(4) + T(6))$.

$$\begin{aligned}
\mathbf{564} &:= -(2!+4!+6!)\times 3!+7! = T(2)\times(T(4)\times T(6)+T(3)-T(7)).\\
&:= -3!\times 2!-5!-4!+6! \quad = T(3)+(T(2)+T(5))\times(T(4)+T(6)).\\
&:= -3!\times(4!+2!)\times 1!+6! = T(3)\times(T(4)+(T(2)+T(1))\times T(6)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{570} &:= -1!\times 3!-4!+6!-5! \quad = (T(1)+T(3)+T(4)+T(6))\times T(5).\\
&:= -3!\times(1!+6!+4!)+7! = (-T(3)\times T(1)+T(6))\times(T(4)+T(7)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{573} &:= -3!\times 4!-1!-2!+6! = T(3)+(T(4)-T(1))\times T(2)\times T(6).\\
\mathbf{575} &:= 1!+6!-2!-4!-5! \quad = (-T(1)+T(6)+T(2))\times(T(4)+T(5)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{576} &:= (2!\times 5!-3!)\times 4!-7! \quad = (T(2)+T(5))\times(T(3)\times T(4)-T(7)).\\
&:= (2!\times 5!-4!)\times 3!-6! \quad = T(2)\times T(5)\times T(4)+T(3)\times T(6).\\
&:= (2!-1!)\times 6!-4!\times 3! \quad = T(2)\times(T(1)+T(6)+T(4))\times T(3).\\
&:= (4!+5!)\times(1!-2!)+6! = (T(4)+T(5)-T(1))\times(T(2)+T(6)).\\
&:= (3!-2!)\times(4!\times 1!+5!) = (T(3)+T(2)\times T(4))\times(T(1)+T(5)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{579} &:= 1!+2!-4!-5!+6! \quad = (T(1)+T(2))\times T(4)\times T(5)-T(6).\\
\mathbf{580} &:= (-4!+1!)\times 3!-2!+6! = T(4)\times(T(1)-T(3)+T(2)\times T(6)).\\
\mathbf{587} &:= -1!+3!\times(2!-4!)+6! = -T(1)+(T(3)\times T(2)+T(4))\times T(6).
\end{aligned}$$

$$\begin{aligned}
\mathbf{588} &:= -(1!\times 2!)\times 3!-5!+6! = (T(1)-T(2)\times(T(3)-T(5)))\times T(6).\\
&:= (-1!\times 4!+2!)\times 3!+6! = (T(1)\times T(4)+T(2)\times T(3))\times T(6).\\
&:= 2!\times 3!-4!-5!+6! \quad = (-T(2)+T(3)+T(4)+T(5))\times T(6).\\
&:= 3!\times(2!-4!-6!)+7! \quad = (-T(3)-T(2)+T(4))\times T(6)\times T(7).\\
&:= -5!-3!\times(2!+6!)+7! = (T(5)-T(3)+T(2))\times(T(6)+T(7)).\\
&:= 3!\times(2!-4!\times 1!+5!) \quad = T(3)\times(T(2)-T(4))\times(T(1)-T(5)).
\end{aligned}$$

$$\mathbf{589} := 1!-(4!-2!)\times 3!+6! = T(1)+(T(4)+T(2)\times T(3))\times T(6).$$

$$\begin{aligned}
\mathbf{594} &:= -(3!+5!)\times(2!-1!)+6! = (-T(3)+T(5))\times T(2)\times(T(1)+T(6)).\\
&:= 3!\times(2!-4!+1!)+6! \quad = -T(3)+T(2)\times T(4)\times(-T(1)+T(6)).\\
&:= 3!\times(1!+2!-4!+5!) \quad = -T(3)+(T(1)+T(2))\times T(4)\times T(5).
\end{aligned}$$

$$\begin{aligned}
\mathbf{600} &:= (2!+3!)\times 6!-7!-5! = (-T(2)-T(3)+T(6)+T(7))\times T(5).\\
\mathbf{600} &:= 4!\times(2!-1!-3!)+6! = T(4)\times(T(2)+T(1))\times(-T(3)+T(6)).\\
&:= 5!\times(2!\times 3!-1!)-6! = T(5)\times(T(2)\times T(3)+T(1)+T(6)).\\
&:= 5!\times(2!\times 4!-1!)-7! = T(5)\times(T(2)+T(4)-T(1)+T(7)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{612} &:= 1!\times 2!\times 3!-5!+6! \quad = (-T(1)+T(2)\times T(3))\times(T(5)+T(6)).\\
&:= (2!-6!)\times 3!-5!+7! \ = T(2)+T(6)+(T(3)+T(5))\times T(7).\\
&:= -3!\times 2!-5!+4!+6! = T(3)\times(-T(2)+(T(5)-T(4))\times T(6)).
\end{aligned}$$

618 $:= (1! + 2!) \times 3! - 5! + 6! = (T(1) - T(2)) \times (T(3) - T(5) \times T(6))$.
620 $:= (4! + 1!) \times (2! - 3!) + 6! = T(4) \times (-T(1) + (-T(2) + T(3)) \times T(6))$.
621 $:= -1! - 2! - 5! + 4! + 6! = (T(1) + T(2)) \times T(5) \times T(4) + T(6)$.
623 $:= -1! - (3! - 2!) \times 4! + 6! = -T(1) - T(3) + (T(2) \times T(4)) \times T(6)$.

624 $:= (-1! \times 3! + 2!) \times 4! + 6! = -T(1) \times T(3) + T(2) \times T(4) \times T(6)$.
$:= (-1! + 2!) \times 4! + 6! - 5! = (-T(1) + T(2) \times T(4)) \times T(6) + T(5)$.
$:= (1! - 2! + 3!) \times 5! + 4! = (T(1) + T(2)) \times (T(3) + (T(5) \times T(4)))$.
$:= 3! \times 4! - 2! \times 5! + 6! = (T(3) + T(4)) \times (T(2) + T(5) + T(6))$.
$:= 7! - 5! - 3! \times 6! + 4! = T(7) \times T(5) - T(3) + T(6) \times T(4)$.

625 $:= 4! - 5! + 2! - 1! + 6! = (T(4) + T(5)) \times (T(2) + T(1) + T(6))$.
$:= 1! - (3! - 2!) \times 4! + 6! = T(1) - T(3) + T(2) \times T(4) \times T(6)$.

629 $:= -1! - 5! + 4! + 3! + 6! = -T(1) + (T(5) - T(4)) \times T(3) \times T(6)$.

630 $:= 1! \times 3! + 4! - 5! + 6! = T(1) \times T(3) \times (-T(4) + T(5)) \times T(6)$.
$:= -(1! + 2!) \times (3! + 4!) + 6! = (-T(1) \times T(2) + T(3)) \times T(4) \times T(6)$.

631 $:= 1! + 3! + 4! - 5! + 6! = T(1) - T(3) \times (T(4) - T(5)) \times T(6)$.
646 $:= -(1! - 4!) \times 2! + 6! - 5! = T(1) + T(4) \times T(2) \times T(6) + T(5)$.

648 $:= (1! + 2! - 3!) \times 4! + 6! = T(1) \times T(2) \times (T(3) + T(4) \times T(6))$.
$:= 2! \times 1! \times 4! + 6! - 5! = T(2) \times ((T(1) + T(4)) \times T(6) - T(5))$.
$:= -(2! + 3!) \times 4! + 5! + 6! = -T(2) + (T(3) + T(4) + T(5)) \times T(6)$.
$:= 3! \times 5! - (2! + 1!) \times 4! = T(3) \times (T(5) - T(2)) \times (-T(1) + T(4))$.

650 $:= (4! + 1!) \times 2! - 5! + 6! = T(4) \times (-T(1) + T(2) \times T(5) + T(6))$.

654 $:= 2! \times 4! + 3! - 5! + 6! = T(2) + (T(4) + T(3) + T(5)) \times T(6)$.
$:= 3! - 4! \times (2! + 1!) + 6! = -T(3) + T(4) \times T(2) \times (T(1) + T(6))$.

660 $:= (4! + 3!) \times 2! - 5! + 6! = T(4) \times ((T(3) - T(2)) \times T(5) + T(6))$.
$:= -2! \times (3! + 4!) \times 1! + 6! = (-T(2) + T(3)) \times T(4) \times (T(1) + T(6))$.

666 $:= -3! - 2! \times 4! \times 1! + 6! = T(3) + (T(2) \times T(4)) \times (T(1) + T(6))$.

672 $:= -(1! + 3!) \times 4! + 5! + 6! = (T(1) + T(3) + T(4) + T(5)) \times T(6)$.
$:= 2! \times 4! \times (5! - 1!) - 7! = -T(2) + (T(4) + T(5)) \times (-T(1) + T(7))$.
$:= 4! \times (2! + 1!) - 5! + 6! = (-T(4) + T(2) \times (-T(1) + T(5))) \times T(6)$.
$:= 2! \times (5! - 4! \times 3!) + 6! = -T(2) + (T(5) + T(4)) \times (T(3) + T(6))$.
$:= -2! \times 4! + 3! \times 1! \times 5! = (-T(2) + T(4)) \times T(3) \times (T(1) + T(5))$.

678 $:= -2! \times 4! \times 1! + 6! + 3! = T(2) \times (T(4) \times (T(1) + T(6)) + T(3))$.
680 $:= 3! + 6! + 2! \times (1! - 4!) = (T(3) + T(6) \times T(2) - T(1)) \times T(4)$.

684 $:= -(2! + 4!) \times 3! + 5! + 6! = (T(2) + T(4) + T(3)) \times (T(5) + T(6))$.
$:= -(2! + 6!) \times 3! - 4! + 7! = (T(2) + T(6) - T(3)) \times (T(4) + T(7))$.

687 $:= -3! - 1! - 4! - 2! + 6! = -T(3) + (T(1) + T(4)) \times T(2) \times T(6)$.
689 $:= 1! - 4! - 3! - 2! + 6! = -T(1) + T(4) \times (T(3) + T(2) \times T(6))$.

690 $:= -(1! + 4!) \times 3! + 5! + 6! = T(1) \times T(4) \times (T(3) \times T(5) - T(6))$.
$:= (4! + 3!) \times (1! - 2!) + 6! = T(4) \times (T(3) \times T(1) + T(2) \times T(6))$.
$:= -4! - (1! + 6!) \times 3! + 7! = T(4) - (T(1) - T(6)) \times (T(3) + T(7))$.

691 $:= -1! - 4! - 3! + 2! + 6! = T(1) + T(4) \times (T(3) + T(2) \times T(6))$.

693 $:= 1! - 4! + 2! - 3! + 6! = (T(1) + T(4)) \times (-T(2) + T(3)) \times T(6)$.
$:= -1! - 4! - 2! + 3! \times 5! = (T(1) + T(4)) \times T(2) \times (T(3) + T(5))$.

696 $:= (-1! + 2! \times 5!) \times 4! - 7! = -T(1) - T(2) + (T(5) + T(4)) \times T(7)$.
$:= -3! \times (6! + 4!) + 7! + 5! = T(3) \times T(6) + (T(4) + T(7)) \times T(5)$.

699 $:= 3! - 1! - 4! - 2! + 6! = T(3) + (T(1) + T(4)) \times T(2) \times T(6)$.
700 $:= -4! \times 1! + 3! - 2! + 6! = T(4) \times (T(1) + T(3) + T(2) \times T(6))$.

702 $:= -3! \times (2! + 6! + 1!) + 7! = T(3) + (T(2) + T(6)) \times (T(1) + T(7))$.
$:= 5! - (4! - 1!) \times 3! + 6! = (T(5) + T(4) + T(1)) \times (T(3) + T(6))$.

704 $:= 2! + (5! + 1!) \times 3! - 4! = (T(2) \times T(5) - T(1)) \times (T(3) + T(4))$.

708 $:= 3! \times (2! - 6!) - 4! + 7! = -T(3) + T(2) \times (T(6) \times T(4) + T(7))$.
$:= -3! \times (4! - 2!) + 5! + 6! = T(3) \times (T(4) + T(2) \times (T(5) + T(6)))$.
$:= -1! \times 4! + 3! \times (2! + 5!) = (T(1) - T(4) \times T(3)) \times (T(2) - T(5))$.

710 $:= (1! - 3!) \times (2! - 5! - 4!) = (-T(1) + T(3) \times (-T(2) + T(5))) \times T(4)$.
712 $:= -2! - (1! + 6!) \times 3! + 7! = -T(2) + T(1) + T(6) \times (T(3) + T(7))$.

714 $:= (1! + 2!) \times 3! - 4! + 6! = ((T(1) + T(2)) \times T(3) + T(4)) \times T(6)$.
$:= 2! \times 4! \times 5! - 3! - 7! = T(2) \times (T(4) \times (T(5) + T(3)) + T(7))$.
$:= -(1! + 5!) \times 3! + 2! \times 6! = (T(1) + T(5) + T(3) \times T(2)) \times T(6)$.
$:= 3! \times (1! + 2! + 5!) - 4! = T(3) \times (-T(1) + (-T(2) + T(5)) \times T(4))$.

716 $:= 2! - (1! + 6!) \times 3! + 7! = T(2) - T(1) + T(6) \times (T(3) + T(7))$.
717 $:= -1! - 2! - 6! \times 3! + 7! = T(1) \times T(2) + T(6) \times (T(3) + T(7))$.
718 $:= -1! \times 2! - 6! \times 3! + 7! = T(1) + T(2) + T(6) \times (T(3) + T(7))$.

720 $:= 1! \times 5! \times 2! \times 3! - 6! = (T(1) + T(5)) \times T(2) \times (-T(3) + T(6))$.
$:= (-(1! + 2!) \times 3! + 4!) \times 5! = T(1) \times T(2) \times (T(3) + T(4)) \times T(5)$.
$:= -2! \times 4! \times 6! - 7! + 8! = (T(2) + T(4) - T(6) + T(7)) \times T(8)$.
$:= -(1! + 2!) \times 6! + 5! \times 4! = (-T(1) + T(2)) \times (T(6) + T(5)) \times T(4)$.
$:= (-3! + 4!) \times 5! - 2! \times 6! = T(3) \times (-T(4) + T(5)) \times (T(2) + T(6))$.
$:= 3! \times (6! + 5! \times 2!) - 7! = T(3) \times (T(6) + T(5) + T(2) \times T(7))$.

722 $:= 2! \times (4! \times 5! + 1!) - 7! = -T(2) + (T(4) + T(5)) \times (T(1) + T(7))$.
726 $:= 3! \times (2! \times 5! + 1!) - 6! = (T(3) \times T(2) + T(5)) \times (T(1) + T(6))$.
730 $:= (-1! + 3!) \times (2! + 5! + 4!) = (T(1) - T(3) \times (T(2) - T(5))) \times T(4)$.
731 $:= (2! - 6!) \times 3! - 1! + 7! = T(2) + (T(6) + T(3) - T(1)) \times T(7)$.

732 $:= (2! - 6!) \times 1! \times 3! + 7! = -T(2) + T(6) \times (T(1) + T(3) + T(7))$.
$:= 1! \times 4! - 3! \times (2! - 5!) = (T(1) + T(4) \times T(3)) \times (-T(2) + T(5))$.
$:= 4! - 3! \times (2! + 6!) + 7! = T(4) \times T(3) + (T(2) + T(6)) \times T(7)$.

735 $:= -1! - 2! + 4! - 3! + 6! = (-T(1) + T(2) \times T(4) + T(3)) \times T(6)$.
736 $:= -2! + (5! - 1!) \times 3! + 4! = (T(2) \times T(5) + T(1)) \times (T(3) + T(4))$.

738 $:= (2! - 6! + 1!) \times 3! + 7! = T(2) + T(6) \times (T(1) + T(3) + T(7))$.
$:= 4! - (1! + 6!) \times 3! + 7! = -T(4) + (T(1) + T(6)) \times (T(3) + T(7))$.

744 $:= 2! \times 3! \times 5! + 4! - 6! = (T(2) + T(3) + T(5)) \times (T(4) + T(6))$.
$:= 4! \times (1! + 5! \times 2!) - 7! = (T(4) - T(1) + T(5)) \times (T(2) + T(7))$.

745 $:= 1! + 4! - 3! \times 6! + 7! = -T(1) - T(4) + (T(3) + T(6)) \times T(7)$.
747 $:= 2! + 4! + 1! + 3! \times 5! = -T(2) + T(4) \times (-T(1) + T(3)) \times T(5)$.
755 $:= -1! + 3! \times 2! + 4! + 6! = -T(1) + (T(3) + T(2) \times T(4)) \times T(6)$.

756 $:= 1! \times 3! \times 2! + 4! + 6! = (T(1) \times T(3) + T(2) \times T(4)) \times T(6)$.
$:= (2! - 6!) \times 3! + 4! + 7! = T(2) \times T(6) \times (-T(3) - T(4) + T(7))$.
$:= 3! \times (2! + 4!) - 5! + 6! = T(3) \times ((-T(2) + T(4)) \times T(5) + T(6))$.

757 $:= 1! + 3! \times 2! + 4! + 6! = T(1) + (T(3) + T(2) \times T(4)) \times T(6)$.

$$\begin{aligned}
\mathbf{768} &:= (3!\times 4!-5!)\times 2!+6! = (T(3)+T(4))\times(-T(5)+T(2)\times T(6)).\\
&:= (3!+1!)\times 4!-5!+6! = T(3)\times(-T(1)+T(4)\times T(5)-T(6)).\\
&:= 2!\times 4!-3!\times 6!+7! \;= T(2)\times T(4)\times T(3)+T(6)\times T(7).\\
&:= 2!\times 4!+3!\times 1!\times 5! \;= T(2)\times(T(4)+T(3))\times(T(1)+T(5)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{780} &:= -(4!+3!)\times 2!+6!+5! = T(4)\times((T(3)-T(2))\times T(6)+T(5)).\\
&:= 2!\times(4!\times 1!+3!)+6! \;= T(2)\times T(4)\times(-T(1)+T(3)+T(6)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{786} &:= -3!-4!\times 2!+6!+5! \;= T(3)+T(4)\times(T(2)\times T(6)+T(5)).\\
\mathbf{790} &:= -(4!+1!)\times 2!+6!+5! = T(4)\times(T(1)+T(2)\times T(6)+T(5)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{792} &:= (3!+2!)\times 4!-5!+6! \;= T(3)\times(T(2)+T(4)\times T(5)-T(6)).\\
&:= 3!\times 5!+(2!+1!)\times 4! \;= T(3)\times(T(5)-T(2))\times(T(1)+T(4)).\\
&:= 4!\times(-2!+3!-1!)+6! = (T(4)\times T(2)+T(3))\times(T(1)+T(6)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{794} &:= (1!-4!)\times 2!+6!+5! \;= -T(1)+(-T(4)+T(2)\times T(6))\times T(5).\\
\mathbf{810} &:= (1!+2!)\times(4!+3!)+6! = T(1)\times T(2)\times T(4)\times(T(3)+T(6)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{816} &:= (-1!\times 2!+3!)\times 4!+6! = (T(1)+T(2))\times(-T(3)+T(4)\times T(6)).\\
&:= 5!\times(-1!+2!)-4!+6! = (T(5)+T(1))\times(T(2)\times T(4)+T(6)).
\end{aligned}$$

$$\mathbf{820} := (4!+1!)\times(-2!+3!)+6! = T(4)\times(T(1)+T(2)\times(T(3)+T(6))).$$

$$\begin{aligned}
\mathbf{828} &:= 2!\times 3!+5!-4!+6! \;= (T(2)\times T(3))\times(T(5)+T(4)+T(6)).\\
&:= -(2!+6!)\times 3!+7!+5! = T(2)+(T(6)+T(3)+T(7))\times T(5).
\end{aligned}$$

$$\mathbf{839} := -1!+5!-3!\times 6!+7! = -T(1)+(T(5)-T(3)+T(6))\times T(7).$$

$$\begin{aligned}
\mathbf{840} &:= -1!\times 6!\times 3!+5!+7! \;= (T(1)\times T(6)-T(3)+T(5))\times T(7).\\
&:= (1!+3!-2!)\times 4!+6! \;= (T(1)+T(3)-T(2))\times T(4)\times T(6).\\
&:= (2!+3!)\times 6!+5!-7! \;= (T(2)\times(-T(3)+T(6))-T(5))\times T(7).\\
&:= (1!+3!\times 2!)\times 5!-6! \;= (T(1)-T(3)+T(2)\times T(5))\times T(6).\\
&:= (4!\times 2!+5!)\times(-1!+3!) = T(4)\times(-T(2)+T(5))\times(T(1)+T(3)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{841} &:= 1!-3!\times 6!+5!+7! \;= T(1)-(T(3)-T(6)-T(5))\times T(7).\\
\mathbf{846} &:= 3!\times(4!-1!-2!)+6! \;= T(3)+T(4)\times(T(1)+T(2))\times T(6).\\
\mathbf{852} &:= -3!\times(6!-2!)+7!+5! = (T(3)+T(6))\times(T(2)+T(7))+T(5).\\
\mathbf{854} &:= (1!+3!)\times 2!+6!+5! \;= -T(1)+(-T(3)+T(2)\times T(6))\times T(5).\\
\mathbf{856} &:= (-1!+5!+4!)\times 3!-2! = T(1)+T(5)\times(T(4)\times T(3)-T(2)).\\
\mathbf{858} &:= (1!+5!+4!-2!)\times 3! \;= ((-T(1)+T(5))\times T(4)+T(2))\times T(3).\\
\mathbf{860} &:= 2!+3!\times(5!-1!+4!) \;= (-T(2)+T(3)\times T(5)-T(1))\times T(4).\\
\mathbf{861} &:= -1!-2!+4!\times 3!+6! \;= (-T(1)+(-T(2)+T(4))\times T(3))\times T(6).\\
\mathbf{863} &:= -1!+3!\times(4!-6!)+7! = T(1)-T(3)+(T(4)+T(6))\times T(7).
\end{aligned}$$

$$\begin{aligned}
\mathbf{864} &:= (-1! + 2!) \times 3! \times 4! + 6! = (T(1) + T(2)) \times (T(3) + T(4) \times T(6)).\\
&:= (3! + 5! \times 2!) \times 4! - 7! \quad = -T(3) + T(5) \times (T(2) \times T(4) + T(7)).\\
&:= 3! \times (4! + 2! \times 5!) - 6! \quad = (-T(3) + T(4) \times T(2)) \times (T(5) + T(6)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{869} &:= -1! + 3! + 5! + 4! + 6! \quad = (-T(1) + T(3) \times T(5)) \times T(4) - T(6).\\
\mathbf{870} &:= (-1! + 4! + 2! + 5!) \times 3! = T(1) \times T(4) \times (-T(2) + T(5) \times T(3)).\\
\mathbf{875} &:= -1! + 6! + 3! \times (2! + 4!) = (T(1) - T(6) \times T(3)) \times (T(2) - T(4)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{876} &:= 2! \times 3! + 4! + 5! + 6! \quad = (-T(2) + T(3) \times T(4)) \times T(5) + T(6).\\
&:= 3! \times 1! \times (2! + 4!) + 6! = T(3) \times (-T(1) + (-T(2) + T(4)) \times T(6)).\\
&:= 3! \times 1! \times (2! + 4! + 5!) = T(3) \times (-T(1) - T(2) + T(4) \times T(5)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{882} &:= (1! + 2! + 4!) \times 3! + 6! = (-T(1) \times T(2) + T(4)) \times T(3) \times T(6).\\
&:= 2! \times 4! + 5! - 3! + 6! \quad = T(2) + T(4) \times T(5) \times T(3) - T(6).\\
&:= 3! \times (1! + 2! + 4! + 5!) = (T(3) \times T(1)) \times (-T(2) + T(4) \times T(5)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{888} &:= (3! - 1! + 2!) \times 4! + 6! = T(3) \times (T(1) - (T(2) - T(4)) \times T(6)).\\
&:= 2! \times 4! + (3! + 1!) \times 5! = T(2) + (T(4) \times T(3) - T(1)) \times T(5).
\end{aligned}$$

$$\mathbf{900} := 2! \times (4! + 3!) + 5! + 6! = T(2) \times T(4) \times (-T(3) + T(5) + T(6)).$$

$$\begin{aligned}
\mathbf{912} &:= (2! + 1!) \times 4! + 5! + 6! \quad = T(2) \times (-T(1) - T(4) + T(5) \times T(6)).\\
&:= (2! + 3!) \times (6! + 4!) - 7! = (-T(2) + T(3) + T(6)) \times (T(4) + T(7)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{914} &:= (-4! + 1! + 5!) \times 2! + 6! = -T(4) + (-T(1) + T(5) \times T(2)) \times T(6).\\
\mathbf{918} &:= 2! \times (5! - 4!) + 3! + 6! \quad = -T(2) + T(5) \times T(4) \times T(3) + T(6).\\
\mathbf{924} &:= 2! \times (3! + 5! - 4!) + 6! \quad = T(2) + T(3) \times T(5) \times T(4) + T(6).\\
\mathbf{930} &:= -4! - 3! + 2! \times 5! + 6! \quad = T(4) \times (T(3) \times (-T(2) + T(5)) + T(6)).\\
\mathbf{934} &:= -4! + 2! \times (5! - 1!) + 6! = T(4) + (T(2) \times T(5) - T(1)) \times T(6).
\end{aligned}$$

$$\begin{aligned}
\mathbf{935} &:= -1! - 4! + 5! \times 2! + 6! \quad = -T(1) \times T(4) + T(5) \times T(2) \times T(6).\\
\mathbf{936} &:= -1! \times 4! + 2! \times 5! + 6! \quad = T(1) - T(4) + T(2) \times T(5) \times T(6).\\
\mathbf{938} &:= -4! + 2! \times (1! + 5!) + 6! = -T(4) + T(2) \times (T(1) + T(5) \times T(6)).\\
\mathbf{942} &:= 2! \times 5! + 3! - 4! + 6! \quad = -T(2) + (-T(5) + T(3) \times T(4)) \times T(6).\\
\mathbf{944} &:= (1! + 5!) \times (2! + 3!) - 4! \quad = -T(1) + T(5) \times (T(2) + T(3) \times T(4)).\\
\mathbf{946} &:= -(1! - 5! + 3!) \times 2! + 6! = T(1) + T(5) \times (T(3) - T(2)) \times T(6).
\end{aligned}$$

$$\begin{aligned}
\mathbf{948} &:= 2! \times (5! + 3!) - 4! + 6! \quad = T(2) - (T(5) - T(3) \times T(4)) \times T(6).\\
&:= 2! \times (-3! \times 1! + 5!) + 6! = (-T(2) + T(3)) \times (T(1) + T(5) \times T(6)).
\end{aligned}$$

950 $:= (1! - 3! + 5!) \times 2! + 6! \quad = -T(1) + T(3) + T(5) \times T(2) \times T(6).$
952 $:= -3! - (1! - 5!) \times 2! + 6! = T(3) + T(1) + T(5) \times T(2) \times T(6).$
954 $:= -3! + 2! \times 1! \times 5! + 6! \quad = T(3) + T(2) \times (T(1) + T(5) \times T(6)).$

960 $:= (3! + 1!) \times 2! \times 5! - 6! \quad = -T(3) + (T(1) + T(2) \times T(5)) \times T(6).$
$:= 2! \times 4! \times (3! - 1!) + 6! \quad = T(2) \times (T(4) + T(3)) \times (-T(1) + T(6)).$
$:= (2! + 3!) \times (5! + 7!) - 8! = (T(2) \times T(3) + T(5)) \times T(7) + T(8).$
$:= -3! \times 6! + 2! \times 5! + 7! \quad = -T(3) + T(6) \times (T(2) + T(5) + T(7)).$
$:= 4! \times (3! - 1!) + 5! + 6! \quad = T(4) \times ((T(3) - T(1)) \times T(5) + T(6)).$
$:= 2! \times (1! - 3!) \times (4! - 5!) = (T(2) + T(1)) \times (T(3) + T(4)) \times T(5).$

966 $:= 1! \times 5! \times 2! + 3! + 6! = (T(1) - T(5) \times (T(2) - T(3))) \times T(6).$

972 $:= 2! \times (3! + 5!) \times 1! + 6! = T(2) \times (-T(3) + T(5) \times (T(1) + T(6))).$
$:= 2! \times (5! - 3!) + 4! + 6! = (-T(2) + T(5)) \times (T(3) \times T(4) + T(6)).$

984 $:= 3! \times 1! \times 4! + 6! + 5! = T(3) \times (-T(1) + (-T(4) + T(6)) \times T(5)).$

990 $:= 3! + 2! \times 5! + 4! + 6! \quad = T(3) \times (-T(2) \times T(5) + T(4) \times T(6)).$
$:= 5! + 3! \times (1! + 4!) + 6! = T(5) \times T(3) \times T(1) \times (-T(4) + T(6)).$

1007 $:= -1! + 2! \times 3! \times 4! + 6! = -T(1) + T(2) \times (T(3) + T(4)) \times T(6).$

1008 $:= 1! \times 2! \times 3! \times 4! + 6! \quad = T(1) \times T(2) \times (T(3) + T(4)) \times T(6).$
$:= (2! \times 1! \times 4! + 5!) \times 3! = (T(2) + (T(1) + T(4)) \times T(5)) \times T(3).$
$:= (4! + 5!) \times 2! \times 3! - 6! = (-T(4) + T(5) + T(2)) \times T(3) \times T(6).$
$:= 2! \times (4! \times 1! + 5!) + 6! = (T(2) \times (T(4) + T(1)) + T(5)) \times T(6).$
$:= 3! \times (4! \times 2! - 6!) + 7! = (T(3) \times T(4) - T(2) - T(6)) \times T(7).$

1009 $:= 1! + 2! \times 3! \times 4! + 6! = T(1) + T(2) \times (T(3) + T(4)) \times T(6).$

1020 $:= 3! \times (4! + 1!) \times 2! + 6! \quad = T(3) \times T(4) \times (-T(1) - T(2) + T(6)).$
$:= 3! \times ((4! + 1!) \times 2! + 5!) = T(3) \times T(4) \times (-T(1) + T(2) + T(5)).$

1056 $:= 2! \times 4! \times (3! + 1!) + 6! \quad = T(2) \times (T(4) + T(3)) \times (T(1) + T(6)).$
$:= 2! \times (-5! + 6!) - 3! \times 4! = (T(2) \times T(5) + T(6)) \times (T(3) + T(4)).$

1080 $:= (1! - 3!) \times (4! - 2! \times 5!) = T(1) \times T(3) \times T(4) \times (T(2) + T(5)).$
$:= 5! \times (3! - 2! - 1!) + 6! \quad = T(5) \times (T(3) + T(2) \times (T(1) + T(6))).$

$$\begin{aligned}
\mathbf{1140} &:= 2! \times (-1! + 5! - 4!) \times 3! \quad = (T(2) + T(1) + T(5)) \times T(4) \times T(3).\\
&:= 2! \times (-3! - 5! + 6! - 4!) \quad = ((T(2) + T(3)) \times T(5) - T(6)) \times T(4).\\
&:= 2! \times (-3! \times (4! + 1!) + 6!) = (T(2) - T(3) \times T(4)) \times (T(1) - T(6)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{1152} &:= 3! \times (2! + 1!) \times 4! + 6! \quad = T(3) \times (T(2) - (T(1) - T(4)) \times T(6)).\\
&:= 3! \times (5! - 2! \times 4!) + 6! \quad = T(3) \times (-T(5) - T(2) + T(4) \times T(6)).\\
&:= 2! \times (-3! \times (6! + 4!) + 7!) = T(2) \times (T(3) - T(6) \times (T(4) - T(7))).
\end{aligned}$$

$$\begin{aligned}
\mathbf{1154} &:= (1! + 6! - 4! - 5!) \times 2! \quad = -T(1) + T(6) \times (T(4) + T(5) \times T(2)).\\
\mathbf{1164} &:= (1! + 5! - 4!) \times 2! \times 3! \quad = (-T(1) + (T(5) \times (T(4) + T(2)))) \times T(3).\\
\mathbf{1170} &:= -3! - 4! + 2! \times (6! - 5!) = (((T(3) \times T(4)) - T(2)) + T(6)) \times T(5).
\end{aligned}$$

$$\begin{aligned}
\mathbf{1176} &:= -1! \times 4! + 2! \times (-5! + 6!) = (T(1) + T(4) + T(2) \times T(5)) \times T(6).\\
&:= (3! + 1!) \times (2! \times 4! + 5!) \quad = T(3) \times (T(1) + (T(2) + T(4)) \times T(5)).
\end{aligned}$$

$$\mathbf{1182} := 3! - 4! + 2! \times (6! - 5!) = (T(3) \times T(4) - T(2)) \times T(6) - T(5).$$

$$\begin{aligned}
\mathbf{1188} &:= 1! \times 2! \times (-5! - 3! + 6!) = (-T(1) + T(2) \times T(5)) \times (T(3) + T(6)).\\
&:= 2! \times (-5! + 3! + 6!) - 4! = (T(2) + T(5)) \times T(3) \times (T(6) - T(4)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{1200} &:= -(3! + 4! + 2!) \times 5! + 7! = -T(3) \times T(4) + T(2) \times T(5) \times T(7).\\
&:= (4! - 5!) \times (1! - 3!) + 6! \ = T(4) \times (T(5) - (T(1) - T(3)) \times T(6)).\\
&:= 5! \times 1! \times (-2! + 3!) + 6! = T(5) \times (-T(1) + T(2) \times (T(3) + T(6))).\\
&:= (4! - (1! + 3!) \times 2!) \times 5! \ = T(4) \times (-T(1) + T(3) + T(2)) \times T(5).\\
&:= 2! \times (-6! \times 3! + 7! - 5!) = ((-T(2) + T(6)) \times T(3) - T(7)) \times T(5).\\
&:= 2! \times (6! - (3! - 1!) \times 4!) \ = (T(2) + T(6)) \times (T(3) - T(1)) \times T(4).
\end{aligned}$$

$$\begin{aligned}
\mathbf{1212} &:= 2! \times (-5! + 6! - 3!) + 4! = -T(2) + T(5) \times (T(6) + T(3) \times T(4)).\\
&:= 2! \times 1! \times (-5! + 3! + 6!) = T(2) \times (-T(1) + T(5) \times (T(3) + T(6))).
\end{aligned}$$

$$\begin{aligned}
\mathbf{1214} &:= (1! + 3! + 6! - 5!) \times 2! \quad = -T(1) + (T(3) + T(6)) \times T(5) \times T(2).\\
\mathbf{1218} &:= 2! \times (-5! + 6!) - 3! + 4! = T(2) + T(5) \times (T(6) + T(3) \times T(4)).\\
\mathbf{1230} &:= 3! + 2! \times (6! - 5!) + 4! \quad = (-T(3) \times (T(2) - T(6)) + T(5)) \times T(4).\\
\mathbf{1242} &:= 2! \times (-5! + 4! + 6!) - 3! = -T(2) - T(5) + T(4) \times T(6) \times T(3).
\end{aligned}$$

$$\begin{aligned}
\mathbf{1248} &:= ((3! - 1!) \times 5! + 4!) \times 2! = T(3) \times (T(1) + T(5)) \times (T(4) + T(2)).\\
&:= 2! \times (5! + 3! \times 4!) + 6! \quad = T(2) - T(5) + T(3) \times T(4) \times T(6).
\end{aligned}$$

$$\begin{aligned}
\mathbf{1250} &:= 2! \times (1! + 6! - 5! + 4!) \quad = (T(2) + T(1)) \times T(6) \times T(5) - T(4).\\
\mathbf{1260} &:= 2! \times (3! - 5! + 4! + 6!) \quad = (-T(2) - T(3) + T(5)) \times T(4) \times T(6).\\
\mathbf{1270} &:= (-4! + 6! - 1!) \times 2! - 5! = T(4) + T(6) \times (T(1) + T(2)) \times T(5).
\end{aligned}$$

$$\begin{aligned}
\mathbf{1272} &:= 2! \times 6! - 4! \times (1! + 3!) = (T(2) + T(6) \times T(4) - T(1)) \times T(3). \\
&:= 5! - 2! \times (3! \times 4! - 6!) = T(5) - T(2) + T(3) \times T(4) \times T(6).
\end{aligned}$$

$$\mathbf{1278} := 2! \times (6! - 4!) + 3! - 5! = T(2) + T(6) \times T(4) \times T(3) + T(5).$$

$$\begin{aligned}
\mathbf{1290} &:= -4! - 3! - 5! + 2! \times 6! = T(4) \times (T(3) \times (T(5) + T(2)) + T(6)). \\
&:= 2! \times 6! - 3! \times (1! + 4!) \ = (T(2) + T(6) \times T(3)) \times T(1) \times T(4). \\
&:= 3! \times (5! - 4! - 1!) + 6! \ = T(3) \times (T(5) - T(4) \times (T(1) - T(6))).
\end{aligned}$$

$$\begin{aligned}
\mathbf{1296} &:= (1! \times 5! - 4!) \times 3! + 6! \quad = (T(1) + T(5)) \times (T(4) \times T(3) + T(6)). \\
&:= -1! \times 4! \times 3! + 2! \times 6! \quad = (-T(1) + T(4)) \times T(3) \times (T(2) + T(6)). \\
&:= (3! - 2!) \times (4! + 5!) + 6! = T(3) \times ((T(2) + T(4)) \times T(5) + T(6)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{1302} &:= (1! - 4!) \times 3! + 2! \times 6! \ = (-T(1) + T(4) \times T(3) + T(2)) \times T(6). \\
&:= -4! + 3! - 5! + 2! \times 6! = (-T(4) + T(3) \times (T(5) - T(2))) \times T(6).
\end{aligned}$$

$$\mathbf{1308} := (5! + 2! - 4!) \times 3! + 6! = -T(5) + (T(2) + T(4) \times T(3)) \times T(6).$$

$$\begin{aligned}
\mathbf{1320} &:= (-2! + 1! + 3!) \times 5! + 6! = T(2) \times (-T(1) + (T(3) + T(5)) \times T(6)). \\
&:= -5! \times (1! + 3! + 4!) + 7! = T(5) \times T(1) \times (T(3) \times T(4) + T(7)). \\
&:= 5! \times (-3! + 4! - 1!) - 6! = T(5) \times (-T(3) + T(4)) \times (T(1) + T(6)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{1322} &:= (-1! + 3!) \times 5! + 2! + 6! = -T(1) + (T(3) + T(5)) \times T(2) \times T(6). \\
\mathbf{1324} &:= (-1! + 6!) \times 2! + 3! - 5! = T(1) + T(6) \times T(2) \times (T(3) + T(5)). \\
\mathbf{1326} &:= 2! \times 1! \times 6! + 3! - 5! \quad = T(2) \times (T(1) + T(6) \times (T(3) + T(5))). \\
\mathbf{1338} &:= -5! - 3! + 4! + (2! \times 6!) = T(5) + (T(3) \times T(4) + T(2)) \times T(6). \\
\mathbf{1344} &:= (3! - 1!) \times 5! + 4! + 6! \quad = T(3) \times (-T(1) + T(5) + T(4) \times T(6)). \\
\mathbf{1350} &:= 3! + 4! - 5! + 2! \times 6! \quad = (T(3) \times T(4) + T(5)) \times (-T(2) + T(6)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{1380} &:= (4! + 3! + 6!) \times 2! - 5! = T(4) \times (T(3) \times T(6) - T(2) + T(5)). \\
&:= 1! \times 2! \times (6! - 3! - 4!) = (-T(1) + T(2) + T(6)) \times T(3) \times T(4).
\end{aligned}$$

$$\begin{aligned}
\mathbf{1392} &:= -(2! + 5!) \times 4! + 3! \times 6! = (T(2) - T(5)) \times (T(4) - T(3) \times T(6)). \\
\mathbf{1404} &:= 2! \times 1! \times (-4! + 6! + 3!) = (T(2) + (T(1) + T(4)) \times T(6)) \times T(3).
\end{aligned}$$

$$\begin{aligned}
\mathbf{1410} &:= -(5! + 1!) \times (4! + 3!) + 7! = T(5) \times ((T(1) + T(4)) \times T(3) + T(7)). \\
&:= -4! + (5! - 1!) \times 3! + 6! \ = T(4) \times (T(5) \times T(1) + T(3) \times T(6)).
\end{aligned}$$

$$\mathbf{1416} := 2! \times (7! - 3! \times 6!) - 4! = T(2) \times (T(7) - T(3)) \times T(6) + T(4).$$

$$\begin{aligned}
\mathbf{1428} &:= 3! \times (5! - 2! - 6!) + 7! \quad = (T(3) \times (T(5) - T(2)) - T(6)) \times T(7).\\
&:= 2! \times (-(1! + 6!) \times 3! + 7!) = (T(2) - T(1)) \times T(6) \times (T(3) + T(7)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{1430} &:= (1! + 3! + 6!) \times 2! - 4! \quad = (-T(1) + T(3) \times (T(6) + T(2))) \times T(4).\\
\mathbf{1438} &:= -(4! + 3!) \times 5! - 2! + 7! = T(4) + (T(3) + T(5) \times T(2)) \times T(7).
\end{aligned}$$

$$\begin{aligned}
\mathbf{1440} &:= (-2! \times 3! + 4! \times 1!) \times 5! = (T(2) + T(3)) \times T(4) \times (T(1) + T(5)).\\
&:= (2! \times 4! + 3!) \times 5! - 7! \quad = T(2) \times (T(4) \times T(3) + T(5) \times T(7)).\\
&:= -(2! \times 4! + 3!) \times 6! + 8! = (T(2) + T(4) + T(3) + T(6)) \times T(8).\\
&:= 3! \times 5! \times (2! + 1!) - 6! \quad = T(3) \times (T(5) - T(2)) \times (-T(1) + T(6)).\\
&:= 4! \times 2! \times 5! - 3! \times 6! \quad = T(4) \times (T(2) + T(5) + T(3) \times T(6)).\\
&:= -2! \times 6! + 4! \times 1! \times 5! \quad = T(2) \times (T(6) + T(4) + T(1)) \times T(5).\\
&:= -3! \times (2! \times 6! + 7!) + 8! = (-T(3) - T(2) + T(6) + T(7)) \times T(8).
\end{aligned}$$

$$\mathbf{1450} := (-1! - 3! + 6!) \times 2! + 4! = (T(1) + T(3) \times (T(6) + T(2))) \times T(4).$$

$$\begin{aligned}
\mathbf{1452} &:= (2! + 5! - 6!) \times 3! + 7! \quad = (T(2) \times T(5) + T(6)) \times (-T(3) + T(7)).\\
&:= 3! \times (5! - 2!) + 6! + 4! \quad = T(3) \times ((T(5) - T(2)) \times T(6) - T(4)).\\
&:= 2! \times ((1! - 6!) \times 3! + 7!) = T(2) \times (T(1) + T(6)) \times (-T(3) + T(7)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{1464} &:= (-3! \times 6! + 7!) \times 2! + 4! = -T(3) + (T(6) + T(7)) \times T(2) \times T(4).\\
&:= 3! \times (5! - 6!) + 4! + 7! \quad = T(3) \times (-T(5) - T(6) + T(4) \times T(7)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{1470} &:= -(5! - 1!) \times (3! + 4!) + 7! = T(5) \times ((T(1) + T(3)) \times T(4) + T(7)).\\
\mathbf{1488} &:= 2! \times (-3! \times 6! + 7! + 4!) \quad = T(2) \times (T(3) + (T(6) + T(7)) \times T(4)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{1500} &:= -((3! + 4!) \times (5! - 2!)) + 7! = (T(3) - T(4)) \times T(5) \times (T(2) - T(7)).\\
&:= 1! \times 2! \times (6! + 3! + 4!) \quad = (T(1) + T(2) + T(6)) \times T(3) \times T(4).\\
&:= 2! \times (3! \times (1! + 5!) + 4!) \quad = (T(2) + T(3) + T(1)) \times T(5) \times T(4).
\end{aligned}$$

$$\begin{aligned}
\mathbf{1512} &:= 2! \times (6! - 4!) \times 1! + 5! \; = T(2) \times T(6) \times (T(4) - T(1) + T(5)).\\
\mathbf{1530} &:= -3! + 5! - 4! + 2! \times 6! = T(3) \times (T(5) + T(4) \times (T(2) + T(6))).\\
\mathbf{1548} &:= (3! + 6!) \times 2! - 4! + 5! \; = T(3) \times (T(6) \times (T(2) + T(4)) - T(5)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{1560} &:= (-1! + 3! + 2!) \times 5! + 6! \quad = (T(1) - T(3)) \times (T(2) - T(5) \times T(6)).\\
&:= (-3! + 1!) \times (6! - 4!) + 7! = T(3) \times (T(1) - T(6) + T(4) \times T(7)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{1572} &:= (-2! + 5! + 4!) \times 3! + 6! = -T(2) + (T(5) + T(4) \times T(3)) \times T(6).\\
&:= 2! \times (6! + 3!) \times 1! + 5! \quad = -T(2) + T(6) \times (T(3) - T(1)) \times T(5).
\end{aligned}$$

$\mathbf{1578} := 2! \times 6! + 4! - 3! + 5! = T(2) + T(6) \times (T(4) \times T(3) + T(5))$.

$\mathbf{1584} := (5! - 6! + 4!) \times 3! + 7! = (T(5) + T(6)) \times (T(4) + T(3) + T(7))$.
$:= 1! \times 4! \times 3! + 2! \times 6! \quad = (T(1) + T(4)) \times T(3) \times (T(2) + T(6))$.

$\mathbf{1585} := (4! + 5!) \times 3! + 1! + 6! = T(4) + T(5) \times (T(3) - T(1)) \times T(6)$.
$\mathbf{1590} := 4! + 5! + 3! + 2! \times 6! \quad = T(4) \times (T(5) + T(3) \times (T(2) + T(6)))$.
$\mathbf{1620} := 2! \times (6! + 4! + 3!) + 5! = (T(2) - T(6)) \times T(4) \times (T(3) - T(5))$.

$\mathbf{1680} := (2! - 4! - 3!) \times 5! + 7! \quad = (-T(2) \times T(4) + T(3) \times T(5)) \times T(7)$.
$:= (2! + 3!) \times (6! + 5!) - 7! \quad = (-T(2) \times (T(3) - T(6)) + T(5)) \times T(7)$.
$:= 2! \times (-(1! - 3!) \times 4! + 6!) = (T(2) - T(1) + T(3)) \times T(4) \times T(6)$.

$\mathbf{1710} := 3! + 4! + 2! \times (5! + 6!) \quad = T(3) \times (-T(4) \times T(2) + T(5) \times T(6))$.
$\mathbf{1722} := -3! + 2! \times (5! + 4! + 6!) = (T(3) \times (-T(2) + T(5)) + T(4)) \times T(6)$.

$\mathbf{1728} := 3! \times (4! \times 2! + 5!) + 6! \quad = (T(3) + T(4)) \times T(2) \times (T(5) + T(6))$.
$:= 2! \times (7! - (6! - 4!) \times 3!) = T(2) \times (T(7) \times T(6) - T(4)) - T(3)$.

$\mathbf{1740} := 2! \times (3! + 6! + 5! + 4!) \quad = ((T(2) + T(3)) \times T(6) - T(5)) \times T(4)$.
$\mathbf{1764} := -(2! + 4!) \times (3! + 5!) + 7! = ((T(2) + T(4)) \times T(3) - T(5)) \times T(7)$.
$\mathbf{1782} := (2! + 1!) \times (-5! + 6! - 3!) = (T(2) - (T(1) - T(5)) \times T(6)) \times T(3)$.

$\mathbf{1800} := (-1! - 2! - 3! + 4!) \times 5! = (-T(1) + T(2)) \times T(3) \times T(4) \times T(5)$.
$:= 5! \times (1! + 3! + 2!) + 6! \quad = T(5) \times (-T(1) + T(3)) \times (T(2) + T(6))$.

$\mathbf{1818} := (2! + 1!) \times (6! - 5! + 3!) \quad = (T(2) - (T(1) - T(6)) \times T(5)) \times T(3)$.
$\mathbf{1890} := -(5! + 3!) \times (1! + 4!) + 7! = T(5) \times (T(3) + T(1)) \times (-T(4) + T(7))$.
$\mathbf{1920} := 5! \times 2! \times (-1! + 3!) + 6! \quad = T(5) \times (T(2) - T(1) + T(3) \times T(6))$.
$\mathbf{1968} := 2! \times (5! + 6! + 4! \times 3!) \quad = (T(2) + T(5) \times T(6) + T(4)) \times T(3)$.
$\mathbf{2040} := (-3! + 2!) \times 6! - 5! + 7! \quad = T(3) \times (-T(2) + T(6) \times T(5) + T(7))$.

$\mathbf{2046} := 3! - 5! + (2! + 1!) \times 6! \quad = (T(3) \times T(5) + T(2)) \times (T(1) + T(6))$.
$\mathbf{2052} := (-2! + 4!) \times (3! + 5!) - 6! = (-T(2) + T(4) \times T(3)) \times (T(5) + T(6))$.
$\mathbf{2064} := 4! \times (-3! + 2! - 5!) + 7! \quad = (T(4) + T(3)) \times T(2) \times (T(5) + T(7))$.
$\mathbf{2106} := -3! - (2! + 5!) \times 4! + 7! \quad = T(3) + T(2) \times (T(5) + T(4)) \times T(7)$.
$\mathbf{2118} := -(2! + 5!) \times 4! + 7! + 3! \quad = T(2) \times ((T(5) + T(4)) \times T(7) + T(3))$.

$\mathbf{2154} := -3! \times 1! + 4! \times 5! - 6! \quad = T(3) \times (-T(1) + T(4) \times (T(5) + T(6)))$.
$:= 3! \times (-1! + 5!) + 2! \times 6! = T(3) \times (-T(1) + T(5) \times (T(2) + T(6)))$.

2156 $:= 2! - 4! \times 5! - 3! + 7! \quad = (-T(2) - T(4) + T(5) \times T(3)) \times T(7).$
2159 $:= -1! + 5! \times 3! + 2! \times 6! = -T(1) + T(5) \times T(3) \times (T(2) + T(6)).$

2160 $:= 1! \times 3! \times 5! \times 2! + 6! \quad = T(1) \times T(3) \times T(5) \times (T(2) + T(6)).$
$:= (1! + 3!) \times 6! - 5! \times 4! = T(1) \times T(3) \times (T(6) + T(5)) \times T(4).$
$:= (4! + 3!) \times 5! - 2! \times 6! = T(4) \times (-T(3) + T(5)) \times (T(2) + T(6)).$
$:= 5! \times (3! + 4!) \times 2! - 7! = T(5) \times (T(3) \times T(4) + T(2) \times T(7)).$
$:= 5! \times 4! + 3! \times 6! - 7! \quad = T(5) \times (-T(4) + T(3) \times T(6) + T(7)).$

2161 $:= 1! + 3! \times 5! + 2! \times 6! = T(1) + T(3) \times T(5) \times (T(2) + T(6)).$

2166 $:= ((3! \times 1!) + (4! \times 5!)) - 6! = T(3) \times (T(1) + T(4) \times (T(5) + T(6))).$
$:= (3! \times (1! + 5!)) + (2! \times 6!) = T(3) \times (T(1) + T(5) \times (T(2) + T(6))).$

2184 $:= ((-(1! - 5!) + 2!) \times 4!) - 6! = (-T(1) + T(5) \times (-T(2) + T(4))) \times T(6).$
$:= (((2! - 1!) - 5!) \times 4!) + 7! \quad = T(2) \times (T(1) + T(5) + T(4)) \times T(7).$
$:= (4! - ((3! - 2!) \times 6!)) + 7! \quad = (T(4) \times T(3) - T(2) + T(6)) \times T(7).$

2208 $:= 3! \times 5! + 2! \times (6! + 4!) \quad = T(3) \times ((T(5) + T(2)) \times T(6) - T(4)).$
2268 $:= (2! - 4!) \times (5! + 3!) + 7! = (T(2) \times (T(4) + T(5)) + T(3)) \times T(7).$
2280 $:= 5! \times (2! - 1! - 4!) + 7! \quad = T(5) \times (T(2) + T(1)) \times (T(4) + T(7)).$
2286 $:= 3! + 6! \times (1! + 2!) + 5! \quad = (T(3) \times T(6) + T(1)) \times (T(2) + T(5)).$
2352 $:= 5! + (1! + 2!) \times (4! + 6!) = (T(5) + T(1)) \times (-T(2) + T(4)) \times T(6).$

2394 $:= (4! + 2!) \times 5! - 3! - 6! \quad = (T(4) \times (-T(2) + T(5)) - T(3)) \times T(6).$
$:= -3! + 5! \times (2! - 4!) + 7! = (T(3) + T(5)) \times T(2) \times (T(4) + T(7)).$

2400 $:= (4! + 2!) \times 5! \times 1! - 6! = T(4) \times (T(2) - T(5)) \times (T(1) - T(6)).$
2448 $:= 2! \times (5! + 4!) \times 3! + 6! = (T(2) + T(5)) \times (T(4) + T(3) \times T(6)).$

2520 $:= (1! + 2! + 4!) \times 5! - 6! \quad = (T(1) - T(2) + T(4)) \times T(5) \times T(6).$
$:= (1! + 2! - 4!) \times 5! + 7! \quad = (-T(1) - T(2) + T(4)) \times T(5) \times T(7).$
$:= (2! + 4! - 3! + 1!) \times 5! \quad = T(2) \times T(4) \times T(3) \times (-T(1) + T(5)).$
$:= (-1! - 2! + 3!) \times (5! + 6!) = (-T(1) + T(2) + T(3)) \times T(5) \times T(6).$

2532 $:= (3! - 5!) \times (4! - 2!) + 7! = T(3) \times (T(5) \times T(4) \times T(2) - T(7)).$
2592 $:= 2! \times (6! - 3! \times (4! - 5!)) = (T(2) - T(6)) \times (T(3) - T(4) \times T(5)).$

2640 $:= -5! \times (2! + 4! - 3!) + 7! \quad = (T(5) - T(2)) \times T(4) \times (-T(3) + T(7)).$
$:= 4! \times (-(3! - 1!) \times 2! + 5!) = T(4) \times T(3) \times (-T(1) + T(2) \times T(5)).$

2700 $:= (1! + 4!) \times (-3! \times 2! + 5!) = T(1) \times T(4) \times T(3) \times T(2) \times T(5).$
2710 $:= -2! + (-3! + 5! - 1!) \times 4! = (T(2) \times T(3) \times T(5) + T(1)) \times T(4).$
2736 $:= -(3! + 5!) \times 4! + 6! + 7! = T(3) + T(5) \times (T(4) \times T(6) - T(7)).$

2760 $:= -5! \times (4! - 3! + 1!) + 7! = T(5) \times (T(4) + (T(3) \times (T(1) + T(7)))).$
$:= 4! \times (-3! - 1! + 2! + 5!) = (T(4) \times T(3)) \times (T(1) + (T(2) \times T(5))).$

2844 $:= -(2! + 5!) \times (4! - 3!) + 7! = (T(2) + T(5)) \times (-T(4) + (T(3) \times T(7))).$
2850 $:= (4! - 1! + 2!) \times (-3! + 5!) = (T(4) \times (T(1) + (T(2) \times T(3)))) \times T(5).$

2880 $:= (4! + 3!) \times 1! \times 5! - 6! = T(4) \times (-T(3) + (-T(1) + T(5)) \times T(6)).$
$:= 1! \times 7! + 6! - 5! \times 4! = (T(1) - T(7) + T(6) \times T(5)) \times T(4).$
$:= (2! + 3!) \times 6! - 4! \times 5! = (-T(2) \times T(3) + T(6) \times T(4)) \times T(5).$
$:= -3! \times 5! \times (1! + 2!) + 7! = T(3) \times T(5) \times (T(1) + T(2) + T(7)).$
$:= (-4! + 6!) \times 5! - 2! \times 8! = T(4) \times (T(6) \times (T(5) - T(2)) + T(8)).$
$:= 2! \times (7! - 3! \times (6! - 5!)) = (T(2) + T(7) \times T(3) + T(6)) \times T(5).$

2928 $:= 6! + (2! - 5!) \times 4! + 7! = (T(6) + T(2)) \times (T(5) \times T(4) - T(7)).$
2976 $:= (3! - 1!) \times (-5! + 6!) - 4! = T(3) \times (T(1) + T(5)) \times (T(6) + T(4)).$
3000 $:= (4! + 3! + 1!) \times 5! - 6! = T(4) \times (T(3) - (T(1) - T(5)) \times T(6)).$

3120 $:= (4! + 2! + 3!) \times 5! - 6! = T(4) \times (T(2) - T(3) + T(5) \times T(6)).$
$:= -5! \times (4! - 2!) + 6! + 7! = T(5) \times (T(4) \times (-T(2) + T(6)) + T(7)).$
$:= 5! \times (2! + 3! - 4!) + 7! = T(5) \times (T(2) \times T(3) \times T(4) + T(7)).$

3150 $:= (2! + 4! - 1!) \times (3! + 5!) = T(2) \times T(4) \times (T(1) + T(3)) \times T(5).$
3168 $:= 2! \times (3! \times (4! + 5!) + 6!) = T(2) \times T(3) + T(4) \times T(5) \times T(6).$
3240 $:= 5! \times (4! - 1! - 2!) + 6! = T(5) \times (T(4) - T(1)) \times (T(2) + T(6)).$

3360 $:= -(1! + 3!) \times 2! \times 5! + 7! = (-T(1) + T(3) + T(2)) \times T(5) \times T(7).$
$:= 1! \times 5! \times (4! - 2!) + 6! = (-T(1) + T(5)) \times T(4) \times (T(2) + T(6)).$

3384 $:= 4! + 7! - 2! \times (5! + 6!) = (T(4) + T(7) \times T(2)) \times (T(5) + T(6)).$
3432 $:= 4! \times (5! - 3! - 1!) + 6! = (T(4) \times T(5) + T(3)) \times (T(1) + T(6)).$
3456 $:= (1! \times 5! - 3!) \times 4! + 6! = (T(1) + T(5)) \times (T(3) + T(4) \times T(6)).$
3480 $:= -5! + 6! \times 2! \times 3! - 7! = T(5) - (T(6) \times (T(2) - (T(3) \times T(7)))).$
3486 $:= 3! - 5! \times (1! - 4!) + 6! = (T(3) + ((T(5) + T(1)) \times T(4))) \times T(6).$

3528 $:= -(2! - 5! + 1!) \times 4! + 6! = (T(2) + (T(5) \times (T(1) + T(4)))) \times T(6).$
$:= -2! \times (6! - 4!) - 5! + 7! = (-(T(2) + T(6)) + (T(4) \times T(5))) \times T(7).$
$:= -2! \times (4! + 6!) + 3! + 7! = (T(2) \times T(4)) + ((T(6) \times T(3)) \times T(7)).$

3570 $:= -3! - 4! - 2! \times 6! + 7! = T(3) \times (T(4) - T(2) + T(6) \times T(7))$.

3576 $:= -3! \times 5! - 4! - 6! + 7! = T(3) + T(5) \times (T(4) \times T(6) + T(7))$.
$:= 4! \times (5! + 1! - 2!) + 6! = (T(4) \times T(5) - T(1)) \times (T(2) + T(6))$.

3592 $:= -(1! + 6!) \times 2! - 3! + 7! = T(1) + T(6) \times (T(2) + T(3) \times T(7))$.
3599 $:= 1! + 4! \times 5! - 2! + 6! = -T(1) + T(4) \times T(5) \times (T(2) + T(6))$.

3600 $:= ((-1! + 2!) \times 3! + 4!) \times 5! = (T(1) + T(2)) \times T(3) \times T(4) \times T(5)$.
$:= -(3! - 4!) \times 5! + 2! \times 6! = T(3) \times (T(4) + T(5)) \times (T(2) + T(6))$.
$:= 4! \times 5! \times (1! + 2!) - 7! = T(4) \times T(5) \times (-T(1) - T(2) + T(7))$.
$:= 4! \times 5! \times (2! - 1!) + 6! = T(4) \times T(5) \times (T(2) \times T(1) + T(6))$.

3601 $:= -1! + 4! \times 5! + 2! + 6! = T(1) + T(4) \times T(5) \times (T(2) + T(6))$.
3606 $:= 3! \times (-5! + 1!) - 6! + 7! = T(3) \times (-T(5) + (T(1) + T(6)) \times T(7))$.
3611 $:= -1! + 2! \times (3! - 6!) + 7! = -T(1) + (T(2) + T(3) \times T(6)) \times T(7)$.

3612 $:= (1! \times 3! - 6!) \times 2! + 7! = (T(1) \times T(3) \times T(6) + T(2)) \times T(7)$.
$:= (2! - 5!) \times 3! - 6! + 7! = ((T(2) + T(5)) \times T(3) + T(6)) \times T(7)$.
$:= -(3! + 6!) \times 2! + 4! + 7! = T(3) \times (T(6) \times T(2) \times T(4) - T(7))$.

3613 $:= 1! - (6! - 3!) \times 2! + 7! = T(1) + (T(6) \times T(3) + T(2)) \times T(7)$.
3624 $:= 4! \times (5! - 1! + 2!) + 6! = (T(4) \times T(5) + T(1)) \times (T(2) + T(6))$.
3654 $:= (2! + 5!) \times 4! + 3! + 6! = ((T(2) + T(5)) \times T(4) - T(3)) \times T(6)$.
3696 $:= -2! \times 6! - 4! + 5! + 7! = (T(2) - T(6) + T(4) \times T(5)) \times T(7)$.
3720 $:= (3! + 1! - 2!) \times (6! + 4!) = T(3) \times (-T(1) + T(2) \times T(6)) \times T(4)$.

3744 $:= 3! \times (4! - 5!) + 7! - 6! = T(3) + (T(4) \times T(5) + T(7)) \times T(6)$.
$:= 3! \times (4! - 5! \times 2!) + 7! = -T(3) + (T(4) \times T(5) \times (-T(2) + T(7)))$.

3770 $:= (4! + 1!) \times (2! + 5!) + 6! = T(4) \times (-T(1) + (T(2) + T(5)) \times T(6))$.

3840 $:= 1! \times 5! \times (4! + 2!) + 6! = (T(1) + T(5)) \times T(4) \times (T(2) + T(6))$.
$:= (3! - 1!) \times (6! + 2! \times 4!) = T(3) \times (T(1) + T(6) \times T(2)) \times T(4)$.

3846 $:= -2! \times (6! - 5!) + 3! + 7! = T(2) + T(6) \times (T(5) + T(3) \times T(7))$.
3864 $:= 2! \times (5! - 6!) + 4! + 7! = T(2) \times (T(5) + T(6) + T(4)) \times T(7)$.

3888 $:= 2! \times (5! - 6! + 4!) + 7! = T(2) - T(5) \times (T(6) - T(4) \times T(7))$.
$:= 3! \times (6! + 4! \times 2! - 5!) = (T(3) + T(6) \times T(4)) \times (T(2) + T(5))$.

$$\begin{aligned}
\mathbf{4032} &:= -(1!+3!)\times(4!+5!)+7! = (-T(1)\times T(3)+T(4)\times T(5))\times T(7).\\
&:= 2!\times((5!-3!)\times 4!-6!) \quad = (-T(2)+T(5))\times(T(3)+T(4))\times T(6).
\end{aligned}$$

$$\mathbf{4050} := (-1!-4!+6!)\times 3!-5! = T(1)\times T(4)\times(T(6)+T(3))\times T(5).$$

$$\begin{aligned}
\mathbf{4104} &:= -2!\times 5!-6!+4!+7! \quad = T(2)\times(T(5)+T(6))\times(T(4)+T(7)).\\
&:= -(3!+2!)\times 5!+4!+7! = T(3)\times(T(2)+T(5))\times(T(4)+T(7)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{4158} &:= 3!\times(-1!-4!-2!+6!) = T(3)\times(T(1)+T(4))\times T(2)\times T(6).\\
\mathbf{4164} &:= 7!-(5!+2!+4!)\times 3! \quad = (T(7)\times T(5)-T(2))\times T(4)-T(3).\\
\mathbf{4175} &:= -1!+7!-3!\times(4!+5!) = (-T(1)+T(7)\times T(3))\times(T(4)+T(5)).\\
\mathbf{4176} &:= -3!\times(5!+4!)\times 1!+7! = (-T(3)+T(5)\times T(4))\times(T(1)+T(7)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{4200} &:= (1!-2!-3!)\times 5!+7! \quad = (T(1)+T(2)+T(3))\times T(5)\times T(7).\\
&:= (4!+3!-1!)\times 5!+6! \quad = T(4)\times(T(3)-T(1)+T(5))\times T(6).\\
&:= 4!\times(1!-3!)-6!+7! \quad = T(4)\times T(1)\times(-T(3)+T(6))\times T(7).\\
&:= -(5!+7!)\times(1!+3!)+8! = T(5)\times(T(7)+(T(1)+T(3))\times T(8)).
\end{aligned}$$

$$\mathbf{4218} := -3!-5!-6!+4!+7! = (T(3)\times T(5)+T(6))\times(T(4)+T(7)).$$

$$\begin{aligned}
\mathbf{4284} &:= -2!\times 3!-4!-6!+7! \quad = T(2)\times T(3)\times(T(4)\times T(6)+T(7)).\\
&:= -3!\times(2!+5!)-4!+7! = (T(3)-T(2)+T(5)\times T(4))\times T(7).
\end{aligned}$$

$$\mathbf{4290} := -(1!+5!)\times 3!-4!+7! = T(1)\times T(5)\times(T(3)+T(4)\times T(7)).$$

$$\begin{aligned}
\mathbf{4320} &:= 1!\times 5!\times(4!+3!)+6! \quad = (T(1)+T(5))\times T(4)\times(T(3)+T(6)).\\
&:= 2!\times(7!+8!)-5!\times 6! \quad = (T(2)\times T(7)+T(8))\times(T(5)+T(6)).\\
&:= 2!\times 1!\times(7!-5!\times 4!) \quad = (-T(2)+(T(1)+T(7))\times T(5))\times T(4).\\
&:= 5!\times(-3!+4!\times 2!)-6! = T(5)\times(T(3)+T(4))\times(-T(2)+T(6)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{4344} &:= -3!\times 5!+4!\times 1!+7! = -T(3)+T(5)\times T(4)\times(T(1)+T(7)).\\
\mathbf{4350} &:= 3!-6!+4!\times 1!+7! \quad = (-T(3)+T(6))\times T(4)\times(T(1)+T(7)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{4368} &:= (1!+3!)\times(4!-5!)+7! = (T(1)\times T(3)+T(4)\times T(5))\times T(7).\\
&:= 2!\times(4!\times(1!+5!)-6!) = (T(2)+T(4))\times(T(1)+T(5))\times T(6).
\end{aligned}$$

$$\begin{aligned}
\mathbf{4410} &:= -3!+5!-4!-6!+7! = (-T(3)+T(5))\times T(4)\times(T(6)+T(7)).\\
\mathbf{4428} &:= -3!\times 2!+5!-6!+7! = T(3)\times(T(2)+T(5)\times(T(6)+T(7))).
\end{aligned}$$

$$\begin{aligned}
\mathbf{4452} &:= -(2!-4!)\times 3!-6!+7! = (T(2)\times T(4)\times T(3)-T(6))\times T(7).\\
&:= 3!\times 2!-6!+5!+7! \quad = (T(3)\times (T(2)+T(6))+T(5))\times T(7).\\
&:= 3!\times (4!-5!-2!)+7! \quad = (T(3)+T(4)\times T(5)+T(2))\times T(7).
\end{aligned}$$

$$\begin{aligned}
\mathbf{4464} &:= (4!+5!)\times(-3!+2!)+7! = (T(4)\times T(5)-T(3))\times (T(2)+T(7)).\\
\mathbf{4470} &:= 3!+4!+5!-6!+7! \quad = T(3)\times (T(4)+T(5)\times (T(6)+T(7))).\\
\mathbf{4512} &:= 2!\times (5!-4!)+7!-6! \quad = -T(2)+T(5)\times (T(4)\times T(7)+T(6)).\\
\mathbf{4536} &:= 2!\times 5!-6!-4!+7! \quad = (T(2)-T(5))\times T(6)\times (T(4)-T(7)).\\
\mathbf{4656} &:= -3!\times 4!-5!\times 2!+7! \quad = T(3)+T(4)\times T(5)\times (T(2)+T(7)).\\
\mathbf{4740} &:= -(5!+3!+4!)\times 2!+7! \quad = T(5)\times (T(3)+T(4)\times (T(2)+T(7))).\\
\mathbf{4770} &:= -3!-2!\times 5!-4!+7! \quad = T(3)\times T(2)\times (-T(5)+T(4)\times T(7)).\\
\mathbf{4836} &:= -(3!-4!+5!)\times 2!+7! \quad = (T(3)+T(4)\times T(5))\times (T(2)+T(7)).\\
\mathbf{4860} &:= 2!\times (3!-5!+4!)+7! \quad = T(2)\times T(3)\times T(5)\times (-T(4)+T(7)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{4872} &:= -3!\times 4!\times 2!+5!+7! \quad = (-T(3)+T(4)\times (T(2)+T(5)))\times T(7).\\
&:= (-3!+1!-2!)\times 4!+7! = T(3)\times (-T(1)+T(2)\times T(4))\times T(7).
\end{aligned}$$

$$\begin{aligned}
\mathbf{4932} &:= -5!-2!\times 3!+4!+7! = (T(5)+T(2))\times (-T(3)+T(4)\times T(7)).\\
\mathbf{4950} &:= 4!-5!\times 1!+3!+7! \quad = T(4)\times T(5)\times (-T(1)+T(3)+T(7)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{4980} &:= (4!+3!)\times 2!-5!+7! = T(4)\times (-T(3)+(T(2)+T(5))\times T(7)).\\
&:= 1!\times 7!-2!\times (3!+4!) = (-T(1)+T(7)\times T(2))\times T(3)\times T(4).
\end{aligned}$$

$$\begin{aligned}
\mathbf{5010} &:= -4!\times (2!-1!)-3!+7! = T(4)\times T(2)\times (-T(1)+T(3)\times T(7)).\\
\mathbf{5012} &:= 1!\times 2!-3!-4!+7! \quad = (-T(1)+T(2)\times T(3)\times T(4))\times T(7).\\
\mathbf{5022} &:= 3!\times (2!-1!)-4!+7! \quad = T(3)\times T(2)\times (-T(1)+T(4)\times T(7)).\\
\mathbf{5030} &:= -4!+(1!+3!)\times 2!+7! = T(4)\times (-T(1)+T(3)\times T(2)\times T(7)).\\
\mathbf{5034} &:= 3!\times (1!+2!)-4!+7! \quad = T(3)\times (-T(1)+T(2)\times T(4)\times T(7)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{5040} &:= -(2!\times 4!+1!)\times 6!+8! = (T(2)-T(4))\times (T(1)-T(6))\times T(8).\\
&:= (1!+6!-3!\times 5!)\times 7! \quad = (T(1)-T(6))\times (T(3)-T(5))\times T(7).\\
&:= 2!\times (3!+1!)\times 6!-7! \quad = (T(2)+T(3))\times (-T(1)+T(6))\times T(7).\\
&:= 2!\times (4!-3!)\times 5!+6! \quad = T(2)\times (-T(4)+T(3)\times T(5))\times T(6).\\
&:= 2!\times (5!+6!)\times 3!-7! \quad = (T(2)-T(5))\times (-T(6)+T(3))\times T(7).\\
&:= 2!\times (7!-4!\times 5!)+6! \quad = T(2)\times T(7)\times T(4)\times (-T(5)+T(6)).\\
&:= -3!\times (7!+5!+6!)+8! = T(3)\times T(7)\times (T(5)-T(6)+T(8)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{5046} &:= -3!\times (1!+2!)+4!+7! = T(3)\times (T(1)+T(2)\times T(4)\times T(7)).\\
\mathbf{5050} &:= 4!-(1!+3!)\times 2!+7! \quad = T(4)\times (T(1)+T(3)\times T(2)\times T(7)).\\
\mathbf{5058} &:= -3!\times (2!-1!)+4!+7! = T(3)\times T(2)\times (T(1)+T(4)\times T(7)).\\
\mathbf{5068} &:= 1!\times 3!+4!-2!+7! \quad = (T(1)+T(3)\times T(4)\times T(2))\times T(7).\\
\mathbf{5070} &:= 4!\times (2!-1!)+3!+7! \quad = T(4)\times T(2)\times (T(1)+T(3)\times T(7)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{5100} &:= (3! + 4! \times 1!) \times 2! + 7! \quad = T(3) \times T(4) \times (T(1) + T(2) \times T(7)).\\
&:= -(4! + 3!) \times 2! + 5! + 7! = T(4) \times (T(3) + (T(2) + T(5)) \times T(7)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{5148} &:= 5! + 2! \times 3! - 4! + 7! \quad = (T(5) + T(2)) \times (T(3) + T(4) \times T(7)).\\
\mathbf{5160} &:= -6! + (1! + 3!) \times 5! + 7! = (T(6) - T(1)) \times T(3) \times (T(5) + T(7)).\\
\mathbf{5202} &:= 2! \times 4! + 5! - 3! + 7! \quad = (T(2) + T(4) \times T(5)) \times (T(3) + T(7)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{5208} &:= 3! \times 4! \times 2! - 5! + 7! \quad = (T(3) + T(4) \times (T(2) + T(5))) \times T(7).\\
&:= (3! - 1! + 2!) \times 4! + 7! = T(3) \times (T(1) + T(2) \times T(4)) \times T(7).
\end{aligned}$$

$$\begin{aligned}
\mathbf{5220} &:= (5! - 3! - 4!) \times 2! + 7! \quad = T(5) \times T(3) \times (T(4) \times T(2) + T(7)).\\
\mathbf{5250} &:= -4! - 3! + 5! \times 2! + 7! \quad = T(4) \times (T(3) + T(5)) \times (-T(2) + T(7)).\\
\mathbf{5292} &:= 3! \times (4! - 2!) + 5! + 7! \quad = (-T(3) + (T(4) + T(2)) \times T(5)) \times T(7).\\
\mathbf{5310} &:= 2! \times 5! + 4! + 7! + 3! \quad = T(2) \times (T(5) + T(4) \times T(7)) \times T(3).\\
\mathbf{5400} &:= (2! + 3! + 1!) \times (6! - 5!) \quad = T(2) \times T(3) \times (-T(1) + T(6)) \times T(5).\\
\mathbf{5472} &:= 6! - 2! \times 3! \times 4! + 7! \quad = (T(6) + T(2)) \times T(3) \times (T(4) + T(7)).\\
\mathbf{5544} &:= -2! \times 5! + 4! + 6! + 7! \quad = (T(2) + T(5)) \times (-T(4) + T(6)) \times T(7).\\
\mathbf{5568} &:= -2! \times (5! - 4!) + 7! + 6! = T(2) - (T(5) - T(4) \times T(7)) \times T(6).
\end{aligned}$$

$$\begin{aligned}
\mathbf{5610} &:= (-1! - 4! + 5!) \times 3! + 7! = (T(1) + T(4)) \times T(5) \times (T(3) + T(7)).\\
&:= -4! + 6! - 5! - 3! + 7! \quad = (-T(4) + T(6)) \times T(5) \times (T(3) + T(7)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{5615} &:= -5! - 1! + 6! - 4! + 7! \quad = T(5) - (T(1) - T(6)) \times T(4) \times T(7).\\
\mathbf{5616} &:= -(3! + 6! \times 2!) \times 4! + 8! = (T(3) \times T(6) + T(2) \times T(4)) \times T(8).
\end{aligned}$$

$$\begin{aligned}
\mathbf{5628} &:= (2! - 4!) \times 3! + 6! + 7! = (T(2) \times T(4) \times T(3) + T(6)) \times T(7).\\
&:= (2! - 4! + 5!) \times 3! + 7! = ((T(2) + T(4)) \times T(5) + T(3)) \times T(7).
\end{aligned}$$

$$\begin{aligned}
\mathbf{5640} &:= -4! \times 2! \times 6! - 5! + 8! \quad = T(4) \times (T(2) + T(6) + T(5) \times T(8)).\\
\mathbf{5670} &:= 4! + 3! - 5! + 6! + 7! \quad = T(4) \times (-T(3) - T(5) + T(6) \times T(7)).\\
\mathbf{5700} &:= -(4! + 3!) \times 2! + 6! + 7! = T(4) \times (-T(3) \times T(2) + T(6) \times T(7)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{5712} &:= -2! \times (4! + 8!) + 6! \times 5! \quad = -T(2) + (T(4) \times T(8) + T(6)) \times T(5).\\
&:= -3! \times 6! + 2! \times (-4! + 7!) = T(3) \times (T(6) + T(2) + T(4)) \times T(7).
\end{aligned}$$

$$\begin{aligned}
\mathbf{5730} &:= -4! - 3! + 6! \times 1! + 7! \quad = T(4) \times (T(3) - T(6) \times (T(1) - T(7))).\\
\mathbf{5733} &:= -1! + 7! - 4! - 2! + 6! \quad = ((-T(1) + T(7)) \times T(4) + T(2)) \times T(6).\\
\mathbf{5736} &:= -3! \times 4! + 5! + 6! + 7! \quad = T(3) - T(4) \times (T(5) - T(6) \times T(7)).\\
\mathbf{5754} &:= -3! \times (6! + 7! + 1!) + 8! = T(3) \times (-T(6) + T(7) \times (-T(1) + T(8))).
\end{aligned}$$

$$\begin{aligned}
\mathbf{5760} &:= -5!\times 3!\times 4!\times 2!+8! &&= T(5)\times(-T(3)+T(4)\times(T(2)+T(8))).\\
&:= 2!\times 6!\times 3!-4!\times 5! &&= (T(2)+T(6))\times(T(3)+T(4))\times T(5).\\
&:= -3!\times 1!\times(6!+7!)+8! &&= (T(3)\times(T(1)+T(6))+T(7))\times T(8).\\
&:= 2!\times(6!+7!-5!\times 4!) &&= (T(2)+T(6)\times T(7)-T(5))\times T(4).\\
&:= 3!\times(5!\times 1!\times 2!+6!) &&= T(3)\times T(5)\times(T(1)+T(2)\times T(6)).
\end{aligned}$$

$$\mathbf{5784} := 4!-(6!+7!)\times 3!+8! = T(4)\times(T(6)\times T(7)-T(3))-T(8).$$

$$\begin{aligned}
\mathbf{5796} &:= 2!\times 3!+4!+6!+7! &&= (T(2)-T(3)+T(4)\times T(6))\times T(7).\\
&:= (2!+5!)\times 3!+4!+7! &&= (-T(2)+(T(5)+T(3))\times T(4))\times T(7).
\end{aligned}$$

$$\begin{aligned}
\mathbf{5802} &:= -3!+2!\times 4!+6!+7! = T(3)-(T(2)-T(4)\times T(6))\times T(7).\\
\mathbf{5832} &:= 5!+6!-2!\times 4!+7! &&= T(5)-T(6)\times(T(2)-T(4)\times T(7)).\\
\mathbf{5855} &:= -1!+6!+7!-4!+5! = (-T(1)+T(6)\times T(7))\times T(4)-T(5).\\
\mathbf{5880} &:= 5!+8!-3!\times(6!+7!) &&= (T(5)+T(8)\times T(3)-T(6))\times T(7).
\end{aligned}$$

$$\begin{aligned}
\mathbf{5904} &:= (4!-6!-7!)\times 3!+8! = T(4)\times(T(6)\times T(7)+T(3))-T(8).\\
&:= 2!\times 7!-(6!-4!)\times 3! = (T(2)+T(7)\times T(6))\times T(4)-T(3).
\end{aligned}$$

$$\begin{aligned}
\mathbf{5905} &:= 1!+6!+7!+4!+5! &&= (T(1)+T(6)\times T(7))\times T(4)+T(5).\\
\mathbf{5916} &:= 3!\times(4!+2!)+6!+7! = T(3)+T(4)\times(T(2)+T(6)\times T(7)).\\
\mathbf{5928} &:= 2!\times 4!+7!+6!+5! &&= (T(2)+T(4)\times T(7))\times T(6)-T(5).\\
\mathbf{6024} &:= 3!\times 4!+5!+6!+7! &&= -T(3)+T(4)\times(T(5)+T(6)\times T(7)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{6048} &:= 2!\times(4!+5!)+6!+7! &&= ((T(2)+T(4))\times T(5)+T(6))\times T(7).\\
&:= 2!\times(-6!+3!)\times 4!+8! = T(2)\times T(6)\times(T(3)\times T(4)+T(8)).\\
&:= 3!\times((4!+5!)\times 2!+6!) &&= (T(3)+T(4))\times(T(5)+T(2))\times T(6).
\end{aligned}$$

$$\begin{aligned}
\mathbf{6192} &:= 2!\times(6!-5!-4!)+7! &&= -T(2)+T(6)\times(T(5)+T(4)\times T(7)).\\
\mathbf{6216} &:= 2!\times(-5!+6!)-4!+7! = (-T(2)+T(5)+T(6)\times T(4))\times T(7).\\
\mathbf{6384} &:= 2!\times 6!+4!-5!+7! &&= (T(2)+T(6)\times T(4)+T(5))\times T(7).\\
\mathbf{6450} &:= -4!-3!+6!\times 2!+7! &&= T(4)\times(-T(3)+T(6)\times(T(2)+T(7))).
\end{aligned}$$

$$\begin{aligned}
\mathbf{6480} &:= (1!-4!\times 2!)\times 6!+8! &&= T(1)\times T(4)\times(-T(2)+T(6))\times T(8).\\
&:= 2!\times(3!+4!)\times 5!-6! &&= T(2)\times T(3)\times T(4)\times(T(5)+T(6)).\\
&:= -2!\times 6!+5!\times 4!+7! = (T(2)+T(6))\times T(5)\times(-T(4)+T(7)).\\
&:= (3!+6!)\times 5!-2!\times 8! &&= (T(3)-T(6))\times(-T(5)+T(2))\times T(8).
\end{aligned}$$

$$\begin{aligned}
\mathbf{6510} &:= 4!+6!\times 2!+3!+7! &&= T(4)\times T(6)\times(-T(2)+T(3)+T(7)).\\
\mathbf{6516} &:= -(3!-4!-6!)\times 2!+7! = T(3)+T(4)\times T(6)\times(T(2)+T(7)).\\
\mathbf{6720} &:= (1!\times 6!+5!)\times 2!+7! &&= (T(1)-T(6))\times(-T(5)+T(2))\times T(7).
\end{aligned}$$

$$\begin{aligned}
\mathbf{7056} &:= -(3!-5!)\times 4!-6!+7! = (-T(3)+T(5)\times T(4))\times(T(6)+T(7)).\\
&:= 4!\times(-3!+6!)-2!\times 7! = (T(4)-T(3))\times T(6)\times T(2)\times T(7).
\end{aligned}$$

$$\begin{aligned}
\mathbf{7200} &:= 4!\times 5!-6!\times 1!+7! \quad = T(4)\times T(5)\times(T(6)-T(1)+T(7)).\\
&:= 4!\times 6!+3!\times 7!-8! \quad = T(4)\times((T(6)+T(3))\times T(7)-T(8)).\\
&:= 3!\times(4!\times 5!+7!)-8! = T(3)\times T(4)\times T(5)\times(-T(7)+T(8)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{7344} &:= (3!+5!)\times 4!-6!+7! = -T(3)+T(5)\times T(4)\times(T(6)+T(7)).\\
\mathbf{7440} &:= 5!\times(4!-3!+2!)+7! = T(5)\times(T(4)+T(3))\times(T(2)+T(7)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{7560} &:= (1!+2!)\times(6!+5!)+7! = (-T(1)\times T(2)+T(6))\times T(5)\times T(7).\\
&:= (1!+2!+3!)\times(5!+6!) = (T(1)+T(2))\times T(3)\times T(5)\times T(6).
\end{aligned}$$

$$\begin{aligned}
\mathbf{7920} &:= (4!\times 5!-6!)\times 3!-7! = T(4)\times(T(5)+T(6))\times(-T(3)+T(7)).\\
&:= 2!\times(6!+5!\times 3!)+7! = (T(2)+T(6))\times T(5)\times(-T(3)+T(7)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{8400} &:= (-1!\times 5!-6!+7!)\times 2! = (T(1)+T(5))\times T(6)\times(T(7)-T(2)).\\
&:= (4!-2!)\times 5!+7!+6! \quad = T(4)\times(-T(2)+T(5)-T(7))\times T(6).\\
&:= 5!\times(3!+4!-2!)+7! \quad = (T(5)\times T(3)+T(4))\times T(2)\times T(7).
\end{aligned}$$

$$\begin{aligned}
\mathbf{8520} &:= 6!\times(-1!+3!)-5!+7! = (T(6)-T(1))\times(T(3)+T(5)\times T(7)).\\
\mathbf{8616} &:= 3!\times(6!-5!)+7!-4! \quad = T(3)+T(6)\times(T(5)\times T(7)-T(4)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{8640} &:= -(2!\times 5!+7!)\times 3!+8! = (-T(2)+T(5)+T(7))\times T(3)\times T(8).\\
&:= (4!+6!)\times 5!-2!\times 8! \quad = T(4)\times(-T(6)+T(5)\times T(2))\times T(8).
\end{aligned}$$

$$\begin{aligned}
\mathbf{8664} &:= -3!\times(5!-6!)+7!+4! = -T(3)+T(5)\times(T(6)\times T(7)-T(4)).\\
\mathbf{8760} &:= 5!\times 1!-2!\times(6!-7!) \quad = T(5)\times(-T(1)-T(2)+T(6)\times T(7)).\\
\mathbf{8880} &:= 1!\times 2!\times(-6!+7!+5!) = (T(1)+T(2)+T(6)\times T(7))\times T(5).\\
\mathbf{8882} &:= (1!-6!+5!+7!)\times 2! \quad = -T(1)+T(6)\times(T(5)\times T(7)+T(2)).\\
\mathbf{9072} &:= (2!\times(6!-4!)+5!)\times 3! \quad = T(2)\times T(6)\times(T(4)\times T(5)-T(3)).\\
\mathbf{9216} &:= -3!\times(4!+5!+7!)+8! = (-T(3)+T(4)\times T(5))\times(T(7)+T(8)).\\
\mathbf{9234} &:= 3!\times(6!-1!)-5!+7! \quad = -T(3)+(T(6)+T(1))\times T(5)\times T(7).\\
\mathbf{9240} &:= 3!\times 6!\times 1!-5!+7! \quad = (-T(3)+T(6)\times(T(1)+T(5)))\times T(7).
\end{aligned}$$

$$\begin{aligned}
\mathbf{9246} &:= 3!\times(1!+6!)-5!+7! \quad = T(3)+(T(1)+T(6))\times T(5)\times T(7).\\
\mathbf{9324} &:= -(2!-6!)\times 3!-4!+7! = (-T(2)+T(6)\times(T(3)+T(4)))\times T(7).\\
\mathbf{9360} &:= (4!-3!+2!)\times 6!-7! \quad = (T(4)+T(3))\times(-T(2)+T(6)\times T(7)).\\
\mathbf{9492} &:= 3!\times(4!+6!-2!)+7! \quad = ((T(3)+T(4))\times T(6)+T(2))\times T(7).\\
\mathbf{9504} &:= (4!-7!-5!)\times 3!+8! \quad = ((-T(4)+T(7))\times T(5)-T(3))\times T(8).\\
\mathbf{9576} &:= 2!\times(5!+7!)-4!-6! \quad = (-T(2)+T(5))\times(T(7)+T(4))\times T(6).\\
\mathbf{9900} &:= 2!\times(4!-5!+3!+7!) \quad = T(2)\times T(4)\times T(5)\times(-T(3)+T(7)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{9936} &:= -(1!\times 7!+4!)\times 3!+8! = (-(T(1)-T(7))\times T(4)+T(3))\times T(8).\\
&:= 8!-5!-4!-7!\times 3! \quad = T(8)\times(-T(5)\times(T(4)-T(7))+T(3)).
\end{aligned}$$

$$\mathbf{9984} := 4!-5!-3!\times 7!+8! = (T(4)\times T(5)+T(3))\times(T(7)+T(8)).$$

$$\begin{aligned}
\mathbf{10044} &:= -3!\times(2!+7!)+8!-4! = -T(3)+(-T(2)+T(7)\times T(8))\times T(4).\\
\mathbf{10050} &:= -3!\times(1!+7!)-4!+8! = T(3)-(T(1)-T(7)\times T(4))\times T(8).
\end{aligned}$$

$$\begin{aligned}
\mathbf{10080} &:= (1!-2!)\times 3!\times 7!+8! \quad = (T(1)+T(2)+T(3))\times T(7)\times T(8).\\
&:= (2!\times 4!-3!)\times 5!+7! \quad = (T(2)\times T(4)-T(3))\times T(5)\times T(7).\\
&:= (2!+3!-1!)\times 6!+7! \quad = T(2)\times T(3)\times(-T(1)+T(6))\times T(7).\\
&:= (2!+6!-3!\times 5!)\times 7! \quad = (-T(2)+T(6)+T(3))\times T(5)\times T(7).\\
&:= (-3!+4!)\times(5!+6!)-7! = T(3)\times T(4)\times(-T(5)+T(6))\times T(7).\\
&:= 6!\times(-2!\times 4!+3!)+8! \quad = (T(6)+T(2))\times T(4)\times(T(3)+T(8)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{10110} &:= 3!\times(1!-7!)+4!+8! = -T(3)+(T(1)+T(7)\times T(4))\times T(8).\\
\mathbf{10116} &:= 3!\times(2!-7!)+8!+4! = T(3)+(T(2)+T(7)\times T(8))\times T(4).
\end{aligned}$$

$$\begin{aligned}
\mathbf{10224} &:= (-1!\times 7!+4!)\times 3!+8! = ((T(1)+T(7))\times T(4)-T(3))\times T(8).\\
&:= -3!\times 7!+8!+5!+4! \quad = -T(3)+(T(7)\times T(8)+T(5))\times T(4).
\end{aligned}$$

$$\begin{aligned}
\mathbf{10260} &:= 2!\times(-3!+5!-4!+7!) = T(2)\times T(3)\times T(5)\times(T(4)+T(7)).\\
\mathbf{10674} &:= -3!-5!+6!+2!\times 7! \quad = T(3)\times(T(5)+T(6)\times T(2)\times T(7)).\\
\mathbf{10692} &:= -5!+2!\times(3!+7!)+6! = (T(5)+T(2))\times(T(3)+T(7)\times T(6)).\\
\mathbf{10764} &:= 2!\times(3!-4!+7!)+6! \quad = T(2)\times T(3)\times(T(4)+T(7)\times T(6)).\\
\mathbf{10800} &:= 1!\times 6!-7!\times 3!+8! \quad = (T(1)+T(6)+T(7))\times T(3)\times T(8).
\end{aligned}$$

$$\begin{aligned}
\mathbf{10920} &:= (4!-2!)\times 6!+5!-7! \quad = T(4)\times(T(2)+T(6)+T(5))\times T(7).\\
&:= (1!+3!)\times(6!+5!)+7! = (-T(1)+T(3)+T(6))\times T(5)\times T(7).
\end{aligned}$$

$$\begin{aligned}
\mathbf{11400} &:= -5!+6!\times(-1!+4!)-7! = T(5)\times(T(6)-T(1))\times(T(4)+T(7)).\\
\mathbf{11976} &:= (-3!+6!)\times 4!-7!-5! \quad = T(3)+T(6)\times(T(4)+T(7))\times T(5).
\end{aligned}$$

$$\begin{aligned}
\mathbf{12240} &:= 4!\times 5!+6!\times 3!+7! \quad = T(4)\times(T(5)+T(6))\times(T(3)+T(7)).\\
&:= 6!+2!\times(5!\times 3!+7!) = (T(6)+T(2))\times T(5)\times(T(3)+T(7)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{12600} &:= (1!+2!-4!)\times(5!-6!) = (T(1)+T(2))\times T(4)\times T(5)\times T(6).\\
\mathbf{12960} &:= -3!\times 7!+4!\times 5!+8! \quad = (T(3)+T(7)-T(4))\times T(5)\times T(8).\\
\mathbf{13104} &:= (3!+5!)\times 4!+2!\times 7! \quad = (T(3)+T(5)\times T(4))\times T(2)\times T(7).\\
\mathbf{13440} &:= (4!-2!)\times(6!+5!)-7! = T(4)\times(T(2)\times T(6)-T(5))\times T(7).\\
\mathbf{13680} &:= 5!\times 4!+7!\times 2!+6! \quad = T(5)\times(T(4)+T(7))\times(T(2)+T(6)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{15120} &:= (-2! + 4!) \times 3! \times 5! - 6! &&= T(2) \times (T(4) + T(3)) \times T(5) \times T(6).\\
&:= (2! - 1! - 3!) \times 7! + 8! &&= T(2) \times (-T(1) + T(3)) \times T(7) \times T(8).\\
&:= -(4! + 3!) \times (5! + 6!) + 8! &&= T(4) \times (T(3) + T(5) + T(6)) \times T(8).\\
&:= 3! \times (5! + 6! - 7!) + 8! &&= T(3) \times T(5) \times T(6) \times (-T(7) + T(8)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{15840} &:= 6! + (1! - 3!) \times 7! + 8! &&= (T(6) - T(1)) \times (-T(3) + T(7)) \times T(8).\\
\mathbf{16560} &:= -(2! + 4!) \times 6! - 7! + 8! &&= T(2) \times T(4) \times (T(6) \times T(7) - T(8)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{17280} &:= (2! - 3!) \times 5! \times 6! + 9! &&= T(2) \times T(3) \times (T(5) + T(6) \times T(9)).\\
&:= -(4! + 1!) \times 6! - 7! + 8! &&= T(4) \times (-T(1) + T(6) + T(7)) \times T(8).\\
&:= -4! \times (5! \times 2! + 6!) + 8! &&= T(4) \times (-T(5) + T(2) \times T(6)) \times T(8).\\
&:= 9! - 3! \times (4! \times 6! + 8!) &&= (T(9) \times T(3) + T(4) \times T(6)) \times T(8).
\end{aligned}$$

$$\mathbf{17640} := (1! + 2!) \times (6! + 5! + 7!) = (-T(1) + T(2)) \times T(6) \times T(5) \times T(7).$$

$$\begin{aligned}
\mathbf{18000} &:= 3! \times 5! \times 4! \times 1! + 6! &&= T(3) \times T(5) \times T(4) \times (-T(1) + T(6)).\\
&:= -4! \times 5! \times 3! - 7! + 8! &&= (-T(4) + T(5) \times (T(3) + T(7))) \times T(8).\\
&:= -1! \times 7! - 6! \times 4! + 8! &&= (T(1) + T(7) + T(6)) \times T(4) \times T(8).
\end{aligned}$$

$$\begin{aligned}
\mathbf{18144} &:= -(6! - 3!) \times 4! - 7! + 8! &&= T(6) \times (T(3) - T(4) + T(7)) \times T(8).\\
\mathbf{18720} &:= (3! \times 4! + 2! - 5!) \times 6! &&= T(3) \times T(4) \times (-T(2) + T(5) \times T(6)).\\
\mathbf{20304} &:= (2! \times 7! + 4!) \times 3! - 8! &&= (T(2) \times T(7) + T(4)) \times T(3) \times T(8).
\end{aligned}$$

$$\begin{aligned}
\mathbf{21600} &:= -1! \times 6! \times (2! + 4!) + 8! &&= (-T(1) + T(6)) \times T(2) \times T(4) \times T(8).\\
&:= (4! - 3!) \times 2! \times (6! - 5!) &&= T(4) \times T(3) \times (T(2) + T(6)) \times T(5).
\end{aligned}$$

$$\begin{aligned}
\mathbf{22320} &:= -(4! - 1! + 2!) \times 6! + 8! &&= T(4) \times (-T(1) + T(2) \times T(6)) \times T(8).\\
\mathbf{23040} &:= (1! - 2!) \times 6! \times 4! + 8! &&= (T(1) + T(2) \times T(6)) \times T(4) \times T(8).\\
\mathbf{23328} &:= (2! \times 3! - 6!) \times 4! + 8! &&= T(2) \times (T(3) + T(6) \times T(4)) \times T(8).\\
\mathbf{23760} &:= (2! - 4! - 1!) \times 6! + 8! &&= T(2) \times T(4) \times (T(1) + T(6)) \times T(8).
\end{aligned}$$

$$\begin{aligned}
\mathbf{25200} &:= (1! + 3!) \times 4! \times 5! + 7! &&= T(1) \times T(3) \times T(4) \times T(5) \times T(7).\\
&:= -4! \times (6! + 5!) + 7! + 8! &&= T(4) \times T(6) \times T(5) \times (-T(7) + T(8)).
\end{aligned}$$

$$\mathbf{26628} := 3! \times (-2! - 6! + 5! + 7!) = (T(3) + T(2) \times T(6) \times T(5)) \times T(7).$$

$$\begin{aligned}
\mathbf{27360} &:= -6! \times (1! + 4!) + 7! + 8! &&= (T(6) - T(1)) \times (T(4) + T(7)) \times T(8).\\
&:= 3! \times (4! \times 5! - 7!) + 8! &&= T(3) \times T(4) \times (T(5) \times T(7) + T(8)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{28080} &:= -3!\times 4!\times 5!+7!+8! &&= T(3)\times T(4)\times(-T(5)+T(7))\times T(8).\\
\mathbf{28224} &:= 4!\times(3!-6!)+7!+8! &&= (T(4)+T(3))\times(T(6)+T(7))\times T(8).\\
\mathbf{30180} &:= -(4!+3!+7!)\times 2!+8! &&= T(4)\times(-T(3)+T(7)\times T(2)\times T(8)).\\
\mathbf{30222} &:= 3!+8!-4!-7!\times 2! &&= (-T(3)+T(8)\times T(4)\times T(7))\times T(2).
\end{aligned}$$

$$\begin{aligned}
\mathbf{30240} &:= -3!\times(6!+5!)-7!+8! &&= (-T(3)+T(6)+T(5))\times T(7)\times T(8).\\
&:= 2!\times((5!+6!)\times 4!-7!) &&= T(2)\times(T(5)+T(6))\times T(4)\times T(7).
\end{aligned}$$

$$\begin{aligned}
\mathbf{30258} &:= -2!\times 7!+4!+8!-3! &&= T(2)\times(T(7)\times T(4)\times T(8)+T(3)).\\
\mathbf{30300} &:= (4!+3!-7!)\times 2!+8! &&= T(4)\times(T(3)+T(7)\times T(2)\times T(8)).\\
\mathbf{30912} &:= 6!-2!\times(7!+4!)+8! &&= (T(6)+T(2))\times T(7)\times(T(4)+T(8)).\\
\mathbf{33120} &:= 3!\times(4!\times 6!-7!)-8! &&= T(3)\times T(4)\times(T(6)\times T(7)-T(8)).\\
\mathbf{33600} &:= -(5!+6!)\times 2!+8!-7! &&= T(5)\times(T(6)\times T(2)\times T(8)-T(7)).\\
\mathbf{34560} &:= -5!\times 6!+(2!+1!)\times 8! &&= T(5)\times(T(6)\times T(2)+T(1))\times T(8).
\end{aligned}$$

$$\begin{aligned}
\mathbf{35280} &:= -5!\times(6!-3!)+4!\times 7! &&= T(5)\times T(6)\times(-T(3)+T(4))\times T(7).\\
&:= 9!-(2!+3!)\times 8!-7! &&= (T(9)-T(2))\times(-T(3)+T(8))\times T(7).
\end{aligned}$$

$$\begin{aligned}
\mathbf{36288} &:= 3!\times(4!\times 2!-6!)+8! &&= (T(3)+T(4))\times T(2)\times T(6)\times T(8).\\
\mathbf{37440} &:= (3!-4!)\times(6!-7!)-8! &&= (T(3)\times T(4))\times(T(6)\times T(7)+T(8)).
\end{aligned}$$

$$\begin{aligned}
\mathbf{38880} &:= 2!\times 6!-5!\times 4!+8! &&= T(2)\times(T(6)+T(5))\times T(4)\times T(8).\\
&:= 5!\times(2!\times 3!-4!)+8! &&= (T(5)+T(2))\times T(3)\times T(4)\times T(8).
\end{aligned}$$

$$\begin{aligned}
\mathbf{40320} &:= 4!\times 7!\times 1!-2!\times 8! &&= T(4)\times T(7)\times(T(1)+T(2))\times T(8).\\
&:= 2!\times(9!-8!)-7!\times 5! &&= (-T(2)+T(9))\times(T(8)+T(7))\times T(5).
\end{aligned}$$

$$\begin{aligned}
\mathbf{45360} &:= (1!-2!+5!)\times 6!-8! &&= (T(1)+T(2))\times T(5)\times T(6)\times T(8).\\
\mathbf{47520} &:= 5!\times(4!-3!)+7!+8! &&= T(5)\times(T(4)\times T(3)+T(7))\times T(8).\\
\mathbf{50400} &:= (-1!\times 3!+4!)\times 7!-8! &&= (-T(1)+T(3))\times T(4)\times T(7)\times T(8).\\
\mathbf{51840} &:= -(3!-4!+2!)\times 6!+8! &&= T(3)\times T(4)\times(T(2)+T(6))\times T(8).\\
\mathbf{55440} &:= (5!-1!)\times 6!-3!\times 7! &&= T(5)\times(T(1)+T(6))\times T(3)\times T(7).
\end{aligned}$$

$$\begin{aligned}
\mathbf{60480} &:= -2!\times(3!+4!)\times 7!+9! &&= T(2)\times(T(3)+T(4))\times T(7)\times T(9).\\
&:= (3!\times(5!+2!)-6!)\times 7! &&= T(3)\times T(5)\times(T(2)+T(6))\times T(7).\\
&:= 4!\times(-5!-6!+7!)-8! &&= T(4)\times(-T(5)+T(6))\times T(7)\times T(8).\\
&:= 4!\times(-5!+3!\times 6!)-8! &&= (-T(4)+T(5)\times T(3))\times T(6)\times T(8).
\end{aligned}$$

$$\begin{aligned}
\mathbf{62640} &:= 3!\times(6!\times 4!-5!)-8! &&= (T(3)\times T(6)-T(4))\times T(5)\times T(8).\\
\mathbf{65520} &:= 3!\times(-5!+7!-6!)+8! &&= T(3)\times T(5)\times(-T(7)+T(6)\times T(8)).\\
\mathbf{67680} &:= (4!+3!+5!)\times 6!-8! &&= (-T(4)+T(3)\times T(5)\times T(6))\times T(8).\\
\mathbf{70560} &:= 3!\times(5!+7!)-6!+8! &&= T(3)\times T(5)\times(T(7)+T(6)\times T(8)).
\end{aligned}$$

$$\mathbf{75600} := (-4! \times 2! + 6!) \times 5! - 7! = T(4) \times (-T(2) + T(6)) \times T(5) \times T(7).$$
$$\mathbf{77760} := 2! \times (-6! - 3! \times 5! + 8!) = (T(2) + T(6)) \times T(3) \times T(5) \times T(8).$$
$$\mathbf{80640} := (4! \times 3! - 5!) \times 7! - 8! = (-T(4) + T(3) \times T(5)) \times T(7) \times T(8).$$
$$\mathbf{82800} := 4! \times (5! + 7!) - 6! - 8! = T(4) \times T(5) \times (T(7) \times T(6) - T(8)).$$
$$\mathbf{89880} := -5! - 6! + (-3! + 4!) \times 7! = (T(5) \times T(6) + T(3)) \times T(4) \times T(7).$$

$$\mathbf{90720} := 9! \times 2! - (5! + 3!) \times 7! = T(9) \times (-T(2) + T(5)) \times T(3) \times T(7).$$
$$:= 3! \times (4! \times (6! + 5!) - 7!) = (T(3) + T(4) \times T(6)) \times T(5) \times T(7).$$

$$\mathbf{108864} := (4! - 5!) \times (3! - 6!) + 8! = (T(4) \times T(5) - T(3)) \times T(6) \times T(8).$$
$$\mathbf{116640} := 3! \times (5! - 8!) - 7! + 9! = T(3) \times T(5) \times (T(8) + T(7) \times T(9)).$$
$$\mathbf{120960} := (-3! + 6!) \times 5! - 7! + 8! = T(3) \times T(6) \times T(5) \times (T(7) + T(8)).$$
$$\mathbf{129600} := (2! \times 6! - 4!) \times 5! - 8! = (T(2) + T(6)) \times T(4) \times T(5) \times T(8).$$
$$\mathbf{181440} := (3! - 2! + 4!) \times 7! + 8! = T(3) \times T(2) \times T(4) \times T(7) \times T(8).$$
$$\mathbf{207360} := -3! \times 8! + 5! \times 6! + 9! = T(3) \times T(8) \times (T(5) + T(6) \times T(9)).$$

$$\mathbf{233280} := 2! \times (-(6! + 8!) \times 3! + 9!) = (T(2) + T(6)) \times T(8) \times T(3) \times T(9).$$
$$\mathbf{241920} := 7! \times (5! - 4!) - 3! \times 8! = T(7) \times T(5) \times (T(4) + T(3)) \times T(8).$$
$$\mathbf{264960} := -4! \times (6! + 7!) + 9! + 8! = T(4) \times (T(6) \times T(7) \times T(9) + T(8)).$$
$$\mathbf{272160} := (3! - 6!) \times 5! - 7! + 9! = T(3) \times (T(6) + T(5)) \times T(7) \times T(9).$$
$$\mathbf{339840} := 1! \times 9! + 6! \times 4! - 8! = (-T(1) + T(9) \times T(6)) \times T(4) \times T(8).$$
$$\mathbf{339984} := (3! + 6!) \times 4! + 9! - 8! = (-T(3) + T(6) \times T(4) \times T(9)) \times T(8).$$

$$\mathbf{340560} := (4! + 1!) \times 6! + 9! - 8! = T(4) \times (T(1) + T(6) \times T(9)) \times T(8).$$
$$\mathbf{341280} := (4! + 2!) \times 6! + 9! - 8! = T(4) \times (T(2) + T(6) \times T(9)) \times T(8).$$
$$\mathbf{349920} := (3! - 4!) \times (6! - 8!) - 9! = (T(3) + T(4) \times T(6)) \times T(8) \times T(9).$$
$$\mathbf{443520} := 4! \times 7! - 8! \times 1! + 9! = T(4) \times T(7) \times T(8) \times (-T(1) + T(9)).$$
$$\mathbf{453600} := (2! + 5! - 4!) \times 7! - 8! = T(2) \times T(5) \times T(4) \times T(7) \times T(8).$$
$$\mathbf{725760} := 7! \times 4! + 3! \times 8! + 9! = T(7) \times (T(4) + T(3)) \times T(8) \times T(9).$$
$$\mathbf{816480} := 3! \times (2! \times 8! - 7!) + 9! = T(3) \times T(2) \times T(8) \times T(7) \times T(9).$$

$$\mathbf{1360800} := (4! - 2!) \times (7! + 8!) + 9! = T(4) \times T(2) \times T(7) \times T(8) \times T(9).$$
$$\mathbf{4082400} := (3! + 5!) \times (8! - 7!) - 9! = T(3) \times T(5) \times T(8) \times T(7) \times T(9).$$

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