

Fixed Power Representation of Numbers

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Abstract

This short work brings numbers written in terms of fixed powers. For minimum length permutable among bases and powers see author's another work [15]. Multiple representations pyramid style are given in author's another works [18, 19]. For power representations with powers see another work by author [16]

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1 Introduction

1.1 Flexible Power Representations

Let us consider two numbers, 1 and 2. Using the idea of power and the operations of *addition* and *subtraction*, we can write following 3 numbers in terms of 1 and 2, as $1 = -1^2 + 2^1$, $3 = 1^2 + 2^1$ and $5 = 1^1 + 2^2$. In this situation, we observe that *bases* and *exponents* are of same digits. Permutations of exponent values helps in bringing different numbers. In case of repeated values, for example, $3 = 1^2 + 2^1 = -1^1 + 2^2$, only possibilities is considered. There is only one number having single digit, i.e., $1 = 1^1$. For simplicity, let us represent the above procedure as $(1,2)^{(1,2)}$, resulting in three possible values. The above procedure is with two digits. Instead having two digits, we can work with two letters, such as,

$$(a,b)^{(a,b)}, \dots (a,b,c,d,e,f,g,h,i)^{(a,b,c,d,e,f,g,h,i)},$$

where $a, b, c, d, e, f, g, h, i \in \{1, 2, 3, 4, 5, 6, 7, 8, 9\}$, all distinct.

1.1.1 Unequal String Lengths

$$100 := 2^6 + 6^2$$

$$101 := 1^1 + 2^6 + 6^2$$

$$102 := -2^5 + 3^2 + 5^3$$

$$103 := 1^1 - 2^5 + 3^2 + 5^3$$

$$104 := -1^1 + 2^3 + 3^4 + 4^2$$

$$105 := 2^3 + 3^4 + 4^2$$

$$106 := 2^7 + 3^3 - 7^2$$

$$107 := -1^2 + 2^7 - 3^3 + 7^1$$

$$108 := 1^7 + 2^6 + 6^2 + 7^1$$

$$109 := 1^2 + 2^7 - 3^3 + 7^1$$

$$110 := 1^9 + 2^6 + 6^2 + 9^1$$

$$111 := -1^3 + 2^7 - 3^2 - 7^1$$

$$112 := 3^5 - 4^4 + 5^3$$

$$113 := -1^5 - 2^1 - 3^2 + 5^3$$

$$114 := -2^2 + 3^5 - 5^3$$

$$115 := 1^5 - 2^1 - 3^2 + 5^3$$

$$116 := 2^2 + 3^5 - 4^4 + 5^3$$

$$117 := -1^1 + 3^5 - 5^3$$

$$118 := 3^5 - 5^3$$

$$119 := 1^1 + 3^5 - 5^3.$$

See more examples,

$$638 := -1^5 - 2^1 - 4^2 + 5^4$$

$$666 := -2^5 + 3^2 + 4^3 + 5^4$$

$$786 := -1^4 + 3^6 + 4^3 - 6^1$$

$$1933 := -1^3 - 2^2 + 3^7 - 4^4 + 7^1$$

$$1934 := 2^9 + 3^6 - 6^2 + 9^3$$

$$3098 := -3^3 + 5^5$$

$$2280 := -1^1 - 2^6 + 4^5 + 5^2 + 6^4$$

$$6922 := -3^6 - 5^3 + 6^5$$

$$9711 := 1^3 + 2^4 + 3^8 + 4^2 + 5^5 - 8^1$$

$$9777 := 1^9 + 2^1 + 4^7 - 7^2 - 9^4$$

$$11110 := 1^1 + 2^2 + 3^9 - 5^6 + 6^5 - 9^3$$

$$11111 := -1^1 + 2^7 + 3^8 - 4^2 + 7^3 + 8^4.$$

This work is up to 20000. For details refer [14].

1.1.2 Equal String Lengths

Based on second type still we can write natural numbers in a sequential way with uniform representations. Instead working with unequal strings as of previous section, here we worked with equal string using the digits 0 to 9, i.e., using all the 10 digits, $\{0, 1, 2, 3, 4, 5, 6, 7, 8, 9\}$. The results obtained are symmetric, i.e., writing in 0 to 9 or 9 to 0, the resulting number is same. See some examples below,

$$201 := 0^3 + 1^9 + 2^4 + 3^7 - 4^8 + 5^1 + 6^6 + 7^5 + 8^2 + 9^0$$

$$202 := 0^0 + 1^9 + 2^6 + 3^8 - 4^7 + 5^5 + 6^3 + 7^2 + 8^1 + 9^4$$

$$203 := 0^3 - 1^9 + 2^4 + 3^7 - 4^8 + 5^0 + 6^6 + 7^5 + 8^2 + 9^1$$

$$204 := 0^8 + 1^9 + 2^5 + 3^7 - 4^6 + 5^1 + 6^4 + 7^2 + 8^0 + 9^3$$

$$\begin{aligned}
205 &:= 0^3 + 1^9 + 2^4 + 3^7 - 4^8 + 5^0 + 6^6 + 7^5 + 8^2 + 9^1 \\
206 &:= 0^7 - 1^9 - 2^5 - 3^8 + 4^6 + 5^1 + 6^3 + 7^4 + 8^0 + 9^2 \\
207 &:= 0^8 + 1^9 + 2^5 + 3^7 - 4^6 + 5^0 + 6^4 + 7^2 + 8^1 + 9^3 \\
208 &:= 0^7 + 1^9 - 2^5 - 3^8 + 4^6 + 5^1 + 6^3 + 7^4 + 8^0 + 9^2 \\
209 &:= 0^7 - 1^9 - 2^5 - 3^8 + 4^6 + 5^0 + 6^3 + 7^4 + 8^1 + 9^2 \\
210 &:= 0^5 - 1^7 - 2^8 - 3^9 + 4^1 + 5^6 + 6^0 + 7^3 + 8^4 + 9^2 \\
211 &:= 0^7 + 1^9 - 2^5 - 3^8 + 4^6 + 5^0 + 6^3 + 7^4 + 8^1 + 9^2 \\
212 &:= 0^5 + 1^7 - 2^8 - 3^9 + 4^1 + 5^6 + 6^0 + 7^3 + 8^4 + 9^2 \\
213 &:= 0^5 + 1^8 - 2^7 - 3^9 + 4^1 + 5^6 + 6^3 + 7^0 + 8^4 + 9^2
\end{aligned}$$

$$\begin{aligned}
214 &:= 0^5 + 1^7 - 2^8 - 3^9 + 4^0 + 5^6 + 6^1 + 7^3 + 8^4 + 9^2 \\
215 &:= 0^5 + 1^9 + 2^8 + 3^7 - 4^6 + 5^0 + 6^4 + 7^2 + 8^3 + 9^1 \\
216 &:= 0^1 - 1^7 + 2^8 - 3^9 + 4^5 + 5^6 + 6^0 + 7^4 + 8^3 + 9^2 \\
217 &:= 0^7 - 1^9 + 2^5 - 3^8 + 4^6 + 5^2 + 6^3 + 7^4 + 8^1 + 9^0 \\
218 &:= 0^1 + 1^7 + 2^8 - 3^9 + 4^5 + 5^6 + 6^0 + 7^4 + 8^3 + 9^2 \\
219 &:= 0^7 + 1^9 + 2^5 - 3^8 + 4^6 + 5^2 + 6^3 + 7^4 + 8^1 + 9^0 \\
220 &:= 0^7 + 1^9 + 2^5 - 3^8 + 4^6 + 5^2 + 6^3 + 7^4 + 8^0 + 9^1.
\end{aligned}$$

Below are more examples,

$$\begin{aligned}
11080 &:= 0^8 + 1^9 + 2^7 + 3^6 + 4^2 + 5^5 + 6^0 + 7^1 + 8^3 + 9^4 \\
11081 &:= 0^8 - 1^9 + 2^6 + 3^7 + 4^4 + 5^1 + 6^5 + 7^0 + 8^2 + 9^3 \\
11082 &:= 0^8 + 1^9 + 2^6 + 3^7 + 4^1 + 5^4 + 6^5 + 7^3 + 8^0 + 9^2 \\
11083 &:= 0^8 + 1^9 + 2^6 + 3^7 + 4^4 + 5^1 + 6^5 + 7^0 + 8^2 + 9^3 \\
11084 &:= 0^7 + 1^9 + 2^8 + 3^6 + 4^1 + 5^5 + 6^0 + 7^3 + 8^2 + 9^4 \\
11085 &:= 0^8 + 1^9 + 2^6 + 3^7 + 4^4 + 5^0 + 6^5 + 7^1 + 8^2 + 9^3 \\
11086 &:= 0^7 + 1^9 + 2^8 + 3^6 + 4^0 + 5^5 + 6^1 + 7^3 + 8^2 + 9^4 \\
11087 &:= 0^6 + 1^9 - 2^8 + 3^7 + 4^2 + 5^4 + 6^5 + 7^0 + 8^1 + 9^3.
\end{aligned}$$

The whole work is from 50000. For details refer [12, 13, 14].

1.2 Fixed Power of Powers

Below are few numbers written in powers 2 and 3 of number also with powers 2 and 3.

$$\begin{aligned}
16^2 &:= 1^2 + 2^2 + 7^2 + 9^2 + 11^2 \\
&:= 1^2 + 3^2 + 5^2 + 10^2 + 11^2 \\
&:= 1^2 + 5^2 + 7^2 + 9^2 + 10^2 \\
&:= 2^2 + 3^2 + 5^2 + 7^2 + 13^2
\end{aligned}$$

$$17^2 := 8^2 + 15^2$$

$$18^2 := 2^2 + 8^2 + 16^2$$

$$\begin{aligned}
19^2 &:= 1^2 + 6^2 + 18^2 \\
&:= 6^2 + 10^2 + 15^2
\end{aligned}$$

$$20^2 := 12^2 + 16^2$$

$$\begin{aligned}
21^2 &:= 4^2 + 13^2 + 16^2 \\
&:= 4^2 + 5^2 + 20^2 \\
&:= 4^2 + 8^2 + 19^2 \\
&:= 6^2 + 9^2 + 18^2 \\
&:= 8^2 + 11^2 + 16^2
\end{aligned}$$

$$22^2 := 4^2 + 12^2 + 18^2$$

$$\begin{aligned}
23^2 &:= 3^2 + 14^2 + 18^2 \\
&:= 3^2 + 6^2 + 22^2 \\
&:= 6^2 + 13^2 + 18^2
\end{aligned}$$

$$\begin{aligned}
21^3 &:= 6^3 + 9^3 + 13^3 + 14^3 + 15^3 \\
&:= 2^3 + 6^3 + 13^3 + 14^3 + 16^3 \\
&:= 3^3 + 7^3 + 11^3 + 12^3 + 18^3 \\
&:= 6^3 + 7^3 + 8^3 + 11^3 + 19^3 \\
&:= 4^3 + 5^3 + 7^3 + 9^3 + 20^3
\end{aligned}$$

$$\begin{aligned}
22^3 &:= 7^3 + 9^3 + 10^3 + 14^3 + 18^3 \\
&:= 1^3 + 7^3 + 12^3 + 14^3 + 18^3 \\
&:= 1^3 + 9^3 + 11^3 + 12^3 + 19^3
\end{aligned}$$

$$23^3 := 6^3 + 14^3 + 15^3 + 18^3$$

$$24^3 := 12^3 + 16^3 + 20^3$$

$$25^3 := 4^3 + 17^3 + 22^3$$

$$\begin{aligned}
26^3 &:= 10^3 + 14^3 + 18^3 + 20^3 \\
&:= 3^3 + 15^3 + 17^3 + 21^3 \\
&:= 5^3 + 11^3 + 19^3 + 21^3 \\
&:= 2^3 + 10^3 + 14^3 + 24^3
\end{aligned}$$

The complete with multiple choices with powers 2 to 7 is given in author's work [16]

1.3 Pyramid-Type Representations

Below are few examples of numbers written as pyramid-type with multiple choices.

$$\begin{aligned}
22 &:= 0^1 - 1^0 - 2^2 + 3^3 \\
&:= 0^2 + 1^3 + 2^4 + 3^0 + 4^1 \\
&:= 0^4 - 1^5 + 2^3 + 3^2 + 4^0 + 5^1 \\
&:= 0^2 + 1^6 + 2^5 - 3^4 + 4^3 + 5^1 + 60 \\
&:= 0^5 + 1^7 - 2^6 - 3^4 + 4^1 + 5^3 + 6^2 + 7^0 \\
&:= 0^1 + 1^4 + 2^8 + 3^5 - 4^7 + 5^6 + 6^3 + 7^0 + 8^2 \\
&:= 0^6 - 1^9 + 2^8 - 3^7 + 4^5 + 5^4 + 6^3 + 7^1 + 8^0 + 9^2.
\end{aligned}$$

$$\begin{aligned}
87 &:= 0^1 + 1^3 + 2^2 + 3^4 + 4^0 \\
&:= 0^2 + 1^5 + 2^4 + 3^0 + 4^3 + 5^1 \\
&:= 0^2 - 1^5 - 2^6 + 3^4 + 4^3 + 5^0 + 6^1 \\
&:= 0^2 - 1^7 - 2^5 - 3^6 + 4^0 + 5^4 + 6^3 + 7^1 \\
&:= 0^1 - 1^8 + 2^6 - 3^7 + 4^5 + 5^4 + 6^0 + 7^2 + 8^3 \\
&:= 0^9 + 1^0 - 2^6 + 3^8 - 4^7 + 5^5 + 6^3 + 7^1 + 8^2 + 9^4
\end{aligned}$$

$$\begin{aligned}
666 &:= 0^1 - 1^3 + 2^5 + 3^2 + 4^0 + 5^4 \\
&:= 0^0 + 1^5 - 2^6 + 3^1 + 4^3 + 5^4 + 6^2 \\
&:= 0^5 + 1^7 - 2^6 + 3^1 + 4^3 + 5^4 + 6^2 + 7^0 \\
&:= 0^2 - 1^7 - 2^6 - 3^8 + 4^3 + 5^5 + 6^1 + 7^0 + 8^4 \\
&:= 0^7 + 1^9 - 2^5 - 3^8 + 4^6 + 5^2 + 6^1 + 7^4 + 8^0 + 9^3.
\end{aligned}$$

$$\begin{aligned}
981 &:= 0^1 - 1^2 - 2^4 - 3^3 + 4^5 + 5^0 \\
&:= 0^2 - 1^4 + 2^5 + 3^6 + 4^1 + 5^0 + 6^3 \\
&:= 0^0 + 1^6 - 2^7 + 3^5 + 4^2 + 5^4 + 6^3 + 7^1 \\
&:= 0^6 + 1^7 - 2^8 + 3^5 + 4^2 + 5^4 + 6^0 + 7^3 + 8^1 \\
&:= 0^7 - 1^9 + 2^4 - 3^8 + 4^6 + 5^5 + 6^3 + 7^0 + 8^1 + 9^2
\end{aligned}$$

For details see author's works [18, 19].

In this work, we shall write number as fixed powers.

2 Fixed Digit Power Representations

$$4 := 2^2$$

$$5 := 1^2 + 2^2$$

$$8 := 2^3$$

$$9 := 1^3 + 2^3$$

$$:= 3^2$$

$$10 := 1^2 + 3^2$$

$$13 := 2^2 + 3^2$$

$$14 := 1^2 + 2^2 + 3^2$$

$$16 := 2^4$$

$$:= 4^2$$

$$17 := 1^2 + 4^2$$

$$:= 1^4 + 2^4$$

$$:= 1^2 + 4^2$$

$$20 := 2^2 + 4^2$$

$$21 := 1^2 + 2^2 + 4^2$$

$$25 := 3^2 + 4^2$$

$$:= 5^2$$

$$26 := 1^2 + 3^2 + 4^2$$

$$:= 1^2 + 5^2$$

$$27 := 3^3$$

$$28 := 1^3 + 3^3$$

$$29 := 2^2 + 3^2 + 4^2$$

$$:= 2^2 + 5^2$$

$$30 := 1^2 + 2^2 + 3^2 + 4^2$$

$$:= 1^2 + 2^2 + 5^2$$

$$32 := 2^5$$

$$33 := 1^5 + 2^5$$

$$34 := 3^2 + 5^2$$

$$35 := 1^2 + 3^2 + 5^2$$

$$:= 2^3 + 3^3$$

$$36 := 1^3 + 2^3 + 3^3$$

$$:= 6^2$$

$$37 := 1^2 + 6^2$$

$$38 := 2^2 + 3^2 + 5^2$$

$$39 := 1^2 + 2^2 + 3^2 + 5^2$$

$$40 := 2^2 + 6^2$$

$$41 := 1^2 + 2^2 + 6^2$$

$$:= 4^2 + 5^2$$

$$42 := 1^2 + 4^2 + 5^2$$

$$45 := 2^2 + 4^2 + 5^2$$

$$:= 3^2 + 6^2$$

$$46 := 1^2 + 2^2 + 4^2 + 5^2$$

$$:= 1^2 + 3^2 + 6^2$$

$$49 := 2^2 + 3^2 + 6^2$$

$$:= 7^2$$

$$50 := 1^2 + 2^2 + 3^2 + 6^2$$

$$:= 1^2 + 7^2$$

$$:= 3^2 + 4^2 + 5^2$$

$$51 := 1^2 + 3^2 + 4^2 + 5^2$$

$$52 := 4^2 + 6^2$$

$$53 := 1^2 + 4^2 + 6^2$$

$$:= 2^2 + 7^2$$

$$54 := 2^2 + 3^2 + 4^2 + 5^2$$

$$:= 1^2 + 2^2 + 7^2$$

$$55 := 1^2 + 2^2 + 3^2 + 4^2 + 5^2$$

$$56 := 2^2 + 4^2 + 6^2$$

$$57 := 1^2 + 2^2 + 4^2 + 6^2$$

$$58 := 3^2 + 7^2$$

$$59 := 1^2 + 3^2 + 7^2$$

$$61 := 3^2 + 4^2 + 6^2$$

$$:= 5^2 + 6^2$$

$$62 := 1^2 + 3^2 + 4^2 + 6^2$$

$$:= 1^2 + 5^2 + 6^2$$

$$:= 2^2 + 3^2 + 7^2$$

$$63 := 1^2 + 2^2 + 3^2 + 7^2$$

$$64 := 2^6$$

$$:= 4^3$$

$$:= 8^2$$

$$65 := 2^2 + 3^2 + 4^2 + 6^2$$

$$:= 2^2 + 5^2 + 6^2$$

$$:= 1^2 + 8^2$$

$$:= 4^2 + 7^2$$

$$\begin{aligned}
&:= 1^6 + 2^6 \\
&:= 1^3 + 4^3 \\
\mathbf{66} &:= 1^2 + 2^2 + 3^2 + 4^2 + 6^2 \\
&:= 1^2 + 2^2 + 5^2 + 6^2 \\
&:= 1^2 + 4^2 + 7^2 \\
\mathbf{68} &:= 2^2 + 8^2 \\
\mathbf{69} &:= 1^2 + 2^2 + 8^2 \\
&:= 2^2 + 4^2 + 7^2 \\
\mathbf{70} &:= 1^2 + 2^2 + 4^2 + 7^2 \\
&:= 3^2 + 5^2 + 6^2 \\
\mathbf{72} &:= 2^3 + 4^3 \\
\mathbf{73} &:= 1^3 + 2^3 + 4^3 \\
&:= 3^2 + 8^2 \\
\mathbf{74} &:= 2^2 + 3^2 + 5^2 + 6^2 \\
&:= 1^2 + 3^2 + 8^2 \\
&:= 3^2 + 4^2 + 7^2 \\
&:= 5^2 + 7^2 \\
\mathbf{75} &:= 1^2 + 2^2 + 3^2 + 5^2 + 6^2 \\
&:= 1^2 + 3^2 + 4^2 + 7^2 \\
&:= 1^2 + 5^2 + 7^2 \\
\mathbf{77} &:= 2^2 + 3^2 + 8^2 \\
&:= 4^2 + 5^2 + 6^2 \\
\mathbf{78} &:= 1^2 + 2^2 + 3^2 + 8^2 \\
&:= 1^2 + 4^2 + 5^2 + 6^2 \\
&:= 2^2 + 3^2 + 4^2 + 7^2 \\
&:= 2^2 + 5^2 + 7^2 \\
\mathbf{79} &:= 1^2 + 2^2 + 3^2 + 4^2 + 7^2 \\
&:= 1^2 + 2^2 + 5^2 + 7^2 \\
\mathbf{80} &:= 4^2 + 8^2 \\
\mathbf{81} &:= 2^2 + 4^2 + 5^2 + 6^2 \\
&:= 1^2 + 4^2 + 8^2 \\
&:= 3^4 \\
&:= 9^2 \\
\mathbf{82} &:= 1^2 + 2^2 + 4^2 + 5^2 + 6^2 \\
&:= 1^2 + 9^2 \\
&:= 1^4 + 3^4 \\
\mathbf{83} &:= 3^2 + 5^2 + 7^2 \\
\mathbf{84} &:= 1^2 + 3^2 + 5^2 + 7^2
\end{aligned}$$

$$\begin{aligned}
&:= 2^2 + 4^2 + 8^2 \\
\mathbf{85} &:= 1^2 + 2^2 + 4^2 + 8^2 \\
&:= 2^2 + 9^2 \\
&:= 6^2 + 7^2 \\
\mathbf{86} &:= 1^2 + 2^2 + 9^2 \\
&:= 1^2 + 6^2 + 7^2 \\
&:= 3^2 + 4^2 + 5^2 + 6^2 \\
\mathbf{87} &:= 1^2 + 3^2 + 4^2 + 5^2 + 6^2 \\
&:= 2^2 + 3^2 + 5^2 + 7^2 \\
\mathbf{88} &:= 1^2 + 2^2 + 3^2 + 5^2 + 7^2 \\
\mathbf{89} &:= 2^2 + 6^2 + 7^2 \\
&:= 3^2 + 4^2 + 8^2 \\
&:= 5^2 + 8^2 \\
\mathbf{90} &:= 1^2 + 2^2 + 6^2 + 7^2 \\
&:= 1^2 + 3^2 + 4^2 + 8^2 \\
&:= 1^2 + 5^2 + 8^2 \\
&:= 2^2 + 3^2 + 4^2 + 5^2 + 6^2 \\
&:= 3^2 + 9^2 \\
&:= 4^2 + 5^2 + 7^2 \\
\mathbf{91} &:= 1^2 + 2^2 + 3^2 + 4^2 + 5^2 + 6^2 \\
&:= 1^2 + 3^2 + 9^2 \\
&:= 1^2 + 4^2 + 5^2 + 7^2 \\
&:= 3^3 + 4^3 \\
\mathbf{92} &:= 1^3 + 3^3 + 4^3 \\
\mathbf{93} &:= 2^2 + 3^2 + 4^2 + 8^2 \\
&:= 2^2 + 5^2 + 8^2 \\
\mathbf{94} &:= 1^2 + 2^2 + 3^2 + 4^2 + 8^2 \\
&:= 1^2 + 2^2 + 5^2 + 8^2 \\
&:= 2^2 + 3^2 + 9^2 \\
&:= 2^2 + 4^2 + 5^2 + 7^2 \\
&:= 3^2 + 6^2 + 7^2 \\
\mathbf{95} &:= 1^2 + 2^2 + 4^2 + 5^2 + 7^2 \\
&:= 1^2 + 2^2 + 3^2 + 9^2 \\
&:= 1^2 + 3^2 + 6^2 + 7^2 \\
\mathbf{97} &:= 2^4 + 3^4 \\
&:= 4^2 + 9^2 \\
\mathbf{98} &:= 1^2 + 4^2 + 9^2 \\
&:= 1^4 + 2^4 + 3^4
\end{aligned}$$

$$\begin{aligned}
&:= 2^2 + 3^2 + 6^2 + 7^2 \\
&:= 3^2 + 5^2 + 8^2 \\
\mathbf{99} &:= 1^2 + 2^2 + 3^2 + 6^2 + 7^2 \\
&:= 1^2 + 3^2 + 5^2 + 8^2 \\
&:= 3^2 + 4^2 + 5^2 + 7^2 \\
&:= 2^3 + 3^3 + 4^3 \\
\mathbf{100} &:= 1^2 + 3^2 + 4^2 + 5^2 + 7^2 \\
&:= 1^3 + 2^3 + 3^3 + 4^3 \\
&:= 6^2 + 8^2 \\
\mathbf{101} &:= 1^2 + 6^2 + 8^2 \\
&:= 2^2 + 4^2 + 9^2 \\
&:= 4^2 + 6^2 + 7^2 \\
\mathbf{102} &:= 1^2 + 2^2 + 4^2 + 9^2 \\
&:= 1^2 + 4^2 + 6^2 + 7^2 \\
&:= 2^2 + 3^2 + 5^2 + 8^2 \\
\mathbf{103} &:= 1^2 + 2^2 + 3^2 + 5^2 + 8^2 \\
&:= 2^2 + 3^2 + 4^2 + 5^2 + 7^2 \\
\mathbf{104} &:= 1^2 + 2^2 + 3^2 + 4^2 + 5^2 + 7^2 \\
&:= 2^2 + 6^2 + 8^2 \\
\mathbf{105} &:= 1^2 + 2^2 + 6^2 + 8^2 \\
&:= 2^2 + 4^2 + 6^2 + 7^2 \\
&:= 4^2 + 5^2 + 8^2 \\
\mathbf{106} &:= 1^2 + 2^2 + 4^2 + 6^2 + 7^2 \\
&:= 1^2 + 4^2 + 5^2 + 8^2 \\
&:= 3^2 + 4^2 + 9^2 \\
&:= 5^2 + 9^2 \\
\mathbf{107} &:= 1^2 + 3^2 + 4^2 + 9^2 \\
&:= 1^2 + 5^2 + 9^2 \\
\mathbf{109} &:= 2^2 + 4^2 + 5^2 + 8^2 \\
&:= 3^2 + 6^2 + 8^2 \\
\mathbf{110} &:= 1^2 + 2^2 + 4^2 + 5^2 + 8^2 \\
&:= 1^2 + 3^2 + 6^2 + 8^2 \\
&:= 2^2 + 3^2 + 4^2 + 9^2 \\
&:= 2^2 + 5^2 + 9^2 \\
&:= 3^2 + 4^2 + 6^2 + 7^2 \\
&:= 5^2 + 6^2 + 7^2 \\
\mathbf{111} &:= 1^2 + 2^2 + 3^2 + 4^2 + 9^2 \\
&:= 1^2 + 2^2 + 5^2 + 9^2 \\
&:= 1^2 + 3^2 + 4^2 + 6^2 + 7^2 \\
&:= 1^2 + 5^2 + 6^2 + 7^2 \\
\mathbf{113} &:= 2^2 + 3^2 + 6^2 + 8^2 \\
&:= 7^2 + 8^2 \\
\mathbf{114} &:= 1^2 + 2^2 + 3^2 + 6^2 + 8^2 \\
&:= 1^2 + 7^2 + 8^2 \\
&:= 2^2 + 3^2 + 4^2 + 6^2 + 7^2 \\
&:= 2^2 + 5^2 + 6^2 + 7^2 \\
&:= 3^2 + 4^2 + 5^2 + 8^2 \\
\mathbf{115} &:= 1^2 + 2^2 + 3^2 + 4^2 + 6^2 + 7^2 \\
&:= 1^2 + 2^2 + 5^2 + 6^2 + 7^2 \\
&:= 1^2 + 3^2 + 4^2 + 5^2 + 8^2 \\
&:= 3^2 + 5^2 + 9^2 \\
\mathbf{116} &:= 1^2 + 3^2 + 5^2 + 9^2 \\
&:= 4^2 + 6^2 + 8^2 \\
\mathbf{117} &:= 1^2 + 4^2 + 6^2 + 8^2 \\
&:= 2^2 + 7^2 + 8^2 \\
&:= 6^2 + 9^2 \\
\mathbf{118} &:= 1^2 + 2^2 + 7^2 + 8^2 \\
&:= 2^2 + 3^2 + 4^2 + 5^2 + 8^2 \\
&:= 1^2 + 6^2 + 9^2 \\
\mathbf{119} &:= 1^2 + 2^2 + 3^2 + 4^2 + 5^2 + 8^2 \\
&:= 2^2 + 3^2 + 5^2 + 9^2 \\
&:= 3^2 + 5^2 + 6^2 + 7^2 \\
\mathbf{120} &:= 1^2 + 2^2 + 3^2 + 5^2 + 9^2 \\
&:= 1^2 + 3^2 + 5^2 + 6^2 + 7^2 \\
&:= 2^2 + 4^2 + 6^2 + 8^2 \\
\mathbf{121} &:= 1^2 + 2^2 + 4^2 + 6^2 + 8^2 \\
&:= 2^2 + 6^2 + 9^2 \\
\mathbf{122} &:= 1^2 + 2^2 + 6^2 + 9^2 \\
&:= 3^2 + 7^2 + 8^2 \\
&:= 4^2 + 5^2 + 9^2 \\
\mathbf{123} &:= 1^2 + 3^2 + 7^2 + 8^2 \\
&:= 1^2 + 4^2 + 5^2 + 9^2 \\
&:= 2^2 + 3^2 + 5^2 + 6^2 + 7^2 \\
\mathbf{124} &:= 1^2 + 2^2 + 3^2 + 5^2 + 6^2 + 7^2 \\
\mathbf{125} &:= 3^2 + 4^2 + 6^2 + 8^2 \\
&:= 5^2 + 6^2 + 8^2
\end{aligned}$$

$$\begin{aligned}
&:= 5^3 \\
\mathbf{126} &:= 1^2 + 3^2 + 4^2 + 6^2 + 8^2 \\
&:= 1^2 + 5^2 + 6^2 + 8^2 \\
&:= 2^2 + 3^2 + 7^2 + 8^2 \\
&:= 2^2 + 4^2 + 5^2 + 9^2 \\
&:= 4^2 + 5^2 + 6^2 + 7^2 \\
&:= 3^2 + 6^2 + 9^2 \\
&:= 1^3 + 5^3 \\
\mathbf{127} &:= 1^2 + 2^2 + 3^2 + 7^2 + 8^2 \\
&:= 1^2 + 2^2 + 4^2 + 5^2 + 9^2 \\
&:= 1^2 + 4^2 + 5^2 + 6^2 + 7^2 \\
&:= 1^2 + 3^2 + 6^2 + 9^2 \\
\mathbf{128} &:= 2^7 \\
\mathbf{129} &:= 2^2 + 3^2 + 4^2 + 6^2 + 8^2 \\
&:= 2^2 + 5^2 + 6^2 + 8^2 \\
&:= 4^2 + 7^2 + 8^2 \\
&:= 1^7 + 2^7 \\
\mathbf{130} &:= 1^2 + 2^2 + 3^2 + 4^2 + 6^2 + 8^2 \\
&:= 1^2 + 2^2 + 5^2 + 6^2 + 8^2 \\
&:= 1^2 + 4^2 + 7^2 + 8^2 \\
&:= 2^2 + 4^2 + 5^2 + 6^2 + 7^2 \\
&:= 2^2 + 3^2 + 6^2 + 9^2 \\
&:= 7^2 + 9^2 \\
\mathbf{131} &:= 1^2 + 2^2 + 4^2 + 5^2 + 6^2 + 7^2 \\
&:= 1^2 + 2^2 + 3^2 + 6^2 + 9^2 \\
&:= 3^2 + 4^2 + 5^2 + 9^2 \\
&:= 1^2 + 7^2 + 9^2 \\
\mathbf{132} &:= 1^2 + 3^2 + 4^2 + 5^2 + 9^2 \\
\mathbf{133} &:= 2^2 + 4^2 + 7^2 + 8^2 \\
&:= 4^2 + 6^2 + 9^2 \\
&:= 2^3 + 5^3 \\
\mathbf{134} &:= 1^2 + 2^2 + 4^2 + 7^2 + 8^2 \\
&:= 1^2 + 4^2 + 6^2 + 9^2 \\
&:= 1^3 + 2^3 + 5^3 \\
&:= 3^2 + 5^2 + 6^2 + 8^2 \\
&:= 2^2 + 7^2 + 9^2 \\
\mathbf{135} &:= 1^2 + 3^2 + 5^2 + 6^2 + 8^2 \\
&:= 1^2 + 2^2 + 7^2 + 9^2 \\
&:= 2^2 + 3^2 + 4^2 + 5^2 + 9^2 \\
&:= 3^2 + 4^2 + 5^2 + 6^2 + 7^2 \\
&:= 1^2 + 2^2 + 3^2 + 4^2 + 5^2 + 9^2 \\
&:= 2^2 + 4^2 + 6^2 + 9^2 \\
&:= 3^2 + 4^2 + 7^2 + 8^2 \\
&:= 5^2 + 7^2 + 8^2 \\
\mathbf{136} &:= 1^2 + 3^2 + 4^2 + 5^2 + 6^2 + 7^2 \\
&:= 1^2 + 2^2 + 3^2 + 4^2 + 5^2 + 9^2 \\
\mathbf{137} &:= 2^2 + 4^2 + 6^2 + 9^2 \\
\mathbf{138} &:= 1^2 + 2^2 + 4^2 + 6^2 + 9^2 \\
&:= 2^2 + 3^2 + 5^2 + 6^2 + 8^2 \\
&:= 3^2 + 4^2 + 7^2 + 8^2 \\
&:= 5^2 + 7^2 + 8^2 \\
\mathbf{139} &:= 1^2 + 2^2 + 3^2 + 5^2 + 6^2 + 8^2 \\
&:= 1^2 + 3^2 + 4^2 + 7^2 + 8^2 \\
&:= 1^2 + 5^2 + 7^2 + 8^2 \\
&:= 2^2 + 3^2 + 4^2 + 5^2 + 6^2 + 7^2 \\
&:= 3^2 + 7^2 + 9^2 \\
\mathbf{140} &:= 1^2 + 2^2 + 3^2 + 4^2 + 5^2 + 6^2 + 7^2 \\
&:= 1^2 + 3^2 + 7^2 + 9^2 \\
\mathbf{141} &:= 4^2 + 5^2 + 6^2 + 8^2 \\
\mathbf{142} &:= 1^2 + 4^2 + 5^2 + 6^2 + 8^2 \\
&:= 2^2 + 3^2 + 4^2 + 7^2 + 8^2 \\
&:= 2^2 + 5^2 + 7^2 + 8^2 \\
&:= 3^2 + 4^2 + 6^2 + 9^2 \\
&:= 5^2 + 6^2 + 9^2 \\
\mathbf{143} &:= 1^2 + 2^2 + 3^2 + 4^2 + 7^2 + 8^2 \\
&:= 1^2 + 2^2 + 5^2 + 7^2 + 8^2 \\
&:= 1^2 + 3^2 + 4^2 + 6^2 + 9^2 \\
&:= 1^2 + 5^2 + 6^2 + 9^2 \\
&:= 2^2 + 3^2 + 7^2 + 9^2 \\
\mathbf{144} &:= 1^2 + 2^2 + 3^2 + 7^2 + 9^2 \\
\mathbf{145} &:= 2^2 + 4^2 + 5^2 + 6^2 + 8^2 \\
&:= 8^2 + 9^2 \\
\mathbf{146} &:= 1^2 + 2^2 + 4^2 + 5^2 + 6^2 + 8^2 \\
&:= 2^2 + 3^2 + 4^2 + 6^2 + 9^2 \\
&:= 2^2 + 5^2 + 6^2 + 9^2 \\
&:= 1^2 + 8^2 + 9^2 \\
&:= 4^2 + 7^2 + 9^2 \\
\mathbf{147} &:= 1^2 + 2^2 + 3^2 + 4^2 + 6^2 + 9^2 \\
&:= 1^2 + 2^2 + 5^2 + 6^2 + 9^2 \\
&:= 1^2 + 4^2 + 7^2 + 9^2
\end{aligned}$$

$$\begin{aligned}
 &:= 3^2 + 5^2 + 7^2 + 8^2 \\
 \mathbf{148} &:= 1^2 + 3^2 + 5^2 + 7^2 + 8^2 \\
 \mathbf{149} &:= 2^2 + 8^2 + 9^2 \\
 &:= 6^2 + 7^2 + 8^2 \\
 \mathbf{150} &:= 1^2 + 2^2 + 8^2 + 9^2 \\
 &:= 1^2 + 6^2 + 7^2 + 8^2 \\
 &:= 2^2 + 4^2 + 7^2 + 9^2 \\
 &:= 3^2 + 4^2 + 5^2 + 6^2 + 8^2 \\
 \mathbf{151} &:= 1^2 + 2^2 + 4^2 + 7^2 + 9^2 \\
 &:= 1^2 + 3^2 + 4^2 + 5^2 + 6^2 + 8^2 \\
 &:= 2^2 + 3^2 + 5^2 + 7^2 + 8^2 \\
 &:= 3^2 + 5^2 + 6^2 + 9^2 \\
 \mathbf{152} &:= 1^2 + 2^2 + 3^2 + 5^2 + 7^2 + 8^2 \\
 &:= 1^2 + 3^2 + 5^2 + 6^2 + 9^2 \\
 &:= 3^3 + 5^3 \\
 \mathbf{153} &:= 2^2 + 6^2 + 7^2 + 8^2 \\
 &:= 1^3 + 3^3 + 5^3 \\
 \mathbf{154} &:= 2^2 + 3^2 + 4^2 + 5^2 + 6^2 + 8^2 \\
 &:= 1^2 + 2^2 + 6^2 + 7^2 + 8^2 \\
 &:= 3^2 + 8^2 + 9^2 \\
 &:= 4^2 + 5^2 + 7^2 + 8^2 \\
 \mathbf{155} &:= 1^2 + 2^2 + 3^2 + 4^2 + 5^2 + 6^2 + 8^2 \\
 &:= 1^2 + 3^2 + 8^2 + 9^2 \\
 &:= 1^2 + 4^2 + 5^2 + 7^2 + 8^2 \\
 &:= 2^2 + 3^2 + 5^2 + 6^2 + 9^2 \\
 &:= 3^2 + 4^2 + 7^2 + 9^2 \\
 &:= 5^2 + 7^2 + 9^2 \\
 \mathbf{156} &:= 1^2 + 2^2 + 3^2 + 5^2 + 6^2 + 9^2 \\
 &:= 1^2 + 3^2 + 4^2 + 7^2 + 9^2 \\
 &:= 1^2 + 5^2 + 7^2 + 9^2 \\
 \mathbf{158} &:= 2^2 + 4^2 + 5^2 + 7^2 + 8^2 \\
 &:= 2^2 + 3^2 + 8^2 + 9^2 \\
 &:= 3^2 + 6^2 + 7^2 + 8^2 \\
 &:= 4^2 + 5^2 + 6^2 + 9^2 \\
 \mathbf{159} &:= 1^2 + 2^2 + 4^2 + 5^2 + 7^2 + 8^2 \\
 &:= 1^2 + 2^2 + 3^2 + 8^2 + 9^2 \\
 &:= 1^2 + 3^2 + 6^2 + 7^2 + 8^2 \\
 &:= 1^2 + 4^2 + 5^2 + 6^2 + 9^2
 \end{aligned}$$

$$\begin{aligned}
 &:= 2^2 + 3^2 + 4^2 + 7^2 + 9^2 \\
 &:= 2^2 + 5^2 + 7^2 + 9^2 \\
 \mathbf{160} &:= 1^2 + 2^2 + 3^2 + 4^2 + 7^2 + 9^2 \\
 &:= 1^2 + 2^2 + 5^2 + 7^2 + 9^2 \\
 &:= 2^3 + 3^3 + 5^3 \\
 \mathbf{161} &:= 1^3 + 2^3 + 3^3 + 5^3 \\
 &:= 4^2 + 8^2 + 9^2 \\
 \mathbf{162} &:= 1^2 + 4^2 + 8^2 + 9^2 \\
 &:= 2^2 + 3^2 + 6^2 + 7^2 + 8^2 \\
 &:= 2^2 + 4^2 + 5^2 + 6^2 + 9^2 \\
 \mathbf{163} &:= 1^2 + 2^2 + 3^2 + 6^2 + 7^2 + 8^2 \\
 &:= 1^2 + 2^2 + 4^2 + 5^2 + 6^2 + 9^2 \\
 &:= 3^2 + 4^2 + 5^2 + 7^2 + 8^2 \\
 \mathbf{164} &:= 1^2 + 3^2 + 4^2 + 5^2 + 7^2 + 8^2 \\
 &:= 3^2 + 5^2 + 7^2 + 9^2 \\
 \mathbf{165} &:= 1^2 + 3^2 + 5^2 + 7^2 + 9^2 \\
 &:= 2^2 + 4^2 + 8^2 + 9^2 \\
 &:= 4^2 + 6^2 + 7^2 + 8^2 \\
 \mathbf{166} &:= 1^2 + 2^2 + 4^2 + 8^2 + 9^2 \\
 &:= 1^2 + 4^2 + 6^2 + 7^2 + 8^2 \\
 &:= 6^2 + 7^2 + 9^2 \\
 \mathbf{167} &:= 1^2 + 6^2 + 7^2 + 9^2 \\
 &:= 2^2 + 3^2 + 4^2 + 5^2 + 7^2 + 8^2 \\
 &:= 3^2 + 4^2 + 5^2 + 6^2 + 9^2 \\
 \mathbf{168} &:= 1^2 + 2^2 + 3^2 + 4^2 + 5^2 + 7^2 + 8^2 \\
 &:= 1^2 + 3^2 + 4^2 + 5^2 + 6^2 + 9^2 \\
 &:= 2^2 + 3^2 + 5^2 + 7^2 + 9^2 \\
 \mathbf{169} &:= 1^2 + 2^2 + 3^2 + 5^2 + 7^2 + 9^2 \\
 &:= 2^2 + 4^2 + 6^2 + 7^2 + 8^2 \\
 \mathbf{170} &:= 1^2 + 2^2 + 4^2 + 6^2 + 7^2 + 8^2 \\
 &:= 2^2 + 6^2 + 7^2 + 9^2 \\
 &:= 3^2 + 4^2 + 8^2 + 9^2 \\
 &:= 5^2 + 8^2 + 9^2 \\
 \mathbf{171} &:= 1^2 + 2^2 + 6^2 + 7^2 + 9^2 \\
 &:= 1^2 + 3^2 + 4^2 + 8^2 + 9^2 \\
 &:= 1^2 + 5^2 + 8^2 + 9^2 \\
 &:= 2^2 + 3^2 + 4^2 + 5^2 + 6^2 + 9^2 \\
 &:= 4^2 + 5^2 + 7^2 + 9^2
 \end{aligned}$$

$$172 := 1^2 + 2^2 + 3^2 + 4^2 + 5^2 + 6^2 + 9^2$$

$$:= 1^2 + 4^2 + 5^2 + 7^2 + 9^2$$

$$174 := 2^2 + 3^2 + 4^2 + 8^2 + 9^2$$

$$:= 2^2 + 5^2 + 8^2 + 9^2$$

$$175 := 1^2 + 2^2 + 3^2 + 4^2 + 8^2 + 9^2$$

$$:= 1^2 + 2^2 + 5^2 + 8^2 + 9^2$$

$$:= 1^2 + 3^2 + 4^2 + 6^2 + 7^2 + 8^2$$

$$:= 1^2 + 5^2 + 6^2 + 7^2 + 8^2$$

$$:= 2^2 + 4^2 + 5^2 + 7^2 + 9^2$$

$$:= 3^2 + 6^2 + 7^2 + 9^2$$

$$176 := 1^2 + 2^2 + 4^2 + 5^2 + 7^2 + 9^2$$

$$:= 1^2 + 3^2 + 6^2 + 7^2 + 9^2$$

$$178 := 2^2 + 3^2 + 4^2 + 6^2 + 7^2 + 8^2$$

$$:= 2^2 + 5^2 + 6^2 + 7^2 + 8^2$$

$$179 := 1^2 + 2^2 + 3^2 + 4^2 + 6^2 + 7^2 + 8^2$$

$$:= 1^2 + 2^2 + 5^2 + 6^2 + 7^2 + 8^2$$

$$:= 2^2 + 3^2 + 6^2 + 7^2 + 9^2$$

$$:= 3^2 + 5^2 + 8^2 + 9^2$$

$$180 := 1^2 + 2^2 + 3^2 + 6^2 + 7^2 + 9^2$$

$$:= 1^2 + 3^2 + 5^2 + 8^2 + 9^2$$

$$:= 3^2 + 4^2 + 5^2 + 7^2 + 9^2$$

$$181 := 1^2 + 3^2 + 4^2 + 5^2 + 7^2 + 9^2$$

$$:= 6^2 + 8^2 + 9^2$$

$$182 := 1^2 + 6^2 + 8^2 + 9^2$$

$$:= 4^2 + 6^2 + 7^2 + 9^2$$

$$183 := 1^2 + 4^2 + 6^2 + 7^2 + 9^2$$

$$:= 2^2 + 3^2 + 5^2 + 8^2 + 9^2$$

$$:= 3^2 + 5^2 + 6^2 + 7^2 + 8^2$$

$$184 := 1^2 + 2^2 + 3^2 + 5^2 + 8^2 + 9^2$$

$$:= 1^2 + 3^2 + 5^2 + 6^2 + 7^2 + 8^2$$

$$:= 2^2 + 3^2 + 4^2 + 5^2 + 7^2 + 9^2$$

$$185 := 1^2 + 2^2 + 3^2 + 4^2 + 5^2 + 7^2 + 9^2$$

$$:= 2^2 + 6^2 + 8^2 + 9^2$$

$$186 := 1^2 + 2^2 + 6^2 + 8^2 + 9^2$$

$$:= 2^2 + 4^2 + 6^2 + 7^2 + 9^2$$

$$:= 4^2 + 5^2 + 8^2 + 9^2$$

$$187 := 1^2 + 2^2 + 4^2 + 6^2 + 7^2 + 9^2$$

$$:= 1^2 + 4^2 + 5^2 + 8^2 + 9^2$$

$$:= 2^2 + 3^2 + 5^2 + 6^2 + 7^2 + 8^2$$

$$188 := 1^2 + 2^2 + 3^2 + 5^2 + 6^2 + 7^2 + 8^2$$

$$189 := 4^3 + 5^3$$

$$190 := 1^3 + 4^3 + 5^3$$

$$:= 2^2 + 4^2 + 5^2 + 8^2 + 9^2$$

$$:= 3^2 + 6^2 + 8^2 + 9^2$$

$$:= 4^2 + 5^2 + 6^2 + 7^2 + 8^2$$

$$191 := 1^2 + 2^2 + 4^2 + 5^2 + 8^2 + 9^2$$

$$:= 1^2 + 3^2 + 6^2 + 8^2 + 9^2$$

$$:= 1^2 + 4^2 + 5^2 + 6^2 + 7^2 + 8^2$$

$$:= 3^2 + 4^2 + 6^2 + 7^2 + 9^2$$

$$:= 5^2 + 6^2 + 7^2 + 9^2$$

$$192 := 1^2 + 3^2 + 4^2 + 6^2 + 7^2 + 9^2$$

$$:= 1^2 + 5^2 + 6^2 + 7^2 + 9^2$$

$$194 := 2^2 + 4^2 + 5^2 + 6^2 + 7^2 + 8^2$$

$$:= 2^2 + 3^2 + 6^2 + 8^2 + 9^2$$

$$:= 7^2 + 8^2 + 9^2$$

$$195 := 1^2 + 2^2 + 4^2 + 5^2 + 6^2 + 7^2 + 8^2$$

$$:= 1^2 + 2^2 + 3^2 + 6^2 + 8^2 + 9^2$$

$$:= 1^2 + 7^2 + 8^2 + 9^2$$

$$:= 2^2 + 3^2 + 4^2 + 6^2 + 7^2 + 9^2$$

$$:= 2^2 + 5^2 + 6^2 + 7^2 + 9^2$$

$$:= 3^2 + 4^2 + 5^2 + 8^2 + 9^2$$

$$196 := 1^2 + 2^2 + 3^2 + 4^2 + 6^2 + 7^2 + 9^2$$

$$:= 1^2 + 2^2 + 5^2 + 6^2 + 7^2 + 9^2$$

$$:= 1^2 + 3^2 + 4^2 + 5^2 + 8^2 + 9^2$$

$$197 := 2^3 + 4^3 + 5^3$$

$$:= 4^2 + 6^2 + 8^2 + 9^2$$

$$198 := 1^2 + 4^2 + 6^2 + 8^2 + 9^2$$

$$:= 1^3 + 2^3 + 4^3 + 5^3$$

$$:= 2^2 + 7^2 + 8^2 + 9^2$$

$$199 := 1^2 + 2^2 + 7^2 + 8^2 + 9^2$$

$$:= 2^2 + 3^2 + 4^2 + 5^2 + 8^2 + 9^2$$

$$:= 3^2 + 4^2 + 5^2 + 6^2 + 7^2 + 8^2$$

$$200 := 1^2 + 2^2 + 3^2 + 4^2 + 5^2 + 8^2 + 9^2$$

$$:= 1^2 + 3^2 + 4^2 + 5^2 + 6^2 + 7^2 + 8^2$$

$$:= 3^2 + 5^2 + 6^2 + 7^2 + 9^2$$

$$201 := 1^2 + 3^2 + 5^2 + 6^2 + 7^2 + 9^2$$

$$\begin{aligned}
&:= 2^2 + 4^2 + 6^2 + 8^2 + 9^2 \\
\mathbf{202} &:= 1^2 + 2^2 + 4^2 + 6^2 + 8^2 + 9^2 \\
\mathbf{203} &:= 2^2 + 3^2 + 4^2 + 5^2 + 6^2 + 7^2 + 8^2 \\
&:= 3^2 + 7^2 + 8^2 + 9^2 \\
\mathbf{204} &:= 1^2 + 2^2 + 3^2 + 4^2 + 5^2 + 6^2 + 7^2 + 8^2 \\
&:= 1^2 + 3^2 + 7^2 + 8^2 + 9^2 \\
&:= 2^2 + 3^2 + 5^2 + 6^2 + 7^2 + 9^2 \\
\mathbf{205} &:= 1^2 + 2^2 + 3^2 + 5^2 + 6^2 + 7^2 + 9^2 \\
\mathbf{206} &:= 3^2 + 4^2 + 6^2 + 8^2 + 9^2 \\
&:= 5^2 + 6^2 + 8^2 + 9^2 \\
\mathbf{207} &:= 1^2 + 3^2 + 4^2 + 6^2 + 8^2 + 9^2 \\
&:= 1^2 + 5^2 + 6^2 + 8^2 + 9^2 \\
&:= 2^2 + 3^2 + 7^2 + 8^2 + 9^2 \\
&:= 4^2 + 5^2 + 6^2 + 7^2 + 9^2 \\
\mathbf{208} &:= 1^2 + 2^2 + 3^2 + 7^2 + 8^2 + 9^2 \\
&:= 1^2 + 4^2 + 5^2 + 6^2 + 7^2 + 9^2 \\
\mathbf{210} &:= 2^2 + 3^2 + 4^2 + 6^2 + 8^2 + 9^2 \\
&:= 2^2 + 5^2 + 6^2 + 8^2 + 9^2 \\
&:= 4^2 + 7^2 + 8^2 + 9^2 \\
\mathbf{211} &:= 1^2 + 2^2 + 3^2 + 4^2 + 6^2 + 8^2 + 9^2 \\
&:= 1^2 + 2^2 + 5^2 + 6^2 + 8^2 + 9^2 \\
&:= 1^2 + 4^2 + 7^2 + 8^2 + 9^2 \\
&:= 2^2 + 4^2 + 5^2 + 6^2 + 7^2 + 9^2 \\
\mathbf{212} &:= 1^2 + 2^2 + 4^2 + 5^2 + 6^2 + 7^2 + 9^2 \\
\mathbf{214} &:= 2^2 + 4^2 + 7^2 + 8^2 + 9^2 \\
\mathbf{215} &:= 1^2 + 2^2 + 4^2 + 7^2 + 8^2 + 9^2 \\
&:= 3^2 + 5^2 + 6^2 + 8^2 + 9^2 \\
\mathbf{216} &:= 1^2 + 3^2 + 5^2 + 6^2 + 8^2 + 9^2 \\
&:= 3^2 + 4^2 + 5^2 + 6^2 + 7^2 + 9^2 \\
&:= 3^3 + 4^3 + 5^3 \\
&:= 6^3 \\
\mathbf{217} &:= 1^2 + 3^2 + 4^2 + 5^2 + 6^2 + 7^2 + 9^2 \\
&:= 1^3 + 3^3 + 4^3 + 5^3 \\
&:= 1^3 + 6^3 \\
\mathbf{219} &:= 2^2 + 3^2 + 5^2 + 6^2 + 8^2 + 9^2 \\
&:= 3^2 + 4^2 + 7^2 + 8^2 + 9^2 \\
&:= 5^2 + 7^2 + 8^2 + 9^2 \\
\mathbf{220} &:= 1^2 + 2^2 + 3^2 + 5^2 + 6^2 + 8^2 + 9^2 \\
&:= 1^2 + 3^2 + 4^2 + 7^2 + 8^2 + 9^2 \\
&:= 1^2 + 5^2 + 7^2 + 8^2 + 9^2 \\
\mathbf{221} &:= 1^2 + 2^2 + 3^2 + 4^2 + 5^2 + 6^2 + 7^2 + 9^2 \\
\mathbf{222} &:= 4^2 + 5^2 + 6^2 + 8^2 + 9^2 \\
\mathbf{223} &:= 1^2 + 4^2 + 5^2 + 6^2 + 8^2 + 9^2 \\
&:= 2^2 + 3^2 + 4^2 + 7^2 + 8^2 + 9^2 \\
&:= 2^2 + 5^2 + 7^2 + 8^2 + 9^2 \\
\mathbf{224} &:= 1^2 + 2^2 + 3^2 + 4^2 + 7^2 + 8^2 + 9^2 \\
&:= 1^2 + 2^2 + 5^2 + 7^2 + 8^2 + 9^2 \\
&:= 2^3 + 3^3 + 4^3 + 5^3 \\
&:= 2^3 + 6^3 \\
\mathbf{225} &:= 1^3 + 2^3 + 3^3 + 4^3 + 5^3 \\
&:= 1^3 + 2^3 + 6^3 \\
\mathbf{226} &:= 2^2 + 4^2 + 5^2 + 6^2 + 8^2 + 9^2 \\
\mathbf{227} &:= 1^2 + 2^2 + 4^2 + 5^2 + 6^2 + 8^2 + 9^2 \\
\mathbf{228} &:= 3^2 + 5^2 + 7^2 + 8^2 + 9^2 \\
\mathbf{229} &:= 1^2 + 3^2 + 5^2 + 7^2 + 8^2 + 9^2 \\
\mathbf{230} &:= 6^2 + 7^2 + 8^2 + 9^2 \\
\mathbf{231} &:= 1^2 + 6^2 + 7^2 + 8^2 + 9^2 \\
&:= 3^2 + 4^2 + 5^2 + 6^2 + 8^2 + 9^2 \\
\mathbf{232} &:= 1^2 + 3^2 + 4^2 + 5^2 + 6^2 + 8^2 + 9^2 \\
&:= 2^2 + 3^2 + 5^2 + 7^2 + 8^2 + 9^2 \\
\mathbf{233} &:= 1^2 + 2^2 + 3^2 + 5^2 + 7^2 + 8^2 + 9^2 \\
\mathbf{234} &:= 2^2 + 6^2 + 7^2 + 8^2 + 9^2 \\
\mathbf{235} &:= 1^2 + 2^2 + 6^2 + 7^2 + 8^2 + 9^2 \\
&:= 2^2 + 3^2 + 4^2 + 5^2 + 6^2 + 8^2 + 9^2 \\
&:= 4^2 + 5^2 + 7^2 + 8^2 + 9^2 \\
\mathbf{236} &:= 1^2 + 2^2 + 3^2 + 4^2 + 5^2 + 6^2 + 8^2 + 9^2 \\
&:= 1^2 + 4^2 + 5^2 + 7^2 + 8^2 + 9^2 \\
\mathbf{239} &:= 2^2 + 4^2 + 5^2 + 7^2 + 8^2 + 9^2 \\
&:= 3^2 + 6^2 + 7^2 + 8^2 + 9^2 \\
\mathbf{240} &:= 1^2 + 2^2 + 4^2 + 5^2 + 7^2 + 8^2 + 9^2 \\
&:= 1^2 + 3^2 + 6^2 + 7^2 + 8^2 + 9^2 \\
\mathbf{243} &:= 2^2 + 3^2 + 6^2 + 7^2 + 8^2 + 9^2 \\
&:= 3^3 + 6^3 \\
&:= 3^5 \\
\mathbf{244} &:= 1^2 + 2^2 + 3^2 + 6^2 + 7^2 + 8^2 + 9^2
\end{aligned}$$

$$\begin{aligned}
&:= 1^3 + 3^3 + 6^3 = 1^5 + 3^5 \\
&:= 3^2 + 4^2 + 5^2 + 7^2 + 8^2 + 9^2 \\
\mathbf{245} &:= 1^2 + 3^2 + 4^2 + 5^2 + 7^2 + 8^2 + 9^2 \\
\mathbf{246} &:= 4^2 + 6^2 + 7^2 + 8^2 + 9^2 \\
\mathbf{247} &:= 1^2 + 4^2 + 6^2 + 7^2 + 8^2 + 9^2 \\
\mathbf{248} &:= 2^2 + 3^2 + 4^2 + 5^2 + 7^2 + 8^2 + 9^2 \\
\mathbf{249} &:= 1^2 + 2^2 + 3^2 + 4^2 + 5^2 + 7^2 + 8^2 + 9^2 \\
\mathbf{250} &:= 2^2 + 4^2 + 6^2 + 7^2 + 8^2 + 9^2 \\
\mathbf{251} &:= 1^2 + 2^2 + 4^2 + 6^2 + 7^2 + 8^2 + 9^2 \\
&:= 2^3 + 3^3 + 6^3 \\
\mathbf{252} &:= 1^3 + 2^3 + 3^3 + 6^3 \\
\mathbf{255} &:= 3^2 + 4^2 + 6^2 + 7^2 + 8^2 + 9^2 \\
&:= 5^2 + 6^2 + 7^2 + 8^2 + 9^2 \\
\mathbf{256} &:= 1^2 + 3^2 + 4^2 + 6^2 + 7^2 + 8^2 + 9^2 \\
&:= 1^2 + 5^2 + 6^2 + 7^2 + 8^2 + 9^2 \\
&:= 2^8 \\
&:= 4^4 \\
\mathbf{257} &:= 1^4 + 4^4 \\
&:= 1^8 + 2^8 \\
\mathbf{259} &:= 2^2 + 3^2 + 4^2 + 6^2 + 7^2 + 8^2 + 9^2 \\
&:= 2^2 + 5^2 + 6^2 + 7^2 + 8^2 + 9^2 \\
\mathbf{260} &:= 1^2 + 2^2 + 3^2 + 4^2 + 6^2 + 7^2 + 8^2 + 9^2 \\
&:= 1^2 + 2^2 + 5^2 + 6^2 + 7^2 + 8^2 + 9^2 \\
\mathbf{264} &:= 3^2 + 5^2 + 6^2 + 7^2 + 8^2 + 9^2 \\
\mathbf{265} &:= 1^2 + 3^2 + 5^2 + 6^2 + 7^2 + 8^2 + 9^2 \\
\mathbf{268} &:= 2^2 + 3^2 + 5^2 + 6^2 + 7^2 + 8^2 + 9^2 \\
\mathbf{269} &:= 1^2 + 2^2 + 3^2 + 5^2 + 6^2 + 7^2 + 8^2 + 9^2 \\
\mathbf{271} &:= 4^2 + 5^2 + 6^2 + 7^2 + 8^2 + 9^2 \\
\mathbf{272} &:= 1^2 + 4^2 + 5^2 + 6^2 + 7^2 + 8^2 + 9^2 \\
&:= 2^4 + 4^4 \\
\mathbf{273} &:= 1^4 + 2^4 + 4^4 \\
\mathbf{275} &:= 2^2 + 4^2 + 5^2 + 6^2 + 7^2 + 8^2 + 9^2 \\
&:= 2^5 + 3^5 \\
\mathbf{276} &:= 1^2 + 2^2 + 4^2 + 5^2 + 6^2 + 7^2 + 8^2 + 9^2 \\
&:= 1^5 + 2^5 + 3^5 \\
\mathbf{280} &:= 3^2 + 4^2 + 5^2 + 6^2 + 7^2 + 8^2 + 9^2 \\
&:= 4^3 + 6^3 \\
\mathbf{281} &:= 1^2 + 3^2 + 4^2 + 5^2 + 6^2 + 7^2 + 8^2 + 9^2
\end{aligned}$$

$$\begin{aligned}
&:= 1^3 + 4^3 + 6^3 \\
\mathbf{284} &:= 2^2 + 3^2 + 4^2 + 5^2 + 6^2 + 7^2 + 8^2 + 9^2 \\
\mathbf{285} &:= 1^2 + 2^2 + 3^2 + 4^2 + 5^2 + 6^2 + 7^2 + 8^2 + 9^2 \\
\mathbf{288} &:= 2^3 + 4^3 + 6^3 \\
\mathbf{289} &:= 1^3 + 2^3 + 4^3 + 6^3 \\
\mathbf{307} &:= 3^3 + 4^3 + 6^3 \\
\mathbf{308} &:= 1^3 + 3^3 + 4^3 + 6^3 \\
\mathbf{315} &:= 2^3 + 3^3 + 4^3 + 6^3 \\
\mathbf{316} &:= 1^3 + 2^3 + 3^3 + 4^3 + 6^3 \\
\mathbf{337} &:= 3^4 + 4^4 \\
\mathbf{338} &:= 1^4 + 3^4 + 4^4 \\
\mathbf{341} &:= 5^3 + 6^3 \\
\mathbf{342} &:= 1^3 + 5^3 + 6^3 \\
\mathbf{343} &:= 7^3 \\
\mathbf{344} &:= 1^3 + 7^3 \\
\mathbf{349} &:= 2^3 + 5^3 + 6^3 \\
\mathbf{350} &:= 1^3 + 2^3 + 5^3 + 6^3 \\
\mathbf{351} &:= 2^3 + 7^3 \\
\mathbf{352} &:= 1^3 + 2^3 + 7^3 \\
\mathbf{353} &:= 2^4 + 3^4 + 4^4 \\
\mathbf{354} &:= 1^4 + 2^4 + 3^4 + 4^4 \\
\mathbf{368} &:= 3^3 + 5^3 + 6^3 \\
\mathbf{369} &:= 1^3 + 3^3 + 5^3 + 6^3 \\
\mathbf{370} &:= 3^3 + 7^3 \\
\mathbf{371} &:= 1^3 + 3^3 + 7^3 \\
\mathbf{376} &:= 2^3 + 3^3 + 5^3 + 6^3 \\
\mathbf{377} &:= 1^3 + 2^3 + 3^3 + 5^3 + 6^3 \\
\mathbf{378} &:= 2^3 + 3^3 + 7^3 \\
\mathbf{379} &:= 1^3 + 2^3 + 3^3 + 7^3 \\
\mathbf{405} &:= 4^3 + 5^3 + 6^3 \\
\mathbf{406} &:= 1^3 + 4^3 + 5^3 + 6^3 \\
\mathbf{407} &:= 4^3 + 7^3 \\
\mathbf{408} &:= 1^3 + 4^3 + 7^3 \\
\mathbf{413} &:= 2^3 + 4^3 + 5^3 + 6^3 \\
\mathbf{414} &:= 1^3 + 2^3 + 4^3 + 5^3 + 6^3 \\
\mathbf{415} &:= 2^3 + 4^3 + 7^3 \\
\mathbf{416} &:= 1^3 + 2^3 + 4^3 + 7^3 \\
\mathbf{432} &:= 3^3 + 4^3 + 5^3 + 6^3
\end{aligned}$$

$$433 := 1^3 + 3^3 + 4^3 + 5^3 + 6^3$$

$$434 := 3^3 + 4^3 + 7^3$$

$$435 := 1^3 + 3^3 + 4^3 + 7^3$$

$$440 := 2^3 + 3^3 + 4^3 + 5^3 + 6^3$$

$$441 := 1^3 + 2^3 + 3^3 + 4^3 + 5^3 + 6^3$$

$$442 := 2^3 + 3^3 + 4^3 + 7^3$$

$$443 := 1^3 + 2^3 + 3^3 + 4^3 + 7^3$$

$$468 := 5^3 + 7^3$$

$$469 := 1^3 + 5^3 + 7^3$$

$$476 := 2^3 + 5^3 + 7^3$$

$$477 := 1^3 + 2^3 + 5^3 + 7^3$$

$$495 := 3^3 + 5^3 + 7^3$$

$$496 := 1^3 + 3^3 + 5^3 + 7^3$$

$$503 := 2^3 + 3^3 + 5^3 + 7^3$$

$$504 := 1^3 + 2^3 + 3^3 + 5^3 + 7^3$$

$$512 := 2^9$$

$$:= 8^3$$

$$513 := 1^3 + 8^3$$

$$:= 1^9 + 2^9$$

$$520 := 2^3 + 8^3$$

$$521 := 1^3 + 2^3 + 8^3$$

$$532 := 4^3 + 5^3 + 7^3$$

$$533 := 1^3 + 4^3 + 5^3 + 7^3$$

$$539 := 3^3 + 8^3$$

$$540 := 1^3 + 3^3 + 8^3$$

$$:= 2^3 + 4^3 + 5^3 + 7^3$$

$$541 := 1^3 + 2^3 + 4^3 + 5^3 + 7^3$$

$$547 := 2^3 + 3^3 + 8^3$$

$$548 := 1^3 + 2^3 + 3^3 + 8^3$$

$$559 := 3^3 + 4^3 + 5^3 + 7^3$$

$$:= 6^3 + 7^3$$

$$560 := 1^3 + 3^3 + 4^3 + 5^3 + 7^3$$

$$:= 1^3 + 6^3 + 7^3$$

$$567 := 2^3 + 3^3 + 4^3 + 5^3 + 7^3$$

$$:= 2^3 + 6^3 + 7^3$$

$$568 := 1^3 + 2^3 + 3^3 + 4^3 + 5^3 + 7^3$$

$$:= 1^3 + 2^3 + 6^3 + 7^3$$

$$576 := 4^3 + 8^3$$

$$577 := 1^3 + 4^3 + 8^3$$

$$584 := 2^3 + 4^3 + 8^3$$

$$585 := 1^3 + 2^3 + 4^3 + 8^3$$

$$586 := 3^3 + 6^3 + 7^3$$

$$587 := 1^3 + 3^3 + 6^3 + 7^3$$

$$594 := 2^3 + 3^3 + 6^3 + 7^3$$

$$595 := 1^3 + 2^3 + 3^3 + 6^3 + 7^3$$

$$603 := 3^3 + 4^3 + 8^3$$

$$604 := 1^3 + 3^3 + 4^3 + 8^3$$

$$611 := 2^3 + 3^3 + 4^3 + 8^3$$

$$612 := 1^3 + 2^3 + 3^3 + 4^3 + 8^3$$

$$623 := 4^3 + 6^3 + 7^3$$

$$624 := 1^3 + 4^3 + 6^3 + 7^3$$

$$625 := 5^4$$

$$626 := 1^4 + 5^4$$

$$631 := 2^3 + 4^3 + 6^3 + 7^3$$

$$632 := 1^3 + 2^3 + 4^3 + 6^3 + 7^3$$

$$637 := 5^3 + 8^3$$

$$638 := 1^3 + 5^3 + 8^3$$

$$641 := 2^4 + 5^4$$

$$642 := 1^4 + 2^4 + 5^4$$

$$645 := 2^3 + 5^3 + 8^3$$

$$646 := 1^3 + 2^3 + 5^3 + 8^3$$

$$650 := 3^3 + 4^3 + 6^3 + 7^3$$

$$651 := 1^3 + 3^3 + 4^3 + 6^3 + 7^3$$

$$658 := 2^3 + 3^3 + 4^3 + 6^3 + 7^3$$

$$659 := 1^3 + 2^3 + 3^3 + 4^3 + 6^3 + 7^3$$

$$664 := 3^3 + 5^3 + 8^3$$

$$665 := 1^3 + 3^3 + 5^3 + 8^3$$

$$672 := 2^3 + 3^3 + 5^3 + 8^3$$

$$673 := 1^3 + 2^3 + 3^3 + 5^3 + 8^3$$

$$684 := 5^3 + 6^3 + 7^3$$

$$685 := 1^3 + 5^3 + 6^3 + 7^3$$

$$692 := 2^3 + 5^3 + 6^3 + 7^3$$

$$693 := 1^3 + 2^3 + 5^3 + 6^3 + 7^3$$

$$701 := 4^3 + 5^3 + 8^3$$

$$702 := 1^3 + 4^3 + 5^3 + 8^3$$

$$706 := 3^4 + 5^4$$

$$707 := 1^4 + 3^4 + 5^4$$

$$709 := 2^3 + 4^3 + 5^3 + 8^3$$

$$710 := 1^3 + 2^3 + 4^3 + 5^3 + 8^3$$

$$711 := 3^3 + 5^3 + 6^3 + 7^3$$

$$712 := 1^3 + 3^3 + 5^3 + 6^3 + 7^3$$

$$719 := 2^3 + 3^3 + 5^3 + 6^3 + 7^3$$

$$720 := 1^3 + 2^3 + 3^3 + 5^3 + 6^3 + 7^3$$

$$722 := 2^4 + 3^4 + 5^4$$

$$723 := 1^4 + 2^4 + 3^4 + 5^4$$

$$728 := 3^3 + 4^3 + 5^3 + 8^3$$

$$:= 6^3 + 8^3$$

$$729 := 1^3 + 3^3 + 4^3 + 5^3 + 8^3$$

$$:= 1^3 + 6^3 + 8^3$$

$$:= 3^6$$

$$:= 9^3$$

$$730 := 1^3 + 9^3$$

$$:= 1^6 + 3^6$$

$$736 := 2^3 + 3^3 + 4^3 + 5^3 + 8^3$$

$$:= 2^3 + 6^3 + 8^3$$

$$737 := 1^3 + 2^3 + 3^3 + 4^3 + 5^3 + 8^3$$

$$:= 1^3 + 2^3 + 6^3 + 8^3$$

$$:= 2^3 + 9^3$$

$$738 := 1^3 + 2^3 + 9^3$$

$$748 := 4^3 + 5^3 + 6^3 + 7^3$$

$$749 := 1^3 + 4^3 + 5^3 + 6^3 + 7^3$$

$$755 := 3^3 + 6^3 + 8^3$$

$$756 := 1^3 + 3^3 + 6^3 + 8^3$$

$$:= 2^3 + 4^3 + 5^3 + 6^3 + 7^3$$

$$:= 3^3 + 9^3$$

$$757 := 1^3 + 2^3 + 4^3 + 5^3 + 6^3 + 7^3$$

$$:= 1^3 + 3^3 + 9^3$$

$$763 := 2^3 + 3^3 + 6^3 + 8^3$$

$$764 := 1^3 + 2^3 + 3^3 + 6^3 + 8^3$$

$$:= 2^3 + 3^3 + 9^3$$

$$765 := 1^3 + 2^3 + 3^3 + 9^3$$

$$775 := 3^3 + 4^3 + 5^3 + 6^3 + 7^3$$

$$776 := 1^3 + 3^3 + 4^3 + 5^3 + 6^3 + 7^3$$

$$783 := 2^3 + 3^3 + 4^3 + 5^3 + 6^3 + 7^3$$

$$784 := 1^3 + 2^3 + 3^3 + 4^3 + 5^3 + 6^3 + 7^3$$

$$792 := 4^3 + 6^3 + 8^3$$

$$793 := 1^3 + 4^3 + 6^3 + 8^3$$

$$:= 2^6 + 3^6$$

$$:= 4^3 + 9^3$$

$$794 := 1^3 + 4^3 + 9^3$$

$$:= 1^6 + 2^6 + 3^6$$

$$800 := 2^3 + 4^3 + 6^3 + 8^3$$

$$801 := 2^3 + 4^3 + 9^3$$

$$802 := 1^3 + 2^3 + 4^3 + 9^3$$

$$819 := 3^3 + 4^3 + 6^3 + 8^3$$

$$820 := 1^3 + 3^3 + 4^3 + 6^3 + 8^3$$

$$:= 3^3 + 4^3 + 9^3$$

$$821 := 1^3 + 3^3 + 4^3 + 9^3$$

$$827 := 2^3 + 3^3 + 4^3 + 6^3 + 8^3$$

$$828 := 1^3 + 2^3 + 3^3 + 4^3 + 6^3 + 8^3$$

$$:= 2^3 + 3^3 + 4^3 + 9^3$$

$$829 := 1^3 + 2^3 + 3^3 + 4^3 + 9^3$$

$$853 := 5^3 + 6^3 + 8^3$$

$$854 := 1^3 + 5^3 + 6^3 + 8^3$$

$$:= 5^3 + 9^3$$

$$855 := 1^3 + 5^3 + 9^3$$

$$:= 7^3 + 8^3$$

$$856 := 1^3 + 7^3 + 8^3$$

$$861 := 2^3 + 5^3 + 6^3 + 8^3$$

$$862 := 1^3 + 2^3 + 5^3 + 6^3 + 8^3$$

$$:= 2^3 + 5^3 + 9^3$$

$$863 := 1^3 + 2^3 + 5^3 + 9^3$$

$$:= 2^3 + 7^3 + 8^3$$

$$864 := 1^3 + 2^3 + 7^3 + 8^3$$

$$880 := 3^3 + 5^3 + 6^3 + 8^3$$

$$881 := 1^3 + 3^3 + 5^3 + 6^3 + 8^3$$

$$:= 3^3 + 5^3 + 9^3$$

$$:= 4^4 + 5^4$$

$$882 := 1^3 + 3^3 + 5^3 + 9^3$$

$$:= 1^4 + 4^4 + 5^4$$

$$:= 3^3 + 7^3 + 8^3$$

$$883 := 1^3 + 3^3 + 7^3 + 8^3$$

$$888 := 2^3 + 3^3 + 5^3 + 6^3 + 8^3$$

$$889 := 1^3 + 2^3 + 3^3 + 5^3 + 6^3 + 8^3$$

$$:= 2^3 + 3^3 + 5^3 + 9^3$$

$$890 := 1^3 + 2^3 + 3^3 + 5^3 + 9^3$$

$$:= 2^3 + 3^3 + 7^3 + 8^3$$

$$891 := 1^3 + 2^3 + 3^3 + 7^3 + 8^3$$

$$897 := 2^4 + 4^4 + 5^4$$

$$898 := 1^4 + 2^4 + 4^4 + 5^4$$

$$917 := 4^3 + 5^3 + 6^3 + 8^3$$

$$918 := 1^3 + 4^3 + 5^3 + 6^3 + 8^3$$

$$:= 4^3 + 5^3 + 9^3$$

$$919 := 1^3 + 4^3 + 5^3 + 9^3$$

$$:= 4^3 + 7^3 + 8^3$$

$$920 := 1^3 + 4^3 + 7^3 + 8^3$$

$$925 := 2^3 + 4^3 + 5^3 + 6^3 + 8^3$$

$$926 := 1^3 + 2^3 + 4^3 + 5^3 + 6^3 + 8^3$$

$$:= 2^3 + 4^3 + 5^3 + 9^3$$

$$927 := 1^3 + 2^3 + 4^3 + 5^3 + 9^3$$

$$:= 2^3 + 4^3 + 7^3 + 8^3$$

$$928 := 1^3 + 2^3 + 4^3 + 7^3 + 8^3$$

$$944 := 3^3 + 4^3 + 5^3 + 6^3 + 8^3$$

$$945 := 1^3 + 3^3 + 4^3 + 5^3 + 6^3 + 8^3$$

$$:= 3^3 + 4^3 + 5^3 + 9^3$$

$$:= 6^3 + 9^3$$

$$946 := 1^3 + 3^3 + 4^3 + 5^3 + 9^3$$

$$:= 1^3 + 6^3 + 9^3$$

$$:= 3^3 + 4^3 + 7^3 + 8^3$$

$$947 := 1^3 + 3^3 + 4^3 + 7^3 + 8^3$$

$$952 := 2^3 + 3^3 + 4^3 + 5^3 + 6^3 + 8^3$$

$$953 := 1^3 + 2^3 + 3^3 + 4^3 + 5^3 + 6^3 + 8^3$$

$$:= 2^3 + 3^3 + 4^3 + 5^3 + 9^3$$

$$:= 2^3 + 6^3 + 9^3$$

$$954 := 1^3 + 2^3 + 3^3 + 4^3 + 5^3 + 9^3$$

$$:= 1^3 + 2^3 + 6^3 + 9^3$$

$$:= 2^3 + 3^3 + 4^3 + 7^3 + 8^3$$

$$955 := 1^3 + 2^3 + 3^3 + 4^3 + 7^3 + 8^3$$

$$962 := 3^4 + 4^4 + 5^4$$

$$963 := 1^4 + 3^4 + 4^4 + 5^4$$

$$972 := 3^3 + 6^3 + 9^3$$

$$973 := 1^3 + 3^3 + 6^3 + 9^3$$

$$978 := 2^4 + 3^4 + 4^4 + 5^4$$

$$979 := 1^4 + 2^4 + 3^4 + 4^4 + 5^4$$

$$980 := 2^3 + 3^3 + 6^3 + 9^3$$

$$:= 5^3 + 7^3 + 8^3$$

$$981 := 1^3 + 2^3 + 3^3 + 6^3 + 9^3$$

$$:= 1^3 + 5^3 + 7^3 + 8^3$$

$$988 := 2^3 + 5^3 + 7^3 + 8^3$$

$$989 := 1^3 + 2^3 + 5^3 + 7^3 + 8^3$$

$$1007 := 3^3 + 5^3 + 7^3 + 8^3$$

$$1008 := 1^3 + 3^3 + 5^3 + 7^3 + 8^3$$

$$1009 := 4^3 + 6^3 + 9^3$$

$$1010 := 1^3 + 4^3 + 6^3 + 9^3$$

$$1015 := 2^3 + 3^3 + 5^3 + 7^3 + 8^3$$

$$1016 := 1^3 + 2^3 + 3^3 + 5^3 + 7^3 + 8^3$$

$$1017 := 2^3 + 4^3 + 6^3 + 9^3$$

$$1018 := 1^3 + 2^3 + 4^3 + 6^3 + 9^3$$

$$1024 := 2^{10}$$

$$:= 4^5$$

$$1025 := 1^{10} + 2^{10}$$

$$:= 1^5 + 4^5$$

$$1036 := 3^3 + 4^3 + 6^3 + 9^3$$

$$1037 := 1^3 + 3^3 + 4^3 + 6^3 + 9^3$$

$$1044 := 2^3 + 3^3 + 4^3 + 6^3 + 9^3$$

$$:= 4^3 + 5^3 + 7^3 + 8^3$$

$$1045 := 1^3 + 2^3 + 3^3 + 4^3 + 6^3 + 9^3$$

$$:= 1^3 + 4^3 + 5^3 + 7^3 + 8^3$$

$$1052 := 2^3 + 4^3 + 5^3 + 7^3 + 8^3$$

$$1053 := 1^3 + 2^3 + 4^3 + 5^3 + 7^3 + 8^3$$

$$1056 := 2^5 + 4^5$$

$$1057 := 1^5 + 2^5 + 4^5$$

$$1070 := 5^3 + 6^3 + 9^3$$

$$1071 := 1^3 + 5^3 + 6^3 + 9^3$$

$$:= 3^3 + 4^3 + 5^3 + 7^3 + 8^3$$

$$:= 6^3 + 7^3 + 8^3$$

$$1072 := 1^3 + 3^3 + 4^3 + 5^3 + 7^3 + 8^3$$

$$:= 1^3 + 6^3 + 7^3 + 8^3$$

$$\begin{aligned}
&:= 7^3 + 9^3 \\
\mathbf{1073} &:= 1^3 + 7^3 + 9^3 \\
\mathbf{1078} &:= 2^3 + 5^3 + 6^3 + 9^3 \\
\mathbf{1079} &:= 1^3 + 2^3 + 5^3 + 6^3 + 9^3 \\
&:= 2^3 + 3^3 + 4^3 + 5^3 + 7^3 + 8^3 \\
&:= 2^3 + 6^3 + 7^3 + 8^3 \\
\mathbf{1080} &:= 1^3 + 2^3 + 3^3 + 4^3 + 5^3 + 7^3 + 8^3 \\
&:= 1^3 + 2^3 + 6^3 + 7^3 + 8^3 \\
&:= 2^3 + 7^3 + 9^3 \\
\mathbf{1081} &:= 1^3 + 2^3 + 7^3 + 9^3 \\
\mathbf{1097} &:= 3^3 + 5^3 + 6^3 + 9^3 \\
\mathbf{1098} &:= 1^3 + 3^3 + 5^3 + 6^3 + 9^3 \\
&:= 3^3 + 6^3 + 7^3 + 8^3 \\
\mathbf{1099} &:= 1^3 + 3^3 + 6^3 + 7^3 + 8^3 \\
&:= 3^3 + 7^3 + 9^3 \\
\mathbf{1100} &:= 1^3 + 3^3 + 7^3 + 9^3 \\
\mathbf{1105} &:= 2^3 + 3^3 + 5^3 + 6^3 + 9^3 \\
\mathbf{1106} &:= 1^3 + 2^3 + 3^3 + 5^3 + 6^3 + 9^3 \\
&:= 2^3 + 3^3 + 6^3 + 7^3 + 8^3 \\
\mathbf{1107} &:= 1^3 + 2^3 + 3^3 + 6^3 + 7^3 + 8^3 \\
&:= 2^3 + 3^3 + 7^3 + 9^3 \\
\mathbf{1108} &:= 1^3 + 2^3 + 3^3 + 7^3 + 9^3 \\
\mathbf{1134} &:= 4^3 + 5^3 + 6^3 + 9^3 \\
\mathbf{1135} &:= 1^3 + 4^3 + 5^3 + 6^3 + 9^3 \\
&:= 4^3 + 6^3 + 7^3 + 8^3 \\
\mathbf{1136} &:= 1^3 + 4^3 + 6^3 + 7^3 + 8^3 \\
&:= 4^3 + 7^3 + 9^3 \\
\mathbf{1137} &:= 1^3 + 4^3 + 7^3 + 9^3 \\
\mathbf{1142} &:= 2^3 + 4^3 + 5^3 + 6^3 + 9^3 \\
\mathbf{1143} &:= 1^3 + 2^3 + 4^3 + 5^3 + 6^3 + 9^3 \\
&:= 2^3 + 4^3 + 6^3 + 7^3 + 8^3 \\
\mathbf{1144} &:= 1^3 + 2^3 + 4^3 + 6^3 + 7^3 + 8^3 \\
&:= 2^3 + 4^3 + 7^3 + 9^3 \\
\mathbf{1145} &:= 1^3 + 2^3 + 4^3 + 7^3 + 9^3 \\
\mathbf{1161} &:= 3^3 + 4^3 + 5^3 + 6^3 + 9^3 \\
\mathbf{1162} &:= 1^3 + 3^3 + 4^3 + 5^3 + 6^3 + 9^3 \\
&:= 3^3 + 4^3 + 6^3 + 7^3 + 8^3 \\
\mathbf{1163} &:= 1^3 + 3^3 + 4^3 + 6^3 + 7^3 + 8^3
\end{aligned}$$

$$\begin{aligned}
&:= 3^3 + 4^3 + 7^3 + 9^3 \\
\mathbf{1164} &:= 1^3 + 3^3 + 4^3 + 7^3 + 9^3 \\
\mathbf{1169} &:= 2^3 + 3^3 + 4^3 + 5^3 + 6^3 + 9^3 \\
\mathbf{1170} &:= 1^3 + 2^3 + 3^3 + 4^3 + 5^3 + 6^3 + 9^3 \\
&:= 2^3 + 3^3 + 4^3 + 6^3 + 7^3 + 8^3 \\
\mathbf{1171} &:= 1^3 + 2^3 + 3^3 + 4^3 + 6^3 + 7^3 + 8^3 \\
&:= 2^3 + 3^3 + 4^3 + 7^3 + 9^3 \\
\mathbf{1172} &:= 1^3 + 2^3 + 3^3 + 4^3 + 7^3 + 9^3 \\
\mathbf{1196} &:= 5^3 + 6^3 + 7^3 + 8^3 \\
\mathbf{1197} &:= 1^3 + 5^3 + 6^3 + 7^3 + 8^3 \\
&:= 5^3 + 7^3 + 9^3 \\
\mathbf{1198} &:= 1^3 + 5^3 + 7^3 + 9^3 \\
\mathbf{1204} &:= 2^3 + 5^3 + 6^3 + 7^3 + 8^3 \\
\mathbf{1205} &:= 1^3 + 2^3 + 5^3 + 6^3 + 7^3 + 8^3 \\
&:= 2^3 + 5^3 + 7^3 + 9^3 \\
\mathbf{1206} &:= 1^3 + 2^3 + 5^3 + 7^3 + 9^3 \\
\mathbf{1223} &:= 3^3 + 5^3 + 6^3 + 7^3 + 8^3 \\
\mathbf{1224} &:= 1^3 + 3^3 + 5^3 + 6^3 + 7^3 + 8^3 \\
&:= 3^3 + 5^3 + 7^3 + 9^3 \\
\mathbf{1225} &:= 1^3 + 3^3 + 5^3 + 7^3 + 9^3 \\
\mathbf{1231} &:= 2^3 + 3^3 + 5^3 + 6^3 + 7^3 + 8^3 \\
\mathbf{1232} &:= 1^3 + 2^3 + 3^3 + 5^3 + 6^3 + 7^3 + 8^3 \\
&:= 2^3 + 3^3 + 5^3 + 7^3 + 9^3 \\
\mathbf{1233} &:= 1^3 + 2^3 + 3^3 + 5^3 + 7^3 + 9^3 \\
\mathbf{1241} &:= 8^3 + 9^3 \\
\mathbf{1242} &:= 1^3 + 8^3 + 9^3 \\
\mathbf{1249} &:= 2^3 + 8^3 + 9^3 \\
\mathbf{1250} &:= 1^3 + 2^3 + 8^3 + 9^3 \\
\mathbf{1260} &:= 4^3 + 5^3 + 6^3 + 7^3 + 8^3 \\
\mathbf{1261} &:= 1^3 + 4^3 + 5^3 + 6^3 + 7^3 + 8^3 \\
&:= 4^3 + 5^3 + 7^3 + 9^3 \\
\mathbf{1262} &:= 1^3 + 4^3 + 5^3 + 7^3 + 9^3 \\
\mathbf{1267} &:= 3^5 + 4^5 \\
\mathbf{1268} &:= 2^3 + 4^3 + 5^3 + 6^3 + 7^3 + 8^3 \\
&:= 1^5 + 3^5 + 4^5 \\
&:= 3^3 + 8^3 + 9^3 \\
\mathbf{1269} &:= 1^3 + 2^3 + 4^3 + 5^3 + 6^3 + 7^3 + 8^3 \\
&:= 1^3 + 3^3 + 8^3 + 9^3
\end{aligned}$$

$$\begin{aligned}
&:= 2^3 + 4^3 + 5^3 + 7^3 + 9^3 \\
\mathbf{1270} &:= 1^3 + 2^3 + 4^3 + 5^3 + 7^3 + 9^3 \\
\mathbf{1276} &:= 2^3 + 3^3 + 8^3 + 9^3 \\
\mathbf{1277} &:= 1^3 + 2^3 + 3^3 + 8^3 + 9^3 \\
\mathbf{1287} &:= 3^3 + 4^3 + 5^3 + 6^3 + 7^3 + 8^3 \\
\mathbf{1288} &:= 1^3 + 3^3 + 4^3 + 5^3 + 6^3 + 7^3 + 8^3 \\
&:= 3^3 + 4^3 + 5^3 + 7^3 + 9^3 \\
&:= 6^3 + 7^3 + 9^3 \\
\mathbf{1289} &:= 1^3 + 3^3 + 4^3 + 5^3 + 7^3 + 9^3 \\
&:= 1^3 + 6^3 + 7^3 + 9^3 \\
\mathbf{1295} &:= 2^3 + 3^3 + 4^3 + 5^3 + 6^3 + 7^3 + 8^3 \\
\mathbf{1296} &:= 1^3 + 2^3 + 3^3 + 4^3 + 5^3 + 6^3 + 7^3 + 8^3 \\
&:= 2^3 + 3^3 + 4^3 + 5^3 + 7^3 + 9^3 \\
&:= 2^3 + 6^3 + 7^3 + 9^3 \\
&:= 6^4 \\
\mathbf{1297} &:= 1^3 + 2^3 + 3^3 + 4^3 + 5^3 + 7^3 + 9^3 \\
&:= 1^3 + 2^3 + 6^3 + 7^3 + 9^3 \\
&:= 1^4 + 6^4 \\
\mathbf{1299} &:= 2^5 + 3^5 + 4^5 \\
\mathbf{1300} &:= 1^5 + 2^5 + 3^5 + 4^5 \\
\mathbf{1305} &:= 4^3 + 8^3 + 9^3 \\
\mathbf{1306} &:= 1^3 + 4^3 + 8^3 + 9^3 \\
\mathbf{1312} &:= 2^4 + 6^4 \\
\mathbf{1313} &:= 1^4 + 2^4 + 6^4 \\
&:= 2^3 + 4^3 + 8^3 + 9^3 \\
\mathbf{1314} &:= 1^3 + 2^3 + 4^3 + 8^3 + 9^3 \\
\mathbf{1315} &:= 3^3 + 6^3 + 7^3 + 9^3 \\
\mathbf{1316} &:= 1^3 + 3^3 + 6^3 + 7^3 + 9^3 \\
\mathbf{1323} &:= 2^3 + 3^3 + 6^3 + 7^3 + 9^3 \\
\mathbf{1324} &:= 1^3 + 2^3 + 3^3 + 6^3 + 7^3 + 9^3 \\
\mathbf{1332} &:= 3^3 + 4^3 + 8^3 + 9^3 \\
\mathbf{1333} &:= 1^3 + 3^3 + 4^3 + 8^3 + 9^3 \\
\mathbf{1340} &:= 2^3 + 3^3 + 4^3 + 8^3 + 9^3 \\
\mathbf{1341} &:= 1^3 + 2^3 + 3^3 + 4^3 + 8^3 + 9^3 \\
\mathbf{1352} &:= 4^3 + 6^3 + 7^3 + 9^3 \\
\mathbf{1353} &:= 1^3 + 4^3 + 6^3 + 7^3 + 9^3 \\
\mathbf{1360} &:= 2^3 + 4^3 + 6^3 + 7^3 + 9^3 \\
\mathbf{1361} &:= 1^3 + 2^3 + 4^3 + 6^3 + 7^3 + 9^3 \\
\mathbf{1366} &:= 5^3 + 8^3 + 9^3 \\
\mathbf{1367} &:= 1^3 + 5^3 + 8^3 + 9^3 \\
\mathbf{1374} &:= 2^3 + 5^3 + 8^3 + 9^3 \\
\mathbf{1375} &:= 1^3 + 2^3 + 5^3 + 8^3 + 9^3 \\
\mathbf{1377} &:= 3^4 + 6^4 \\
\mathbf{1378} &:= 1^4 + 3^4 + 6^4 \\
\mathbf{1379} &:= 3^3 + 4^3 + 6^3 + 7^3 + 9^3 \\
\mathbf{1380} &:= 1^3 + 3^3 + 4^3 + 6^3 + 7^3 + 9^3 \\
\mathbf{1387} &:= 2^3 + 3^3 + 4^3 + 6^3 + 7^3 + 9^3 \\
\mathbf{1388} &:= 1^3 + 2^3 + 3^3 + 4^3 + 6^3 + 7^3 + 9^3 \\
\mathbf{1393} &:= 2^4 + 3^4 + 6^4 \\
&:= 3^3 + 5^3 + 8^3 + 9^3 \\
\mathbf{1394} &:= 1^3 + 3^3 + 5^3 + 8^3 + 9^3 \\
&:= 1^4 + 2^4 + 3^4 + 6^4 \\
\mathbf{1401} &:= 2^3 + 3^3 + 5^3 + 8^3 + 9^3 \\
\mathbf{1402} &:= 1^3 + 2^3 + 3^3 + 5^3 + 8^3 + 9^3 \\
\mathbf{1413} &:= 5^3 + 6^3 + 7^3 + 9^3 \\
\mathbf{1414} &:= 1^3 + 5^3 + 6^3 + 7^3 + 9^3 \\
\mathbf{1421} &:= 2^3 + 5^3 + 6^3 + 7^3 + 9^3 \\
\mathbf{1422} &:= 1^3 + 2^3 + 5^3 + 6^3 + 7^3 + 9^3 \\
\mathbf{1430} &:= 4^3 + 5^3 + 8^3 + 9^3 \\
\mathbf{1431} &:= 1^3 + 4^3 + 5^3 + 8^3 + 9^3 \\
\mathbf{1438} &:= 2^3 + 4^3 + 5^3 + 8^3 + 9^3 \\
\mathbf{1439} &:= 1^3 + 2^3 + 4^3 + 5^3 + 8^3 + 9^3 \\
\mathbf{1440} &:= 3^3 + 5^3 + 6^3 + 7^3 + 9^3 \\
\mathbf{1441} &:= 1^3 + 3^3 + 5^3 + 6^3 + 7^3 + 9^3 \\
\mathbf{1448} &:= 2^3 + 3^3 + 5^3 + 6^3 + 7^3 + 9^3 \\
\mathbf{1449} &:= 1^3 + 2^3 + 3^3 + 5^3 + 6^3 + 7^3 + 9^3 \\
\mathbf{1457} &:= 3^3 + 4^3 + 5^3 + 8^3 + 9^3 \\
&:= 6^3 + 8^3 + 9^3 \\
\mathbf{1458} &:= 1^3 + 3^3 + 4^3 + 5^3 + 8^3 + 9^3 \\
&:= 1^3 + 6^3 + 8^3 + 9^3 \\
\mathbf{1465} &:= 2^3 + 3^3 + 4^3 + 5^3 + 8^3 + 9^3 \\
&:= 2^3 + 6^3 + 8^3 + 9^3 \\
\mathbf{1466} &:= 1^3 + 2^3 + 3^3 + 4^3 + 5^3 + 8^3 + 9^3 \\
&:= 1^3 + 2^3 + 6^3 + 8^3 + 9^3 \\
\mathbf{1477} &:= 4^3 + 5^3 + 6^3 + 7^3 + 9^3 \\
\mathbf{1478} &:= 1^3 + 4^3 + 5^3 + 6^3 + 7^3 + 9^3
\end{aligned}$$

$$1484 := 3^3 + 6^3 + 8^3 + 9^3$$

$$1485 := 1^3 + 3^3 + 6^3 + 8^3 + 9^3$$

$$:= 2^3 + 4^3 + 5^3 + 6^3 + 7^3 + 9^3$$

$$1486 := 1^3 + 2^3 + 4^3 + 5^3 + 6^3 + 7^3 + 9^3$$

$$1492 := 2^3 + 3^3 + 6^3 + 8^3 + 9^3$$

$$1493 := 1^3 + 2^3 + 3^3 + 6^3 + 8^3 + 9^3$$

$$1504 := 3^3 + 4^3 + 5^3 + 6^3 + 7^3 + 9^3$$

$$1505 := 1^3 + 3^3 + 4^3 + 5^3 + 6^3 + 7^3 + 9^3$$

$$1512 := 2^3 + 3^3 + 4^3 + 5^3 + 6^3 + 7^3 + 9^3$$

$$1513 := 1^3 + 2^3 + 3^3 + 4^3 + 5^3 + 6^3 + 7^3 + 9^3$$

$$1521 := 4^3 + 6^3 + 8^3 + 9^3$$

$$1522 := 1^3 + 4^3 + 6^3 + 8^3 + 9^3$$

$$1529 := 2^3 + 4^3 + 6^3 + 8^3 + 9^3$$

$$1530 := 1^3 + 2^3 + 4^3 + 6^3 + 8^3 + 9^3$$

$$1548 := 3^3 + 4^3 + 6^3 + 8^3 + 9^3$$

$$1549 := 1^3 + 3^3 + 4^3 + 6^3 + 8^3 + 9^3$$

$$1552 := 4^4 + 6^4$$

$$1553 := 1^4 + 4^4 + 6^4$$

$$1556 := 2^3 + 3^3 + 4^3 + 6^3 + 8^3 + 9^3$$

$$1557 := 1^3 + 2^3 + 3^3 + 4^3 + 6^3 + 8^3 + 9^3$$

$$1568 := 2^4 + 4^4 + 6^4$$

$$1569 := 1^4 + 2^4 + 4^4 + 6^4$$

$$1582 := 5^3 + 6^3 + 8^3 + 9^3$$

$$1583 := 1^3 + 5^3 + 6^3 + 8^3 + 9^3$$

$$1584 := 7^3 + 8^3 + 9^3$$

$$1585 := 1^3 + 7^3 + 8^3 + 9^3$$

$$1590 := 2^3 + 5^3 + 6^3 + 8^3 + 9^3$$

$$1591 := 1^3 + 2^3 + 5^3 + 6^3 + 8^3 + 9^3$$

$$1592 := 2^3 + 7^3 + 8^3 + 9^3$$

$$1593 := 1^3 + 2^3 + 7^3 + 8^3 + 9^3$$

$$1609 := 3^3 + 5^3 + 6^3 + 8^3 + 9^3$$

$$1610 := 1^3 + 3^3 + 5^3 + 6^3 + 8^3 + 9^3$$

$$1611 := 3^3 + 7^3 + 8^3 + 9^3$$

$$1612 := 1^3 + 3^3 + 7^3 + 8^3 + 9^3$$

$$1617 := 2^3 + 3^3 + 5^3 + 6^3 + 8^3 + 9^3$$

$$1618 := 1^3 + 2^3 + 3^3 + 5^3 + 6^3 + 8^3 + 9^3$$

$$1619 := 2^3 + 3^3 + 7^3 + 8^3 + 9^3$$

$$1620 := 1^3 + 2^3 + 3^3 + 7^3 + 8^3 + 9^3$$

$$1633 := 3^4 + 4^4 + 6^4$$

$$1634 := 1^4 + 3^4 + 4^4 + 6^4$$

$$1646 := 4^3 + 5^3 + 6^3 + 8^3 + 9^3$$

$$1647 := 1^3 + 4^3 + 5^3 + 6^3 + 8^3 + 9^3$$

$$1648 := 4^3 + 7^3 + 8^3 + 9^3$$

$$1649 := 2^4 + 3^4 + 4^4 + 6^4$$

$$1650 := 1^4 + 2^4 + 3^4 + 4^4 + 6^4$$

$$1654 := 2^3 + 4^3 + 5^3 + 6^3 + 8^3 + 9^3$$

$$1655 := 1^3 + 2^3 + 4^3 + 5^3 + 6^3 + 8^3 + 9^3$$

$$1656 := 2^3 + 4^3 + 7^3 + 8^3 + 9^3$$

$$1657 := 1^3 + 2^3 + 4^3 + 7^3 + 8^3 + 9^3$$

$$1673 := 3^3 + 4^3 + 5^3 + 6^3 + 8^3 + 9^3$$

$$1674 := 1^3 + 3^3 + 4^3 + 5^3 + 6^3 + 8^3 + 9^3$$

$$1675 := 3^3 + 4^3 + 7^3 + 8^3 + 9^3$$

$$1676 := 1^3 + 3^3 + 4^3 + 7^3 + 8^3 + 9^3$$

$$1681 := 2^3 + 3^3 + 4^3 + 5^3 + 6^3 + 8^3 + 9^3$$

$$1682 := 1^3 + 2^3 + 3^3 + 4^3 + 5^3 + 6^3 + 8^3 + 9^3$$

$$1683 := 2^3 + 3^3 + 4^3 + 7^3 + 8^3 + 9^3$$

$$1684 := 1^3 + 2^3 + 3^3 + 4^3 + 7^3 + 8^3 + 9^3$$

$$1709 := 5^3 + 7^3 + 8^3 + 9^3$$

$$1710 := 1^3 + 5^3 + 7^3 + 8^3 + 9^3$$

$$1717 := 2^3 + 5^3 + 7^3 + 8^3 + 9^3$$

$$1718 := 1^3 + 2^3 + 5^3 + 7^3 + 8^3 + 9^3$$

$$1736 := 3^3 + 5^3 + 7^3 + 8^3 + 9^3$$

$$1737 := 1^3 + 3^3 + 5^3 + 7^3 + 8^3 + 9^3$$

$$1744 := 2^3 + 3^3 + 5^3 + 7^3 + 8^3 + 9^3$$

$$1745 := 1^3 + 2^3 + 3^3 + 5^3 + 7^3 + 8^3 + 9^3$$

$$1773 := 4^3 + 5^3 + 7^3 + 8^3 + 9^3$$

$$1774 := 1^3 + 4^3 + 5^3 + 7^3 + 8^3 + 9^3$$

$$1781 := 2^3 + 4^3 + 5^3 + 7^3 + 8^3 + 9^3$$

$$1782 := 1^3 + 2^3 + 4^3 + 5^3 + 7^3 + 8^3 + 9^3$$

$$1800 := 3^3 + 4^3 + 5^3 + 7^3 + 8^3 + 9^3$$

$$:= 6^3 + 7^3 + 8^3 + 9^3$$

$$1801 := 1^3 + 3^3 + 4^3 + 5^3 + 7^3 + 8^3 + 9^3$$

$$:= 1^3 + 6^3 + 7^3 + 8^3 + 9^3$$

$$1808 := 2^3 + 3^3 + 4^3 + 5^3 + 7^3 + 8^3 + 9^3$$

$$:= 2^3 + 6^3 + 7^3 + 8^3 + 9^3$$

$$1809 := 1^3 + 2^3 + 3^3 + 4^3 + 5^3 + 7^3 + 8^3 + 9^3$$

$$\begin{aligned}
&:= 1^3 + 2^3 + 6^3 + 7^3 + 8^3 + 9^3 \\
\mathbf{1827} &:= 3^3 + 6^3 + 7^3 + 8^3 + 9^3 \\
\mathbf{1828} &:= 1^3 + 3^3 + 6^3 + 7^3 + 8^3 + 9^3 \\
\mathbf{1835} &:= 2^3 + 3^3 + 6^3 + 7^3 + 8^3 + 9^3 \\
\mathbf{1836} &:= 1^3 + 2^3 + 3^3 + 6^3 + 7^3 + 8^3 + 9^3 \\
\mathbf{1864} &:= 4^3 + 6^3 + 7^3 + 8^3 + 9^3 \\
\mathbf{1865} &:= 1^3 + 4^3 + 6^3 + 7^3 + 8^3 + 9^3 \\
\mathbf{1872} &:= 2^3 + 4^3 + 6^3 + 7^3 + 8^3 + 9^3 \\
\mathbf{1873} &:= 1^3 + 2^3 + 4^3 + 6^3 + 7^3 + 8^3 + 9^3 \\
\mathbf{1891} &:= 3^3 + 4^3 + 6^3 + 7^3 + 8^3 + 9^3 \\
\mathbf{1892} &:= 1^3 + 3^3 + 4^3 + 6^3 + 7^3 + 8^3 + 9^3 \\
\mathbf{1899} &:= 2^3 + 3^3 + 4^3 + 6^3 + 7^3 + 8^3 + 9^3 \\
\mathbf{1900} &:= 1^3 + 2^3 + 3^3 + 4^3 + 6^3 + 7^3 + 8^3 + 9^3 \\
\mathbf{1921} &:= 5^4 + 6^4 \\
\mathbf{1922} &:= 1^4 + 5^4 + 6^4 \\
\mathbf{1925} &:= 5^3 + 6^3 + 7^3 + 8^3 + 9^3 \\
\mathbf{1926} &:= 1^3 + 5^3 + 6^3 + 7^3 + 8^3 + 9^3 \\
\mathbf{1933} &:= 2^3 + 5^3 + 6^3 + 7^3 + 8^3 + 9^3 \\
\mathbf{1934} &:= 1^3 + 2^3 + 5^3 + 6^3 + 7^3 + 8^3 + 9^3 \\
\mathbf{1937} &:= 2^4 + 5^4 + 6^4 \\
\mathbf{1938} &:= 1^4 + 2^4 + 5^4 + 6^4 \\
\mathbf{1952} &:= 3^3 + 5^3 + 6^3 + 7^3 + 8^3 + 9^3 \\
\mathbf{1953} &:= 1^3 + 3^3 + 5^3 + 6^3 + 7^3 + 8^3 + 9^3 \\
\mathbf{1960} &:= 2^3 + 3^3 + 5^3 + 6^3 + 7^3 + 8^3 + 9^3 \\
\mathbf{1961} &:= 1^3 + 2^3 + 3^3 + 5^3 + 6^3 + 7^3 + 8^3 + 9^3 \\
\mathbf{1989} &:= 4^3 + 5^3 + 6^3 + 7^3 + 8^3 + 9^3 \\
\mathbf{1990} &:= 1^3 + 4^3 + 5^3 + 6^3 + 7^3 + 8^3 + 9^3 \\
\mathbf{1997} &:= 2^3 + 4^3 + 5^3 + 6^3 + 7^3 + 8^3 + 9^3 \\
\mathbf{1998} &:= 1^3 + 2^3 + 4^3 + 5^3 + 6^3 + 7^3 + 8^3 + 9^3 \\
\mathbf{2002} &:= 3^4 + 5^4 + 6^4 \\
\mathbf{2003} &:= 1^4 + 3^4 + 5^4 + 6^4 \\
\mathbf{2016} &:= 3^3 + 4^3 + 5^3 + 6^3 + 7^3 + 8^3 + 9^3 \\
\mathbf{2017} &:= 1^3 + 3^3 + 4^3 + 5^3 + 6^3 + 7^3 + 8^3 + 9^3 \\
\mathbf{2018} &:= 2^4 + 3^4 + 5^4 + 6^4 \\
\mathbf{2019} &:= 1^4 + 2^4 + 3^4 + 5^4 + 6^4 \\
\mathbf{2024} &:= 2^3 + 3^3 + 4^3 + 5^3 + 6^3 + 7^3 + 8^3 + 9^3 \\
\mathbf{2025} &:= 1^3 + 2^3 + 3^3 + 4^3 + 5^3 + 6^3 + 7^3 + 8^3 + 9^3 \\
\mathbf{2048} &:= 2^{11}
\end{aligned}$$

$$\begin{aligned}
\mathbf{2049} &:= 1^{11} + 2^{11} \\
\mathbf{2177} &:= 4^4 + 5^4 + 6^4 \\
\mathbf{2178} &:= 1^4 + 4^4 + 5^4 + 6^4 \\
\mathbf{2187} &:= 3^7 \\
\mathbf{2188} &:= 1^7 + 3^7 \\
\mathbf{2193} &:= 2^4 + 4^4 + 5^4 + 6^4 \\
\mathbf{2194} &:= 1^4 + 2^4 + 4^4 + 5^4 + 6^4 \\
\mathbf{2258} &:= 3^4 + 4^4 + 5^4 + 6^4 \\
\mathbf{2259} &:= 1^4 + 3^4 + 4^4 + 5^4 + 6^4 \\
\mathbf{2274} &:= 2^4 + 3^4 + 4^4 + 5^4 + 6^4 \\
\mathbf{2275} &:= 1^4 + 2^4 + 3^4 + 4^4 + 5^4 + 6^4 \\
\mathbf{2315} &:= 2^7 + 3^7 \\
\mathbf{2316} &:= 1^7 + 2^7 + 3^7 \\
\mathbf{2401} &:= 7^4 \\
\mathbf{2402} &:= 1^4 + 7^4 \\
\mathbf{2417} &:= 2^4 + 7^4 \\
\mathbf{2418} &:= 1^4 + 2^4 + 7^4 \\
\mathbf{2482} &:= 3^4 + 7^4 \\
\mathbf{2483} &:= 1^4 + 3^4 + 7^4 \\
\mathbf{2498} &:= 2^4 + 3^4 + 7^4 \\
\mathbf{2499} &:= 1^4 + 2^4 + 3^4 + 7^4 \\
\mathbf{2657} &:= 4^4 + 7^4 \\
\mathbf{2658} &:= 1^4 + 4^4 + 7^4 \\
\mathbf{2673} &:= 2^4 + 4^4 + 7^4 \\
\mathbf{2674} &:= 1^4 + 2^4 + 4^4 + 7^4 \\
\mathbf{2738} &:= 3^4 + 4^4 + 7^4 \\
\mathbf{2739} &:= 1^4 + 3^4 + 4^4 + 7^4 \\
\mathbf{2754} &:= 2^4 + 3^4 + 4^4 + 7^4 \\
\mathbf{2755} &:= 1^4 + 2^4 + 3^4 + 4^4 + 7^4 \\
\mathbf{3026} &:= 5^4 + 7^4 \\
\mathbf{3027} &:= 1^4 + 5^4 + 7^4 \\
\mathbf{3042} &:= 2^4 + 5^4 + 7^4 \\
\mathbf{3043} &:= 1^4 + 2^4 + 5^4 + 7^4 \\
\mathbf{3107} &:= 3^4 + 5^4 + 7^4 \\
\mathbf{3108} &:= 1^4 + 3^4 + 5^4 + 7^4 \\
\mathbf{3123} &:= 2^4 + 3^4 + 5^4 + 7^4 \\
\mathbf{3124} &:= 1^4 + 2^4 + 3^4 + 5^4 + 7^4 \\
\mathbf{3125} &:= 5^5
\end{aligned}$$

$$\mathbf{3126} := 1^5 + 5^5$$

$$\mathbf{3157} := 2^5 + 5^5$$

$$\mathbf{3158} := 1^5 + 2^5 + 5^5$$

$$\mathbf{3282} := 4^4 + 5^4 + 7^4$$

$$\mathbf{3283} := 1^4 + 4^4 + 5^4 + 7^4$$

$$\mathbf{3298} := 2^4 + 4^4 + 5^4 + 7^4$$

$$\mathbf{3299} := 1^4 + 2^4 + 4^4 + 5^4 + 7^4$$

$$\mathbf{3363} := 3^4 + 4^4 + 5^4 + 7^4$$

$$\mathbf{3364} := 1^4 + 3^4 + 4^4 + 5^4 + 7^4$$

$$\mathbf{3368} := 3^5 + 5^5$$

$$\mathbf{3369} := 1^5 + 3^5 + 5^5$$

$$\mathbf{3379} := 2^4 + 3^4 + 4^4 + 5^4 + 7^4$$

$$\mathbf{3380} := 1^4 + 2^4 + 3^4 + 4^4 + 5^4 + 7^4$$

$$\mathbf{3400} := 2^5 + 3^5 + 5^5$$

$$\mathbf{3401} := 1^5 + 2^5 + 3^5 + 5^5$$

$$\mathbf{3697} := 6^4 + 7^4$$

$$\mathbf{3698} := 1^4 + 6^4 + 7^4$$

$$\mathbf{3713} := 2^4 + 6^4 + 7^4$$

$$\mathbf{3714} := 1^4 + 2^4 + 6^4 + 7^4$$

$$\mathbf{3778} := 3^4 + 6^4 + 7^4$$

$$\mathbf{3779} := 1^4 + 3^4 + 6^4 + 7^4$$

$$\mathbf{3794} := 2^4 + 3^4 + 6^4 + 7^4$$

$$\mathbf{3795} := 1^4 + 2^4 + 3^4 + 6^4 + 7^4$$

$$\mathbf{3953} := 4^4 + 6^4 + 7^4$$

$$\mathbf{3954} := 1^4 + 4^4 + 6^4 + 7^4$$

$$\mathbf{3969} := 2^4 + 4^4 + 6^4 + 7^4$$

$$\mathbf{3970} := 1^4 + 2^4 + 4^4 + 6^4 + 7^4$$

$$\mathbf{4034} := 3^4 + 4^4 + 6^4 + 7^4$$

$$\mathbf{4035} := 1^4 + 3^4 + 4^4 + 6^4 + 7^4$$

$$\mathbf{4050} := 2^4 + 3^4 + 4^4 + 6^4 + 7^4$$

$$\mathbf{4051} := 1^4 + 2^4 + 3^4 + 4^4 + 6^4 + 7^4$$

$$\mathbf{4096} := 2^{12}$$

$$:= 4^6$$

$$:= 8^4$$

$$\mathbf{4097} := 1^{12} + 2^{12}$$

$$:= 1^4 + 8^4$$

$$:= 1^6 + 4^6$$

$$\mathbf{4112} := 2^4 + 8^4$$

$$\mathbf{4113} := 1^4 + 2^4 + 8^4$$

$$\mathbf{4149} := 4^5 + 5^5$$

$$\mathbf{4150} := 1^5 + 4^5 + 5^5$$

$$\mathbf{4160} := 2^6 + 4^6$$

$$\mathbf{4161} := 1^6 + 2^6 + 4^6$$

$$\mathbf{4177} := 3^4 + 8^4$$

$$\mathbf{4178} := 1^4 + 3^4 + 8^4$$

$$\mathbf{4181} := 2^5 + 4^5 + 5^5$$

$$\mathbf{4182} := 1^5 + 2^5 + 4^5 + 5^5$$

$$\mathbf{4193} := 2^4 + 3^4 + 8^4$$

$$\mathbf{4194} := 1^4 + 2^4 + 3^4 + 8^4$$

$$\mathbf{4322} := 5^4 + 6^4 + 7^4$$

$$\mathbf{4323} := 1^4 + 5^4 + 6^4 + 7^4$$

$$\mathbf{4338} := 2^4 + 5^4 + 6^4 + 7^4$$

$$\mathbf{4339} := 1^4 + 2^4 + 5^4 + 6^4 + 7^4$$

$$\mathbf{4352} := 4^4 + 8^4$$

$$\mathbf{4353} := 1^4 + 4^4 + 8^4$$

$$\mathbf{4368} := 2^4 + 4^4 + 8^4$$

$$\mathbf{4369} := 1^4 + 2^4 + 4^4 + 8^4$$

$$\mathbf{4392} := 3^5 + 4^5 + 5^5$$

$$\mathbf{4393} := 1^5 + 3^5 + 4^5 + 5^5$$

$$\mathbf{4403} := 3^4 + 5^4 + 6^4 + 7^4$$

$$\mathbf{4404} := 1^4 + 3^4 + 5^4 + 6^4 + 7^4$$

$$\mathbf{4419} := 2^4 + 3^4 + 5^4 + 6^4 + 7^4$$

$$\mathbf{4420} := 1^4 + 2^4 + 3^4 + 5^4 + 6^4 + 7^4$$

$$\mathbf{4424} := 2^5 + 3^5 + 4^5 + 5^5$$

$$\mathbf{4425} := 1^5 + 2^5 + 3^5 + 4^5 + 5^5$$

$$\mathbf{4433} := 3^4 + 4^4 + 8^4$$

$$\mathbf{4434} := 1^4 + 3^4 + 4^4 + 8^4$$

$$\mathbf{4449} := 2^4 + 3^4 + 4^4 + 8^4$$

$$\mathbf{4450} := 1^4 + 2^4 + 3^4 + 4^4 + 8^4$$

$$\mathbf{4578} := 4^4 + 5^4 + 6^4 + 7^4$$

$$\mathbf{4579} := 1^4 + 4^4 + 5^4 + 6^4 + 7^4$$

$$\mathbf{4594} := 2^4 + 4^4 + 5^4 + 6^4 + 7^4$$

$$\mathbf{4595} := 1^4 + 2^4 + 4^4 + 5^4 + 6^4 + 7^4$$

$$\mathbf{4659} := 3^4 + 4^4 + 5^4 + 6^4 + 7^4$$

$$\mathbf{4660} := 1^4 + 3^4 + 4^4 + 5^4 + 6^4 + 7^4$$

$$\mathbf{4675} := 2^4 + 3^4 + 4^4 + 5^4 + 6^4 + 7^4$$

$$4676 := 1^4 + 2^4 + 3^4 + 4^4 + 5^4 + 6^4 + 7^4$$

$$4721 := 5^4 + 8^4$$

$$4722 := 1^4 + 5^4 + 8^4$$

$$4737 := 2^4 + 5^4 + 8^4$$

$$4738 := 1^4 + 2^4 + 5^4 + 8^4$$

$$4802 := 3^4 + 5^4 + 8^4$$

$$4803 := 1^4 + 3^4 + 5^4 + 8^4$$

$$4818 := 2^4 + 3^4 + 5^4 + 8^4$$

$$4819 := 1^4 + 2^4 + 3^4 + 5^4 + 8^4$$

$$4825 := 3^6 + 4^6$$

$$4826 := 1^6 + 3^6 + 4^6$$

$$4889 := 2^6 + 3^6 + 4^6$$

$$4890 := 1^6 + 2^6 + 3^6 + 4^6$$

$$4977 := 4^4 + 5^4 + 8^4$$

$$4978 := 1^4 + 4^4 + 5^4 + 8^4$$

$$4993 := 2^4 + 4^4 + 5^4 + 8^4$$

$$4994 := 1^4 + 2^4 + 4^4 + 5^4 + 8^4$$

$$5058 := 3^4 + 4^4 + 5^4 + 8^4$$

$$5059 := 1^4 + 3^4 + 4^4 + 5^4 + 8^4$$

$$5074 := 2^4 + 3^4 + 4^4 + 5^4 + 8^4$$

$$5075 := 1^4 + 2^4 + 3^4 + 4^4 + 5^4 + 8^4$$

$$5392 := 6^4 + 8^4$$

$$5393 := 1^4 + 6^4 + 8^4$$

$$5408 := 2^4 + 6^4 + 8^4$$

$$5409 := 1^4 + 2^4 + 6^4 + 8^4$$

$$5473 := 3^4 + 6^4 + 8^4$$

$$5474 := 1^4 + 3^4 + 6^4 + 8^4$$

$$5489 := 2^4 + 3^4 + 6^4 + 8^4$$

$$5490 := 1^4 + 2^4 + 3^4 + 6^4 + 8^4$$

$$5648 := 4^4 + 6^4 + 8^4$$

$$5649 := 1^4 + 4^4 + 6^4 + 8^4$$

$$5664 := 2^4 + 4^4 + 6^4 + 8^4$$

$$5665 := 1^4 + 2^4 + 4^4 + 6^4 + 8^4$$

$$5729 := 3^4 + 4^4 + 6^4 + 8^4$$

$$5730 := 1^4 + 3^4 + 4^4 + 6^4 + 8^4$$

$$5745 := 2^4 + 3^4 + 4^4 + 6^4 + 8^4$$

$$5746 := 1^4 + 2^4 + 3^4 + 4^4 + 6^4 + 8^4$$

$$6017 := 5^4 + 6^4 + 8^4$$

$$6018 := 1^4 + 5^4 + 6^4 + 8^4$$

$$6033 := 2^4 + 5^4 + 6^4 + 8^4$$

$$6034 := 1^4 + 2^4 + 5^4 + 6^4 + 8^4$$

$$6098 := 3^4 + 5^4 + 6^4 + 8^4$$

$$6099 := 1^4 + 3^4 + 5^4 + 6^4 + 8^4$$

$$6114 := 2^4 + 3^4 + 5^4 + 6^4 + 8^4$$

$$6115 := 1^4 + 2^4 + 3^4 + 5^4 + 6^4 + 8^4$$

$$6273 := 4^4 + 5^4 + 6^4 + 8^4$$

$$6274 := 1^4 + 4^4 + 5^4 + 6^4 + 8^4$$

$$6289 := 2^4 + 4^4 + 5^4 + 6^4 + 8^4$$

$$6290 := 1^4 + 2^4 + 4^4 + 5^4 + 6^4 + 8^4$$

$$6354 := 3^4 + 4^4 + 5^4 + 6^4 + 8^4$$

$$6355 := 1^4 + 3^4 + 4^4 + 5^4 + 6^4 + 8^4$$

$$6370 := 2^4 + 3^4 + 4^4 + 5^4 + 6^4 + 8^4$$

$$6371 := 1^4 + 2^4 + 3^4 + 4^4 + 5^4 + 6^4 + 8^4$$

$$6497 := 7^4 + 8^4$$

$$6498 := 1^4 + 7^4 + 8^4$$

$$6513 := 2^4 + 7^4 + 8^4$$

$$6514 := 1^4 + 2^4 + 7^4 + 8^4$$

$$6561 := 3^8$$

$$:= 9^4$$

$$6562 := 1^4 + 9^4$$

$$:= 1^8 + 3^8$$

$$6577 := 2^4 + 9^4$$

$$6578 := 1^4 + 2^4 + 9^4$$

$$:= 3^4 + 7^4 + 8^4$$

$$6579 := 1^4 + 3^4 + 7^4 + 8^4$$

$$6594 := 2^4 + 3^4 + 7^4 + 8^4$$

$$6595 := 1^4 + 2^4 + 3^4 + 7^4 + 8^4$$

$$6642 := 3^4 + 9^4$$

$$6643 := 1^4 + 3^4 + 9^4$$

$$6658 := 2^4 + 3^4 + 9^4$$

$$6659 := 1^4 + 2^4 + 3^4 + 9^4$$

$$6753 := 4^4 + 7^4 + 8^4$$

$$6754 := 1^4 + 4^4 + 7^4 + 8^4$$

$$6769 := 2^4 + 4^4 + 7^4 + 8^4$$

$$6770 := 1^4 + 2^4 + 4^4 + 7^4 + 8^4$$

$$6817 := 2^8 + 3^8$$

$$\begin{aligned}
&:= 4^4 + 9^4 \\
\mathbf{6818} &:= 1^4 + 4^4 + 9^4 \\
&:= 1^8 + 2^8 + 3^8 \\
\mathbf{6833} &:= 2^4 + 4^4 + 9^4 \\
\mathbf{6834} &:= 1^4 + 2^4 + 4^4 + 9^4 \\
&:= 3^4 + 4^4 + 7^4 + 8^4 \\
\mathbf{6835} &:= 1^4 + 3^4 + 4^4 + 7^4 + 8^4 \\
\mathbf{6850} &:= 2^4 + 3^4 + 4^4 + 7^4 + 8^4 \\
\mathbf{6851} &:= 1^4 + 2^4 + 3^4 + 4^4 + 7^4 + 8^4 \\
\mathbf{6898} &:= 3^4 + 4^4 + 9^4 \\
\mathbf{6899} &:= 1^4 + 3^4 + 4^4 + 9^4 \\
\mathbf{6914} &:= 2^4 + 3^4 + 4^4 + 9^4 \\
\mathbf{6915} &:= 1^4 + 2^4 + 3^4 + 4^4 + 9^4 \\
\mathbf{7122} &:= 5^4 + 7^4 + 8^4 \\
\mathbf{7123} &:= 1^4 + 5^4 + 7^4 + 8^4 \\
\mathbf{7138} &:= 2^4 + 5^4 + 7^4 + 8^4 \\
\mathbf{7139} &:= 1^4 + 2^4 + 5^4 + 7^4 + 8^4 \\
\mathbf{7186} &:= 5^4 + 9^4 \\
\mathbf{7187} &:= 1^4 + 5^4 + 9^4 \\
\mathbf{7202} &:= 2^4 + 5^4 + 9^4 \\
\mathbf{7203} &:= 1^4 + 2^4 + 5^4 + 9^4 \\
&:= 3^4 + 5^4 + 7^4 + 8^4 \\
\mathbf{7204} &:= 1^4 + 3^4 + 5^4 + 7^4 + 8^4 \\
\mathbf{7219} &:= 2^4 + 3^4 + 5^4 + 7^4 + 8^4 \\
\mathbf{7220} &:= 1^4 + 2^4 + 3^4 + 5^4 + 7^4 + 8^4 \\
\mathbf{7267} &:= 3^4 + 5^4 + 9^4 \\
\mathbf{7268} &:= 1^4 + 3^4 + 5^4 + 9^4 \\
\mathbf{7283} &:= 2^4 + 3^4 + 5^4 + 9^4 \\
\mathbf{7284} &:= 1^4 + 2^4 + 3^4 + 5^4 + 9^4 \\
\mathbf{7378} &:= 4^4 + 5^4 + 7^4 + 8^4 \\
\mathbf{7379} &:= 1^4 + 4^4 + 5^4 + 7^4 + 8^4 \\
\mathbf{7394} &:= 2^4 + 4^4 + 5^4 + 7^4 + 8^4 \\
\mathbf{7395} &:= 1^4 + 2^4 + 4^4 + 5^4 + 7^4 + 8^4 \\
\mathbf{7442} &:= 4^4 + 5^4 + 9^4 \\
\mathbf{7443} &:= 1^4 + 4^4 + 5^4 + 9^4 \\
\mathbf{7458} &:= 2^4 + 4^4 + 5^4 + 9^4 \\
\mathbf{7459} &:= 1^4 + 2^4 + 4^4 + 5^4 + 9^4 \\
&:= 3^4 + 4^4 + 5^4 + 7^4 + 8^4 \\
\mathbf{7460} &:= 1^4 + 3^4 + 4^4 + 5^4 + 7^4 + 8^4 \\
\mathbf{7475} &:= 2^4 + 3^4 + 4^4 + 5^4 + 7^4 + 8^4 \\
\mathbf{7476} &:= 1^4 + 2^4 + 3^4 + 4^4 + 5^4 + 7^4 + 8^4 \\
\mathbf{7523} &:= 3^4 + 4^4 + 5^4 + 9^4 \\
\mathbf{7524} &:= 1^4 + 3^4 + 4^4 + 5^4 + 9^4 \\
\mathbf{7539} &:= 2^4 + 3^4 + 4^4 + 5^4 + 9^4 \\
\mathbf{7540} &:= 1^4 + 2^4 + 3^4 + 4^4 + 5^4 + 9^4 \\
\mathbf{7776} &:= 6^5 \\
\mathbf{7777} &:= 1^5 + 6^5 \\
\mathbf{7793} &:= 6^4 + 7^4 + 8^4 \\
\mathbf{7794} &:= 1^4 + 6^4 + 7^4 + 8^4 \\
\mathbf{7808} &:= 2^5 + 6^5 \\
\mathbf{7809} &:= 1^5 + 2^5 + 6^5 \\
&:= 2^4 + 6^4 + 7^4 + 8^4 \\
\mathbf{7810} &:= 1^4 + 2^4 + 6^4 + 7^4 + 8^4 \\
\mathbf{7857} &:= 6^4 + 9^4 \\
\mathbf{7858} &:= 1^4 + 6^4 + 9^4 \\
\mathbf{7873} &:= 2^4 + 6^4 + 9^4 \\
\mathbf{7874} &:= 1^4 + 2^4 + 6^4 + 9^4 \\
&:= 3^4 + 6^4 + 7^4 + 8^4 \\
\mathbf{7875} &:= 1^4 + 3^4 + 6^4 + 7^4 + 8^4 \\
\mathbf{7890} &:= 2^4 + 3^4 + 6^4 + 7^4 + 8^4 \\
\mathbf{7891} &:= 1^4 + 2^4 + 3^4 + 6^4 + 7^4 + 8^4 \\
\mathbf{7938} &:= 3^4 + 6^4 + 9^4 \\
\mathbf{7939} &:= 1^4 + 3^4 + 6^4 + 9^4 \\
\mathbf{7954} &:= 2^4 + 3^4 + 6^4 + 9^4 \\
\mathbf{7955} &:= 1^4 + 2^4 + 3^4 + 6^4 + 9^4 \\
\mathbf{8019} &:= 3^5 + 6^5 \\
\mathbf{8020} &:= 1^5 + 3^5 + 6^5 \\
\mathbf{8049} &:= 4^4 + 6^4 + 7^4 + 8^4 \\
\mathbf{8050} &:= 1^4 + 4^4 + 6^4 + 7^4 + 8^4 \\
\mathbf{8051} &:= 2^5 + 3^5 + 6^5 \\
\mathbf{8052} &:= 1^5 + 2^5 + 3^5 + 6^5 \\
\mathbf{8065} &:= 2^4 + 4^4 + 6^4 + 7^4 + 8^4 \\
\mathbf{8066} &:= 1^4 + 2^4 + 4^4 + 6^4 + 7^4 + 8^4 \\
\mathbf{8113} &:= 4^4 + 6^4 + 9^4 \\
\mathbf{8114} &:= 1^4 + 4^4 + 6^4 + 9^4 \\
\mathbf{8129} &:= 2^4 + 4^4 + 6^4 + 9^4
\end{aligned}$$

$$\begin{aligned} 8130 &:= 1^4 + 2^4 + 4^4 + 6^4 + 9^4 \\ &:= 3^4 + 4^4 + 6^4 + 7^4 + 8^4 \end{aligned}$$

$$8131 := 1^4 + 3^4 + 4^4 + 6^4 + 7^4 + 8^4$$

$$8146 := 2^4 + 3^4 + 4^4 + 6^4 + 7^4 + 8^4$$

$$8147 := 1^4 + 2^4 + 3^4 + 4^4 + 6^4 + 7^4 + 8^4$$

$$8192 := 2^{13}$$

$$8193 := 1^{13} + 2^{13}$$

$$8194 := 3^4 + 4^4 + 6^4 + 9^4$$

$$8195 := 1^4 + 3^4 + 4^4 + 6^4 + 9^4$$

$$8210 := 2^4 + 3^4 + 4^4 + 6^4 + 9^4$$

$$8211 := 1^4 + 2^4 + 3^4 + 4^4 + 6^4 + 9^4$$

$$8418 := 5^4 + 6^4 + 7^4 + 8^4$$

$$8419 := 1^4 + 5^4 + 6^4 + 7^4 + 8^4$$

$$8434 := 2^4 + 5^4 + 6^4 + 7^4 + 8^4$$

$$8435 := 1^4 + 2^4 + 5^4 + 6^4 + 7^4 + 8^4$$

$$8482 := 5^4 + 6^4 + 9^4$$

$$8483 := 1^4 + 5^4 + 6^4 + 9^4$$

$$8498 := 2^4 + 5^4 + 6^4 + 9^4$$

$$8499 := 1^4 + 2^4 + 5^4 + 6^4 + 9^4$$

$$:= 3^4 + 5^4 + 6^4 + 7^4 + 8^4$$

$$8500 := 1^4 + 3^4 + 5^4 + 6^4 + 7^4 + 8^4$$

$$8515 := 2^4 + 3^4 + 5^4 + 6^4 + 7^4 + 8^4$$

$$8516 := 1^4 + 2^4 + 3^4 + 5^4 + 6^4 + 7^4 + 8^4$$

$$8563 := 3^4 + 5^4 + 6^4 + 9^4$$

$$8564 := 1^4 + 3^4 + 5^4 + 6^4 + 9^4$$

$$8579 := 2^4 + 3^4 + 5^4 + 6^4 + 9^4$$

$$8580 := 1^4 + 2^4 + 3^4 + 5^4 + 6^4 + 9^4$$

$$8674 := 4^4 + 5^4 + 6^4 + 7^4 + 8^4$$

$$8675 := 1^4 + 4^4 + 5^4 + 6^4 + 7^4 + 8^4$$

$$8690 := 2^4 + 4^4 + 5^4 + 6^4 + 7^4 + 8^4$$

$$8691 := 1^4 + 2^4 + 4^4 + 5^4 + 6^4 + 7^4 + 8^4$$

$$8738 := 4^4 + 5^4 + 6^4 + 9^4$$

$$8739 := 1^4 + 4^4 + 5^4 + 6^4 + 9^4$$

$$8754 := 2^4 + 4^4 + 5^4 + 6^4 + 9^4$$

$$8755 := 1^4 + 2^4 + 4^4 + 5^4 + 6^4 + 9^4$$

$$:= 3^4 + 4^4 + 5^4 + 6^4 + 7^4 + 8^4$$

$$8756 := 1^4 + 3^4 + 4^4 + 5^4 + 6^4 + 7^4 + 8^4$$

$$8771 := 2^4 + 3^4 + 4^4 + 5^4 + 6^4 + 7^4 + 8^4$$

$$8772 := 1^4 + 2^4 + 3^4 + 4^4 + 5^4 + 6^4 + 7^4 + 8^4$$

$$8800 := 4^5 + 6^5$$

$$8801 := 1^5 + 4^5 + 6^5$$

$$8819 := 3^4 + 4^4 + 5^4 + 6^4 + 9^4$$

$$8820 := 1^4 + 3^4 + 4^4 + 5^4 + 6^4 + 9^4$$

$$8832 := 2^5 + 4^5 + 6^5$$

$$8833 := 1^5 + 2^5 + 4^5 + 6^5$$

$$8835 := 2^4 + 3^4 + 4^4 + 5^4 + 6^4 + 9^4$$

$$8836 := 1^4 + 2^4 + 3^4 + 4^4 + 5^4 + 6^4 + 9^4$$

$$8962 := 7^4 + 9^4$$

$$8963 := 1^4 + 7^4 + 9^4$$

$$8978 := 2^4 + 7^4 + 9^4$$

$$8979 := 1^4 + 2^4 + 7^4 + 9^4$$

$$9043 := 3^4 + 7^4 + 9^4$$

$$:= 3^5 + 4^5 + 6^5$$

$$9044 := 1^4 + 3^4 + 7^4 + 9^4$$

$$:= 1^5 + 3^5 + 4^5 + 6^5$$

$$9059 := 2^4 + 3^4 + 7^4 + 9^4$$

$$9060 := 1^4 + 2^4 + 3^4 + 7^4 + 9^4$$

$$9075 := 2^5 + 3^5 + 4^5 + 6^5$$

$$9076 := 1^5 + 2^5 + 3^5 + 4^5 + 6^5$$

$$9218 := 4^4 + 7^4 + 9^4$$

$$9219 := 1^4 + 4^4 + 7^4 + 9^4$$

$$9234 := 2^4 + 4^4 + 7^4 + 9^4$$

$$9235 := 1^4 + 2^4 + 4^4 + 7^4 + 9^4$$

$$9299 := 3^4 + 4^4 + 7^4 + 9^4$$

$$9300 := 1^4 + 3^4 + 4^4 + 7^4 + 9^4$$

$$9315 := 2^4 + 3^4 + 4^4 + 7^4 + 9^4$$

$$9316 := 1^4 + 2^4 + 3^4 + 4^4 + 7^4 + 9^4$$

$$9587 := 5^4 + 7^4 + 9^4$$

$$9588 := 1^4 + 5^4 + 7^4 + 9^4$$

$$9603 := 2^4 + 5^4 + 7^4 + 9^4$$

$$9604 := 1^4 + 2^4 + 5^4 + 7^4 + 9^4$$

$$9668 := 3^4 + 5^4 + 7^4 + 9^4$$

$$9669 := 1^4 + 3^4 + 5^4 + 7^4 + 9^4$$

$$9684 := 2^4 + 3^4 + 5^4 + 7^4 + 9^4$$

$$9685 := 1^4 + 2^4 + 3^4 + 5^4 + 7^4 + 9^4$$

$$9843 := 4^4 + 5^4 + 7^4 + 9^4$$

$$\begin{aligned}
9844 &:= 1^4 + 4^4 + 5^4 + 7^4 + 9^4 \\
9859 &:= 2^4 + 4^4 + 5^4 + 7^4 + 9^4 \\
9860 &:= 1^4 + 2^4 + 4^4 + 5^4 + 7^4 + 9^4 \\
9924 &:= 3^4 + 4^4 + 5^4 + 7^4 + 9^4 \\
9925 &:= 1^4 + 3^4 + 4^4 + 5^4 + 7^4 + 9^4 \\
9940 &:= 2^4 + 3^4 + 4^4 + 5^4 + 7^4 + 9^4 \\
9941 &:= 1^4 + 2^4 + 3^4 + 4^4 + 5^4 + 7^4 + 9^4 \\
10258 &:= 6^4 + 7^4 + 9^4 \\
10259 &:= 1^4 + 6^4 + 7^4 + 9^4 \\
10274 &:= 2^4 + 6^4 + 7^4 + 9^4 \\
10275 &:= 1^4 + 2^4 + 6^4 + 7^4 + 9^4 \\
10339 &:= 3^4 + 6^4 + 7^4 + 9^4 \\
10340 &:= 1^4 + 3^4 + 6^4 + 7^4 + 9^4 \\
10355 &:= 2^4 + 3^4 + 6^4 + 7^4 + 9^4 \\
10356 &:= 1^4 + 2^4 + 3^4 + 6^4 + 7^4 + 9^4 \\
10514 &:= 4^4 + 6^4 + 7^4 + 9^4 \\
10515 &:= 1^4 + 4^4 + 6^4 + 7^4 + 9^4 \\
10530 &:= 2^4 + 4^4 + 6^4 + 7^4 + 9^4 \\
10531 &:= 1^4 + 2^4 + 4^4 + 6^4 + 7^4 + 9^4 \\
10595 &:= 3^4 + 4^4 + 6^4 + 7^4 + 9^4 \\
10596 &:= 1^4 + 3^4 + 4^4 + 6^4 + 7^4 + 9^4 \\
10611 &:= 2^4 + 3^4 + 4^4 + 6^4 + 7^4 + 9^4 \\
10612 &:= 1^4 + 2^4 + 3^4 + 4^4 + 6^4 + 7^4 + 9^4 \\
10657 &:= 8^4 + 9^4 \\
10658 &:= 1^4 + 8^4 + 9^4 \\
10673 &:= 2^4 + 8^4 + 9^4 \\
10674 &:= 1^4 + 2^4 + 8^4 + 9^4 \\
10738 &:= 3^4 + 8^4 + 9^4 \\
10739 &:= 1^4 + 3^4 + 8^4 + 9^4 \\
10754 &:= 2^4 + 3^4 + 8^4 + 9^4 \\
10755 &:= 1^4 + 2^4 + 3^4 + 8^4 + 9^4 \\
10883 &:= 5^4 + 6^4 + 7^4 + 9^4 \\
10884 &:= 1^4 + 5^4 + 6^4 + 7^4 + 9^4 \\
10899 &:= 2^4 + 5^4 + 6^4 + 7^4 + 9^4 \\
10900 &:= 1^4 + 2^4 + 5^4 + 6^4 + 7^4 + 9^4 \\
10901 &:= 5^5 + 6^5 \\
10902 &:= 1^5 + 5^5 + 6^5 \\
10913 &:= 4^4 + 8^4 + 9^4 \\
10914 &:= 1^4 + 4^4 + 8^4 + 9^4 \\
10929 &:= 2^4 + 4^4 + 8^4 + 9^4 \\
10930 &:= 1^4 + 2^4 + 4^4 + 8^4 + 9^4 \\
10933 &:= 2^5 + 5^5 + 6^5 \\
10934 &:= 1^5 + 2^5 + 5^5 + 6^5 \\
10964 &:= 3^4 + 5^4 + 6^4 + 7^4 + 9^4 \\
10965 &:= 1^4 + 3^4 + 5^4 + 6^4 + 7^4 + 9^4 \\
10980 &:= 2^4 + 3^4 + 5^4 + 6^4 + 7^4 + 9^4 \\
10981 &:= 1^4 + 2^4 + 3^4 + 5^4 + 6^4 + 7^4 + 9^4 \\
10994 &:= 3^4 + 4^4 + 8^4 + 9^4 \\
10995 &:= 1^4 + 3^4 + 4^4 + 8^4 + 9^4 \\
11010 &:= 2^4 + 3^4 + 4^4 + 8^4 + 9^4 \\
11011 &:= 1^4 + 2^4 + 3^4 + 4^4 + 8^4 + 9^4 \\
11139 &:= 4^4 + 5^4 + 6^4 + 7^4 + 9^4 \\
11140 &:= 1^4 + 4^4 + 5^4 + 6^4 + 7^4 + 9^4 \\
11144 &:= 3^5 + 5^5 + 6^5 \\
11145 &:= 1^5 + 3^5 + 5^5 + 6^5 \\
11155 &:= 2^4 + 4^4 + 5^4 + 6^4 + 7^4 + 9^4 \\
11156 &:= 1^4 + 2^4 + 4^4 + 5^4 + 6^4 + 7^4 + 9^4 \\
11176 &:= 2^5 + 3^5 + 5^5 + 6^5 \\
11177 &:= 1^5 + 2^5 + 3^5 + 5^5 + 6^5 \\
11220 &:= 3^4 + 4^4 + 5^4 + 6^4 + 7^4 + 9^4 \\
11221 &:= 1^4 + 3^4 + 4^4 + 5^4 + 6^4 + 7^4 + 9^4 \\
11236 &:= 2^4 + 3^4 + 4^4 + 5^4 + 6^4 + 7^4 + 9^4 \\
11237 &:= 1^4 + 2^4 + 3^4 + 4^4 + 5^4 + 6^4 + 7^4 + 9^4 \\
11282 &:= 5^4 + 8^4 + 9^4 \\
11283 &:= 1^4 + 5^4 + 8^4 + 9^4 \\
11298 &:= 2^4 + 5^4 + 8^4 + 9^4 \\
11299 &:= 1^4 + 2^4 + 5^4 + 8^4 + 9^4 \\
11363 &:= 3^4 + 5^4 + 8^4 + 9^4 \\
11364 &:= 1^4 + 3^4 + 5^4 + 8^4 + 9^4 \\
11379 &:= 2^4 + 3^4 + 5^4 + 8^4 + 9^4 \\
11380 &:= 1^4 + 2^4 + 3^4 + 5^4 + 8^4 + 9^4 \\
11538 &:= 4^4 + 5^4 + 8^4 + 9^4 \\
11539 &:= 1^4 + 4^4 + 5^4 + 8^4 + 9^4 \\
11554 &:= 2^4 + 4^4 + 5^4 + 8^4 + 9^4 \\
11555 &:= 1^4 + 2^4 + 4^4 + 5^4 + 8^4 + 9^4 \\
11619 &:= 3^4 + 4^4 + 5^4 + 8^4 + 9^4
\end{aligned}$$

$$11620 := 1^4 + 3^4 + 4^4 + 5^4 + 8^4 + 9^4$$

$$11635 := 2^4 + 3^4 + 4^4 + 5^4 + 8^4 + 9^4$$

$$11636 := 1^4 + 2^4 + 3^4 + 4^4 + 5^4 + 8^4 + 9^4$$

$$11925 := 4^5 + 5^5 + 6^5$$

$$11926 := 1^5 + 4^5 + 5^5 + 6^5$$

$$11953 := 6^4 + 8^4 + 9^4$$

$$11954 := 1^4 + 6^4 + 8^4 + 9^4$$

$$11957 := 2^5 + 4^5 + 5^5 + 6^5$$

$$11958 := 1^5 + 2^5 + 4^5 + 5^5 + 6^5$$

$$11969 := 2^4 + 6^4 + 8^4 + 9^4$$

$$11970 := 1^4 + 2^4 + 6^4 + 8^4 + 9^4$$

$$12034 := 3^4 + 6^4 + 8^4 + 9^4$$

$$12035 := 1^4 + 3^4 + 6^4 + 8^4 + 9^4$$

$$12050 := 2^4 + 3^4 + 6^4 + 8^4 + 9^4$$

$$12051 := 1^4 + 2^4 + 3^4 + 6^4 + 8^4 + 9^4$$

$$12168 := 3^5 + 4^5 + 5^5 + 6^5$$

$$12169 := 1^5 + 3^5 + 4^5 + 5^5 + 6^5$$

$$12200 := 2^5 + 3^5 + 4^5 + 5^5 + 6^5$$

$$12201 := 1^5 + 2^5 + 3^5 + 4^5 + 5^5 + 6^5$$

$$12209 := 4^4 + 6^4 + 8^4 + 9^4$$

$$12210 := 1^4 + 4^4 + 6^4 + 8^4 + 9^4$$

$$12225 := 2^4 + 4^4 + 6^4 + 8^4 + 9^4$$

$$12226 := 1^4 + 2^4 + 4^4 + 6^4 + 8^4 + 9^4$$

$$12290 := 3^4 + 4^4 + 6^4 + 8^4 + 9^4$$

$$12291 := 1^4 + 3^4 + 4^4 + 6^4 + 8^4 + 9^4$$

$$12306 := 2^4 + 3^4 + 4^4 + 6^4 + 8^4 + 9^4$$

$$12307 := 1^4 + 2^4 + 3^4 + 4^4 + 6^4 + 8^4 + 9^4$$

$$12578 := 5^4 + 6^4 + 8^4 + 9^4$$

$$12579 := 1^4 + 5^4 + 6^4 + 8^4 + 9^4$$

$$12594 := 2^4 + 5^4 + 6^4 + 8^4 + 9^4$$

$$12595 := 1^4 + 2^4 + 5^4 + 6^4 + 8^4 + 9^4$$

$$12659 := 3^4 + 5^4 + 6^4 + 8^4 + 9^4$$

$$12660 := 1^4 + 3^4 + 5^4 + 6^4 + 8^4 + 9^4$$

$$12675 := 2^4 + 3^4 + 5^4 + 6^4 + 8^4 + 9^4$$

$$12676 := 1^4 + 2^4 + 3^4 + 5^4 + 6^4 + 8^4 + 9^4$$

$$12834 := 4^4 + 5^4 + 6^4 + 8^4 + 9^4$$

$$12835 := 1^4 + 4^4 + 5^4 + 6^4 + 8^4 + 9^4$$

$$12850 := 2^4 + 4^4 + 5^4 + 6^4 + 8^4 + 9^4$$

$$12851 := 1^4 + 2^4 + 4^4 + 5^4 + 6^4 + 8^4 + 9^4$$

$$12915 := 3^4 + 4^4 + 5^4 + 6^4 + 8^4 + 9^4$$

$$12916 := 1^4 + 3^4 + 4^4 + 5^4 + 6^4 + 8^4 + 9^4$$

$$12931 := 2^4 + 3^4 + 4^4 + 5^4 + 6^4 + 8^4 + 9^4$$

$$12932 := 1^4 + 2^4 + 3^4 + 4^4 + 5^4 + 6^4 + 8^4 + 9^4$$

$$13058 := 7^4 + 8^4 + 9^4$$

$$13059 := 1^4 + 7^4 + 8^4 + 9^4$$

$$13074 := 2^4 + 7^4 + 8^4 + 9^4$$

$$13075 := 1^4 + 2^4 + 7^4 + 8^4 + 9^4$$

$$13139 := 3^4 + 7^4 + 8^4 + 9^4$$

$$13140 := 1^4 + 3^4 + 7^4 + 8^4 + 9^4$$

$$13155 := 2^4 + 3^4 + 7^4 + 8^4 + 9^4$$

$$13156 := 1^4 + 2^4 + 3^4 + 7^4 + 8^4 + 9^4$$

$$13314 := 4^4 + 7^4 + 8^4 + 9^4$$

$$13315 := 1^4 + 4^4 + 7^4 + 8^4 + 9^4$$

$$13330 := 2^4 + 4^4 + 7^4 + 8^4 + 9^4$$

$$13331 := 1^4 + 2^4 + 4^4 + 7^4 + 8^4 + 9^4$$

$$13395 := 3^4 + 4^4 + 7^4 + 8^4 + 9^4$$

$$13396 := 1^4 + 3^4 + 4^4 + 7^4 + 8^4 + 9^4$$

$$13411 := 2^4 + 3^4 + 4^4 + 7^4 + 8^4 + 9^4$$

$$13412 := 1^4 + 2^4 + 3^4 + 4^4 + 7^4 + 8^4 + 9^4$$

$$13683 := 5^4 + 7^4 + 8^4 + 9^4$$

$$13684 := 1^4 + 5^4 + 7^4 + 8^4 + 9^4$$

$$13699 := 2^4 + 5^4 + 7^4 + 8^4 + 9^4$$

$$13700 := 1^4 + 2^4 + 5^4 + 7^4 + 8^4 + 9^4$$

$$13764 := 3^4 + 5^4 + 7^4 + 8^4 + 9^4$$

$$13765 := 1^4 + 3^4 + 5^4 + 7^4 + 8^4 + 9^4$$

$$13780 := 2^4 + 3^4 + 5^4 + 7^4 + 8^4 + 9^4$$

$$13781 := 1^4 + 2^4 + 3^4 + 5^4 + 7^4 + 8^4 + 9^4$$

$$13939 := 4^4 + 5^4 + 7^4 + 8^4 + 9^4$$

$$13940 := 1^4 + 4^4 + 5^4 + 7^4 + 8^4 + 9^4$$

$$13955 := 2^4 + 4^4 + 5^4 + 7^4 + 8^4 + 9^4$$

$$13956 := 1^4 + 2^4 + 4^4 + 5^4 + 7^4 + 8^4 + 9^4$$

$$14020 := 3^4 + 4^4 + 5^4 + 7^4 + 8^4 + 9^4$$

$$14021 := 1^4 + 3^4 + 4^4 + 5^4 + 7^4 + 8^4 + 9^4$$

$$14036 := 2^4 + 3^4 + 4^4 + 5^4 + 7^4 + 8^4 + 9^4$$

$$14037 := 1^4 + 2^4 + 3^4 + 4^4 + 5^4 + 7^4 + 8^4 + 9^4$$

$$14354 := 6^4 + 7^4 + 8^4 + 9^4$$

14355 := $1^4 + 6^4 + 7^4 + 8^4 + 9^4$	$:= 4^7$
14370 := $2^4 + 6^4 + 7^4 + 8^4 + 9^4$	16385 := $1^{14} + 2^{14}$
14371 := $1^4 + 2^4 + 6^4 + 7^4 + 8^4 + 9^4$	$:= 1^7 + 4^7$
14435 := $3^4 + 6^4 + 7^4 + 8^4 + 9^4$	16418 := $2^6 + 3^6 + 5^6$
14436 := $1^4 + 3^4 + 6^4 + 7^4 + 8^4 + 9^4$	16419 := $1^6 + 2^6 + 3^6 + 5^6$
14451 := $2^4 + 3^4 + 6^4 + 7^4 + 8^4 + 9^4$	16512 := $2^7 + 4^7$
14452 := $1^4 + 2^4 + 3^4 + 6^4 + 7^4 + 8^4 + 9^4$	16513 := $1^7 + 2^7 + 4^7$
14610 := $4^4 + 6^4 + 7^4 + 8^4 + 9^4$	16807 := 7^5
14611 := $1^4 + 4^4 + 6^4 + 7^4 + 8^4 + 9^4$	16808 := $1^5 + 7^5$
14626 := $2^4 + 4^4 + 6^4 + 7^4 + 8^4 + 9^4$	16839 := $2^5 + 7^5$
14627 := $1^4 + 2^4 + 4^4 + 6^4 + 7^4 + 8^4 + 9^4$	16840 := $1^5 + 2^5 + 7^5$
14691 := $3^4 + 4^4 + 6^4 + 7^4 + 8^4 + 9^4$	17050 := $3^5 + 7^5$
14692 := $1^4 + 3^4 + 4^4 + 6^4 + 7^4 + 8^4 + 9^4$	17051 := $1^5 + 3^5 + 7^5$
14707 := $2^4 + 3^4 + 4^4 + 6^4 + 7^4 + 8^4 + 9^4$	17082 := $2^5 + 3^5 + 7^5$
14708 := $1^4 + 2^4 + 3^4 + 4^4 + 6^4 + 7^4 + 8^4 + 9^4$	17083 := $1^5 + 2^5 + 3^5 + 7^5$
14979 := $5^4 + 6^4 + 7^4 + 8^4 + 9^4$	17831 := $4^5 + 7^5$
14980 := $1^4 + 5^4 + 6^4 + 7^4 + 8^4 + 9^4$	17832 := $1^5 + 4^5 + 7^5$
14995 := $2^4 + 5^4 + 6^4 + 7^4 + 8^4 + 9^4$	17863 := $2^5 + 4^5 + 7^5$
14996 := $1^4 + 2^4 + 5^4 + 6^4 + 7^4 + 8^4 + 9^4$	17864 := $1^5 + 2^5 + 4^5 + 7^5$
15060 := $3^4 + 5^4 + 6^4 + 7^4 + 8^4 + 9^4$	18074 := $3^5 + 4^5 + 7^5$
15061 := $1^4 + 3^4 + 5^4 + 6^4 + 7^4 + 8^4 + 9^4$	18075 := $1^5 + 3^5 + 4^5 + 7^5$
15076 := $2^4 + 3^4 + 5^4 + 6^4 + 7^4 + 8^4 + 9^4$	18106 := $2^5 + 3^5 + 4^5 + 7^5$
15077 := $1^4 + 2^4 + 3^4 + 5^4 + 6^4 + 7^4 + 8^4 + 9^4$	18107 := $1^5 + 2^5 + 3^5 + 4^5 + 7^5$
15235 := $4^4 + 5^4 + 6^4 + 7^4 + 8^4 + 9^4$	18571 := $3^7 + 4^7$
15236 := $1^4 + 4^4 + 5^4 + 6^4 + 7^4 + 8^4 + 9^4$	18572 := $1^7 + 3^7 + 4^7$
15251 := $2^4 + 4^4 + 5^4 + 6^4 + 7^4 + 8^4 + 9^4$	18699 := $2^7 + 3^7 + 4^7$
15252 := $1^4 + 2^4 + 4^4 + 5^4 + 6^4 + 7^4 + 8^4 + 9^4$	18700 := $1^7 + 2^7 + 3^7 + 4^7$
15316 := $3^4 + 4^4 + 5^4 + 6^4 + 7^4 + 8^4 + 9^4$	19683 := 3^9
15317 := $1^4 + 3^4 + 4^4 + 5^4 + 6^4 + 7^4 + 8^4 + 9^4$	19684 := $1^9 + 3^9$
15332 := $2^4 + 3^4 + 4^4 + 5^4 + 6^4 + 7^4 + 8^4 + 9^4$	19721 := $4^6 + 5^6$
15333 := $1^4 + 2^4 + 3^4 + 4^4 + 5^4 + 6^4 + 7^4 + 8^4 + 9^4$	19722 := $1^6 + 4^6 + 5^6$
15625 := 5^6	19785 := $2^6 + 4^6 + 5^6$
15626 := $1^6 + 5^6$	19786 := $1^6 + 2^6 + 4^6 + 5^6$
15689 := $2^6 + 5^6$	19932 := $5^5 + 7^5$
15690 := $1^6 + 2^6 + 5^6$	19933 := $1^5 + 5^5 + 7^5$
16354 := $3^6 + 5^6$	19964 := $2^5 + 5^5 + 7^5$
16355 := $1^6 + 3^6 + 5^6$	19965 := $1^5 + 2^5 + 5^5 + 7^5$
16384 := 2^{14}	20175 := $3^5 + 5^5 + 7^5$

$$20176 := 1^5 + 3^5 + 5^5 + 7^5$$

$$20195 := 2^9 + 3^9$$

$$20196 := 1^9 + 2^9 + 3^9$$

$$20207 := 2^5 + 3^5 + 5^5 + 7^5$$

$$20208 := 1^5 + 2^5 + 3^5 + 5^5 + 7^5$$

$$20450 := 3^6 + 4^6 + 5^6$$

$$20451 := 1^6 + 3^6 + 4^6 + 5^6$$

$$20514 := 2^6 + 3^6 + 4^6 + 5^6$$

$$20515 := 1^6 + 2^6 + 3^6 + 4^6 + 5^6$$

$$20956 := 4^5 + 5^5 + 7^5$$

$$20957 := 1^5 + 4^5 + 5^5 + 7^5$$

$$20988 := 2^5 + 4^5 + 5^5 + 7^5$$

$$20989 := 1^5 + 2^5 + 4^5 + 5^5 + 7^5$$

$$21199 := 3^5 + 4^5 + 5^5 + 7^5$$

$$21200 := 1^5 + 3^5 + 4^5 + 5^5 + 7^5$$

$$21231 := 2^5 + 3^5 + 4^5 + 5^5 + 7^5$$

$$21232 := 1^5 + 2^5 + 3^5 + 4^5 + 5^5 + 7^5$$

$$24583 := 6^5 + 7^5$$

$$24584 := 1^5 + 6^5 + 7^5$$

$$24615 := 2^5 + 6^5 + 7^5$$

$$24616 := 1^5 + 2^5 + 6^5 + 7^5$$

$$24826 := 3^5 + 6^5 + 7^5$$

$$24827 := 1^5 + 3^5 + 6^5 + 7^5$$

$$24858 := 2^5 + 3^5 + 6^5 + 7^5$$

$$24859 := 1^5 + 2^5 + 3^5 + 6^5 + 7^5$$

$$25607 := 4^5 + 6^5 + 7^5$$

$$25608 := 1^5 + 4^5 + 6^5 + 7^5$$

$$25639 := 2^5 + 4^5 + 6^5 + 7^5$$

$$25640 := 1^5 + 2^5 + 4^5 + 6^5 + 7^5$$

$$25850 := 3^5 + 4^5 + 6^5 + 7^5$$

$$25851 := 1^5 + 3^5 + 4^5 + 6^5 + 7^5$$

$$25882 := 2^5 + 3^5 + 4^5 + 6^5 + 7^5$$

$$25883 := 1^5 + 2^5 + 3^5 + 4^5 + 6^5 + 7^5$$

$$27708 := 5^5 + 6^5 + 7^5$$

$$27709 := 1^5 + 5^5 + 6^5 + 7^5$$

$$27740 := 2^5 + 5^5 + 6^5 + 7^5$$

$$27741 := 1^5 + 2^5 + 5^5 + 6^5 + 7^5$$

$$27951 := 3^5 + 5^5 + 6^5 + 7^5$$

$$27952 := 1^5 + 3^5 + 5^5 + 6^5 + 7^5$$

$$27983 := 2^5 + 3^5 + 5^5 + 6^5 + 7^5$$

$$27984 := 1^5 + 2^5 + 3^5 + 5^5 + 6^5 + 7^5$$

$$28732 := 4^5 + 5^5 + 6^5 + 7^5$$

$$28733 := 1^5 + 4^5 + 5^5 + 6^5 + 7^5$$

$$28764 := 2^5 + 4^5 + 5^5 + 6^5 + 7^5$$

$$28765 := 1^5 + 2^5 + 4^5 + 5^5 + 6^5 + 7^5$$

$$28975 := 3^5 + 4^5 + 5^5 + 6^5 + 7^5$$

$$28976 := 1^5 + 3^5 + 4^5 + 5^5 + 6^5 + 7^5$$

$$29007 := 2^5 + 3^5 + 4^5 + 5^5 + 6^5 + 7^5$$

$$29008 := 1^5 + 2^5 + 3^5 + 4^5 + 5^5 + 6^5 + 7^5$$

$$32768 := 2^{15}$$

$$:= 8^5$$

$$32769 := 1^{15} + 2^{15}$$

$$:= 1^5 + 8^5$$

$$32800 := 2^5 + 8^5$$

$$32801 := 1^5 + 2^5 + 8^5$$

$$33011 := 3^5 + 8^5$$

$$33012 := 1^5 + 3^5 + 8^5$$

$$33043 := 2^5 + 3^5 + 8^5$$

$$33044 := 1^5 + 2^5 + 3^5 + 8^5$$

$$33792 := 4^5 + 8^5$$

$$33793 := 1^5 + 4^5 + 8^5$$

$$33824 := 2^5 + 4^5 + 8^5$$

$$33825 := 1^5 + 2^5 + 4^5 + 8^5$$

$$34035 := 3^5 + 4^5 + 8^5$$

$$34036 := 1^5 + 3^5 + 4^5 + 8^5$$

$$34067 := 2^5 + 3^5 + 4^5 + 8^5$$

$$34068 := 1^5 + 2^5 + 3^5 + 4^5 + 8^5$$

$$35893 := 5^5 + 8^5$$

$$35894 := 1^5 + 5^5 + 8^5$$

$$35925 := 2^5 + 5^5 + 8^5$$

$$35926 := 1^5 + 2^5 + 5^5 + 8^5$$

$$36136 := 3^5 + 5^5 + 8^5$$

$$36137 := 1^5 + 3^5 + 5^5 + 8^5$$

$$36168 := 2^5 + 3^5 + 5^5 + 8^5$$

$$36169 := 1^5 + 2^5 + 3^5 + 5^5 + 8^5$$

$$36917 := 4^5 + 5^5 + 8^5$$

$$36918 := 1^5 + 4^5 + 5^5 + 8^5$$

$$36949 := 2^5 + 4^5 + 5^5 + 8^5$$

$$36950 := 1^5 + 2^5 + 4^5 + 5^5 + 8^5$$

$$37160 := 3^5 + 4^5 + 5^5 + 8^5$$

$$37161 := 1^5 + 3^5 + 4^5 + 5^5 + 8^5$$

$$37192 := 2^5 + 3^5 + 4^5 + 5^5 + 8^5$$

$$37193 := 1^5 + 2^5 + 3^5 + 4^5 + 5^5 + 8^5$$

$$40544 := 6^5 + 8^5$$

$$40545 := 1^5 + 6^5 + 8^5$$

$$40576 := 2^5 + 6^5 + 8^5$$

$$40577 := 1^5 + 2^5 + 6^5 + 8^5$$

$$40787 := 3^5 + 6^5 + 8^5$$

$$40788 := 1^5 + 3^5 + 6^5 + 8^5$$

$$40819 := 2^5 + 3^5 + 6^5 + 8^5$$

$$40820 := 1^5 + 2^5 + 3^5 + 6^5 + 8^5$$

$$41568 := 4^5 + 6^5 + 8^5$$

$$41569 := 1^5 + 4^5 + 6^5 + 8^5$$

$$41600 := 2^5 + 4^5 + 6^5 + 8^5$$

$$41601 := 1^5 + 2^5 + 4^5 + 6^5 + 8^5$$

$$41811 := 3^5 + 4^5 + 6^5 + 8^5$$

$$41812 := 1^5 + 3^5 + 4^5 + 6^5 + 8^5$$

$$41843 := 2^5 + 3^5 + 4^5 + 6^5 + 8^5$$

$$41844 := 1^5 + 2^5 + 3^5 + 4^5 + 6^5 + 8^5$$

$$43669 := 5^5 + 6^5 + 8^5$$

$$43670 := 1^5 + 5^5 + 6^5 + 8^5$$

$$43701 := 2^5 + 5^5 + 6^5 + 8^5$$

$$43702 := 1^5 + 2^5 + 5^5 + 6^5 + 8^5$$

$$43912 := 3^5 + 5^5 + 6^5 + 8^5$$

$$43913 := 1^5 + 3^5 + 5^5 + 6^5 + 8^5$$

$$43944 := 2^5 + 3^5 + 5^5 + 6^5 + 8^5$$

$$43945 := 1^5 + 2^5 + 3^5 + 5^5 + 6^5 + 8^5$$

$$44693 := 4^5 + 5^5 + 6^5 + 8^5$$

$$44694 := 1^5 + 4^5 + 5^5 + 6^5 + 8^5$$

$$44725 := 2^5 + 4^5 + 5^5 + 6^5 + 8^5$$

$$44726 := 1^5 + 2^5 + 4^5 + 5^5 + 6^5 + 8^5$$

$$44936 := 3^5 + 4^5 + 5^5 + 6^5 + 8^5$$

$$44937 := 1^5 + 3^5 + 4^5 + 5^5 + 6^5 + 8^5$$

$$44968 := 2^5 + 3^5 + 4^5 + 5^5 + 6^5 + 8^5$$

$$44969 := 1^5 + 2^5 + 3^5 + 4^5 + 5^5 + 6^5 + 8^5$$

$$46656 := 6^6$$

$$46657 := 1^6 + 6^6$$

$$46720 := 2^6 + 6^6$$

$$46721 := 1^6 + 2^6 + 6^6$$

$$47385 := 3^6 + 6^6$$

$$47386 := 1^6 + 3^6 + 6^6$$

$$47449 := 2^6 + 3^6 + 6^6$$

$$47450 := 1^6 + 2^6 + 3^6 + 6^6$$

$$49575 := 7^5 + 8^5$$

$$49576 := 1^5 + 7^5 + 8^5$$

$$49607 := 2^5 + 7^5 + 8^5$$

$$49608 := 1^5 + 2^5 + 7^5 + 8^5$$

$$49818 := 3^5 + 7^5 + 8^5$$

$$49819 := 1^5 + 3^5 + 7^5 + 8^5$$

$$49850 := 2^5 + 3^5 + 7^5 + 8^5$$

$$49851 := 1^5 + 2^5 + 3^5 + 7^5 + 8^5$$

$$50599 := 4^5 + 7^5 + 8^5$$

$$50600 := 1^5 + 4^5 + 7^5 + 8^5$$

$$50631 := 2^5 + 4^5 + 7^5 + 8^5$$

$$50632 := 1^5 + 2^5 + 4^5 + 7^5 + 8^5$$

$$50752 := 4^6 + 6^6$$

$$50753 := 1^6 + 4^6 + 6^6$$

$$50816 := 2^6 + 4^6 + 6^6$$

$$50817 := 1^6 + 2^6 + 4^6 + 6^6$$

$$50842 := 3^5 + 4^5 + 7^5 + 8^5$$

$$50843 := 1^5 + 3^5 + 4^5 + 7^5 + 8^5$$

$$50874 := 2^5 + 3^5 + 4^5 + 7^5 + 8^5$$

$$50875 := 1^5 + 2^5 + 3^5 + 4^5 + 7^5 + 8^5$$

$$51481 := 3^6 + 4^6 + 6^6$$

$$51482 := 1^6 + 3^6 + 4^6 + 6^6$$

$$51545 := 2^6 + 3^6 + 4^6 + 6^6$$

$$51546 := 1^6 + 2^6 + 3^6 + 4^6 + 6^6$$

$$52700 := 5^5 + 7^5 + 8^5$$

$$52701 := 1^5 + 5^5 + 7^5 + 8^5$$

$$52732 := 2^5 + 5^5 + 7^5 + 8^5$$

$$52733 := 1^5 + 2^5 + 5^5 + 7^5 + 8^5$$

$$52943 := 3^5 + 5^5 + 7^5 + 8^5$$

$$52944 := 1^5 + 3^5 + 5^5 + 7^5 + 8^5$$

$$52975 := 2^5 + 3^5 + 5^5 + 7^5 + 8^5$$

$$52976 := 1^5 + 2^5 + 3^5 + 5^5 + 7^5 + 8^5$$

$$53724 := 4^5 + 5^5 + 7^5 + 8^5$$

$$53725 := 1^5 + 4^5 + 5^5 + 7^5 + 8^5$$

$$53756 := 2^5 + 4^5 + 5^5 + 7^5 + 8^5$$

$$53757 := 1^5 + 2^5 + 4^5 + 5^5 + 7^5 + 8^5$$

$$53967 := 3^5 + 4^5 + 5^5 + 7^5 + 8^5$$

$$53968 := 1^5 + 3^5 + 4^5 + 5^5 + 7^5 + 8^5$$

$$53999 := 2^5 + 3^5 + 4^5 + 5^5 + 7^5 + 8^5$$

$$54000 := 1^5 + 2^5 + 3^5 + 4^5 + 5^5 + 7^5 + 8^5$$

$$57351 := 6^5 + 7^5 + 8^5$$

$$57352 := 1^5 + 6^5 + 7^5 + 8^5$$

$$57383 := 2^5 + 6^5 + 7^5 + 8^5$$

$$57384 := 1^5 + 2^5 + 6^5 + 7^5 + 8^5$$

$$57594 := 3^5 + 6^5 + 7^5 + 8^5$$

$$57595 := 1^5 + 3^5 + 6^5 + 7^5 + 8^5$$

$$57626 := 2^5 + 3^5 + 6^5 + 7^5 + 8^5$$

$$57627 := 1^5 + 2^5 + 3^5 + 6^5 + 7^5 + 8^5$$

$$58375 := 4^5 + 6^5 + 7^5 + 8^5$$

$$58376 := 1^5 + 4^5 + 6^5 + 7^5 + 8^5$$

$$58407 := 2^5 + 4^5 + 6^5 + 7^5 + 8^5$$

$$58408 := 1^5 + 2^5 + 4^5 + 6^5 + 7^5 + 8^5$$

$$58618 := 3^5 + 4^5 + 6^5 + 7^5 + 8^5$$

$$58619 := 1^5 + 3^5 + 4^5 + 6^5 + 7^5 + 8^5$$

$$58650 := 2^5 + 3^5 + 4^5 + 6^5 + 7^5 + 8^5$$

$$58651 := 1^5 + 2^5 + 3^5 + 4^5 + 6^5 + 7^5 + 8^5$$

$$59049 := 3^{10}$$

$$:= 9^5$$

$$59050 := 1^{10} + 3^{10}$$

$$:= 1^5 + 9^5$$

$$59081 := 2^5 + 9^5$$

$$59082 := 1^5 + 2^5 + 9^5$$

$$59292 := 3^5 + 9^5$$

$$59293 := 1^5 + 3^5 + 9^5$$

$$59324 := 2^5 + 3^5 + 9^5$$

$$59325 := 1^5 + 2^5 + 3^5 + 9^5$$

$$60073 := 2^{10} + 3^{10}$$

$$:= 4^5 + 9^5$$

$$60074 := 1^{10} + 2^{10} + 3^{10}$$

$$:= 1^5 + 4^5 + 9^5$$

$$60105 := 2^5 + 4^5 + 9^5$$

$$60106 := 1^5 + 2^5 + 4^5 + 9^5$$

$$60316 := 3^5 + 4^5 + 9^5$$

$$60317 := 1^5 + 3^5 + 4^5 + 9^5$$

$$60348 := 2^5 + 3^5 + 4^5 + 9^5$$

$$60349 := 1^5 + 2^5 + 3^5 + 4^5 + 9^5$$

$$60476 := 5^5 + 6^5 + 7^5 + 8^5$$

$$60477 := 1^5 + 5^5 + 6^5 + 7^5 + 8^5$$

$$60508 := 2^5 + 5^5 + 6^5 + 7^5 + 8^5$$

$$60509 := 1^5 + 2^5 + 5^5 + 6^5 + 7^5 + 8^5$$

$$60719 := 3^5 + 5^5 + 6^5 + 7^5 + 8^5$$

$$60720 := 1^5 + 3^5 + 5^5 + 6^5 + 7^5 + 8^5$$

$$60751 := 2^5 + 3^5 + 5^5 + 6^5 + 7^5 + 8^5$$

$$60752 := 1^5 + 2^5 + 3^5 + 5^5 + 6^5 + 7^5 + 8^5$$

$$61500 := 4^5 + 5^5 + 6^5 + 7^5 + 8^5$$

$$61501 := 1^5 + 4^5 + 5^5 + 6^5 + 7^5 + 8^5$$

$$61532 := 2^5 + 4^5 + 5^5 + 6^5 + 7^5 + 8^5$$

$$61533 := 1^5 + 2^5 + 4^5 + 5^5 + 6^5 + 7^5 + 8^5$$

$$61743 := 3^5 + 4^5 + 5^5 + 6^5 + 7^5 + 8^5$$

$$61744 := 1^5 + 3^5 + 4^5 + 5^5 + 6^5 + 7^5 + 8^5$$

$$61775 := 2^5 + 3^5 + 4^5 + 5^5 + 6^5 + 7^5 + 8^5$$

$$61776 := 1^5 + 2^5 + 3^5 + 4^5 + 5^5 + 6^5 + 7^5 + 8^5$$

$$62174 := 5^5 + 9^5$$

$$62175 := 1^5 + 5^5 + 9^5$$

$$62206 := 2^5 + 5^5 + 9^5$$

$$62207 := 1^5 + 2^5 + 5^5 + 9^5$$

$$62281 := 5^6 + 6^6$$

$$62282 := 1^6 + 5^6 + 6^6$$

$$62345 := 2^6 + 5^6 + 6^6$$

$$62346 := 1^6 + 2^6 + 5^6 + 6^6$$

$$62417 := 3^5 + 5^5 + 9^5$$

$$62418 := 1^5 + 3^5 + 5^5 + 9^5$$

$$62449 := 2^5 + 3^5 + 5^5 + 9^5$$

$$62450 := 1^5 + 2^5 + 3^5 + 5^5 + 9^5$$

$$63010 := 3^6 + 5^6 + 6^6$$

$$\begin{aligned}
63011 &:= 1^6 + 3^6 + 5^6 + 6^6 \\
63074 &:= 2^6 + 3^6 + 5^6 + 6^6 \\
63075 &:= 1^6 + 2^6 + 3^6 + 5^6 + 6^6 \\
63198 &:= 4^5 + 5^5 + 9^5 \\
63199 &:= 1^5 + 4^5 + 5^5 + 9^5 \\
63230 &:= 2^5 + 4^5 + 5^5 + 9^5 \\
63231 &:= 1^5 + 2^5 + 4^5 + 5^5 + 9^5 \\
63441 &:= 3^5 + 4^5 + 5^5 + 9^5 \\
63442 &:= 1^5 + 3^5 + 4^5 + 5^5 + 9^5 \\
63473 &:= 2^5 + 3^5 + 4^5 + 5^5 + 9^5 \\
63474 &:= 1^5 + 2^5 + 3^5 + 4^5 + 5^5 + 9^5 \\
65536 &:= 2^{16} \\
&:= 4^8 \\
65537 &:= 1^{16} + 2^{16} \\
&:= 1^8 + 4^8 \\
65792 &:= 2^8 + 4^8 \\
65793 &:= 1^8 + 2^8 + 4^8 \\
66377 &:= 4^6 + 5^6 + 6^6 \\
66378 &:= 1^6 + 4^6 + 5^6 + 6^6 \\
66441 &:= 2^6 + 4^6 + 5^6 + 6^6 \\
66442 &:= 1^6 + 2^6 + 4^6 + 5^6 + 6^6 \\
66825 &:= 6^5 + 9^5 \\
66826 &:= 1^5 + 6^5 + 9^5 \\
66857 &:= 2^5 + 6^5 + 9^5 \\
66858 &:= 1^5 + 2^5 + 6^5 + 9^5 \\
67068 &:= 3^5 + 6^5 + 9^5 \\
67069 &:= 1^5 + 3^5 + 6^5 + 9^5 \\
67100 &:= 2^5 + 3^5 + 6^5 + 9^5 \\
67101 &:= 1^5 + 2^5 + 3^5 + 6^5 + 9^5 \\
67106 &:= 3^6 + 4^6 + 5^6 + 6^6 \\
67107 &:= 1^6 + 3^6 + 4^6 + 5^6 + 6^6 \\
67170 &:= 2^6 + 3^6 + 4^6 + 5^6 + 6^6 \\
67171 &:= 1^6 + 2^6 + 3^6 + 4^6 + 5^6 + 6^6 \\
67849 &:= 4^5 + 6^5 + 9^5 \\
67850 &:= 1^5 + 4^5 + 6^5 + 9^5 \\
67881 &:= 2^5 + 4^5 + 6^5 + 9^5 \\
67882 &:= 1^5 + 2^5 + 4^5 + 6^5 + 9^5 \\
68092 &:= 3^5 + 4^5 + 6^5 + 9^5
\end{aligned}$$

$$\begin{aligned}
68093 &:= 1^5 + 3^5 + 4^5 + 6^5 + 9^5 \\
68124 &:= 2^5 + 3^5 + 4^5 + 6^5 + 9^5 \\
68125 &:= 1^5 + 2^5 + 3^5 + 4^5 + 6^5 + 9^5 \\
69950 &:= 5^5 + 6^5 + 9^5 \\
69951 &:= 1^5 + 5^5 + 6^5 + 9^5 \\
69982 &:= 2^5 + 5^5 + 6^5 + 9^5 \\
69983 &:= 1^5 + 2^5 + 5^5 + 6^5 + 9^5 \\
70193 &:= 3^5 + 5^5 + 6^5 + 9^5 \\
70194 &:= 1^5 + 3^5 + 5^5 + 6^5 + 9^5 \\
70225 &:= 2^5 + 3^5 + 5^5 + 6^5 + 9^5 \\
70226 &:= 1^5 + 2^5 + 3^5 + 5^5 + 6^5 + 9^5 \\
70974 &:= 4^5 + 5^5 + 6^5 + 9^5 \\
70975 &:= 1^5 + 4^5 + 5^5 + 6^5 + 9^5 \\
71006 &:= 2^5 + 4^5 + 5^5 + 6^5 + 9^5 \\
71007 &:= 1^5 + 2^5 + 4^5 + 5^5 + 6^5 + 9^5 \\
71217 &:= 3^5 + 4^5 + 5^5 + 6^5 + 9^5 \\
71218 &:= 1^5 + 3^5 + 4^5 + 5^5 + 6^5 + 9^5 \\
71249 &:= 2^5 + 3^5 + 4^5 + 5^5 + 6^5 + 9^5 \\
71250 &:= 1^5 + 2^5 + 3^5 + 4^5 + 5^5 + 6^5 + 9^5 \\
72097 &:= 3^8 + 4^8 \\
72098 &:= 1^8 + 3^8 + 4^8 \\
72353 &:= 2^8 + 3^8 + 4^8 \\
72354 &:= 1^8 + 2^8 + 3^8 + 4^8 \\
75856 &:= 7^5 + 9^5 \\
75857 &:= 1^5 + 7^5 + 9^5 \\
75888 &:= 2^5 + 7^5 + 9^5 \\
75889 &:= 1^5 + 2^5 + 7^5 + 9^5 \\
76099 &:= 3^5 + 7^5 + 9^5 \\
76100 &:= 1^5 + 3^5 + 7^5 + 9^5 \\
76131 &:= 2^5 + 3^5 + 7^5 + 9^5 \\
76132 &:= 1^5 + 2^5 + 3^5 + 7^5 + 9^5 \\
76880 &:= 4^5 + 7^5 + 9^5 \\
76881 &:= 1^5 + 4^5 + 7^5 + 9^5 \\
76912 &:= 2^5 + 4^5 + 7^5 + 9^5 \\
76913 &:= 1^5 + 2^5 + 4^5 + 7^5 + 9^5 \\
77123 &:= 3^5 + 4^5 + 7^5 + 9^5 \\
77124 &:= 1^5 + 3^5 + 4^5 + 7^5 + 9^5 \\
77155 &:= 2^5 + 3^5 + 4^5 + 7^5 + 9^5
\end{aligned}$$

$$77156 := 1^5 + 2^5 + 3^5 + 4^5 + 7^5 + 9^5$$

$$78125 := 5^7$$

$$78126 := 1^7 + 5^7$$

$$78253 := 2^7 + 5^7$$

$$78254 := 1^7 + 2^7 + 5^7$$

$$78981 := 5^5 + 7^5 + 9^5$$

$$78982 := 1^5 + 5^5 + 7^5 + 9^5$$

$$79013 := 2^5 + 5^5 + 7^5 + 9^5$$

$$79014 := 1^5 + 2^5 + 5^5 + 7^5 + 9^5$$

$$79224 := 3^5 + 5^5 + 7^5 + 9^5$$

$$79225 := 1^5 + 3^5 + 5^5 + 7^5 + 9^5$$

$$79256 := 2^5 + 3^5 + 5^5 + 7^5 + 9^5$$

$$79257 := 1^5 + 2^5 + 3^5 + 5^5 + 7^5 + 9^5$$

$$80005 := 4^5 + 5^5 + 7^5 + 9^5$$

$$80006 := 1^5 + 4^5 + 5^5 + 7^5 + 9^5$$

$$80037 := 2^5 + 4^5 + 5^5 + 7^5 + 9^5$$

$$80038 := 1^5 + 2^5 + 4^5 + 5^5 + 7^5 + 9^5$$

$$80248 := 3^5 + 4^5 + 5^5 + 7^5 + 9^5$$

$$80249 := 1^5 + 3^5 + 4^5 + 5^5 + 7^5 + 9^5$$

$$80280 := 2^5 + 3^5 + 4^5 + 5^5 + 7^5 + 9^5$$

$$80281 := 1^5 + 2^5 + 3^5 + 4^5 + 5^5 + 7^5 + 9^5$$

$$80312 := 3^7 + 5^7$$

$$80313 := 1^7 + 3^7 + 5^7$$

$$80440 := 2^7 + 3^7 + 5^7$$

$$80441 := 1^7 + 2^7 + 3^7 + 5^7$$

$$83632 := 6^5 + 7^5 + 9^5$$

$$83633 := 1^5 + 6^5 + 7^5 + 9^5$$

$$83664 := 2^5 + 6^5 + 7^5 + 9^5$$

$$83665 := 1^5 + 2^5 + 6^5 + 7^5 + 9^5$$

$$83875 := 3^5 + 6^5 + 7^5 + 9^5$$

$$83876 := 1^5 + 3^5 + 6^5 + 7^5 + 9^5$$

$$83907 := 2^5 + 3^5 + 6^5 + 7^5 + 9^5$$

$$83908 := 1^5 + 2^5 + 3^5 + 6^5 + 7^5 + 9^5$$

$$84656 := 4^5 + 6^5 + 7^5 + 9^5$$

$$84657 := 1^5 + 4^5 + 6^5 + 7^5 + 9^5$$

$$84688 := 2^5 + 4^5 + 6^5 + 7^5 + 9^5$$

$$84689 := 1^5 + 2^5 + 4^5 + 6^5 + 7^5 + 9^5$$

$$84899 := 3^5 + 4^5 + 6^5 + 7^5 + 9^5$$

$$84900 := 1^5 + 3^5 + 4^5 + 6^5 + 7^5 + 9^5$$

$$84931 := 2^5 + 3^5 + 4^5 + 6^5 + 7^5 + 9^5$$

$$84932 := 1^5 + 2^5 + 3^5 + 4^5 + 6^5 + 7^5 + 9^5$$

$$86757 := 5^5 + 6^5 + 7^5 + 9^5$$

$$86758 := 1^5 + 5^5 + 6^5 + 7^5 + 9^5$$

$$86789 := 2^5 + 5^5 + 6^5 + 7^5 + 9^5$$

$$86790 := 1^5 + 2^5 + 5^5 + 6^5 + 7^5 + 9^5$$

$$87000 := 3^5 + 5^5 + 6^5 + 7^5 + 9^5$$

$$87001 := 1^5 + 3^5 + 5^5 + 6^5 + 7^5 + 9^5$$

$$87032 := 2^5 + 3^5 + 5^5 + 6^5 + 7^5 + 9^5$$

$$87033 := 1^5 + 2^5 + 3^5 + 5^5 + 6^5 + 7^5 + 9^5$$

$$87781 := 4^5 + 5^5 + 6^5 + 7^5 + 9^5$$

$$87782 := 1^5 + 4^5 + 5^5 + 6^5 + 7^5 + 9^5$$

$$87813 := 2^5 + 4^5 + 5^5 + 6^5 + 7^5 + 9^5$$

$$87814 := 1^5 + 2^5 + 4^5 + 5^5 + 6^5 + 7^5 + 9^5$$

$$88024 := 3^5 + 4^5 + 5^5 + 6^5 + 7^5 + 9^5$$

$$88025 := 1^5 + 3^5 + 4^5 + 5^5 + 6^5 + 7^5 + 9^5$$

$$88056 := 2^5 + 3^5 + 4^5 + 5^5 + 6^5 + 7^5 + 9^5$$

$$88057 := 1^5 + 2^5 + 3^5 + 4^5 + 5^5 + 6^5 + 7^5 + 9^5$$

$$91817 := 8^5 + 9^5$$

$$91818 := 1^5 + 8^5 + 9^5$$

$$91849 := 2^5 + 8^5 + 9^5$$

$$91850 := 1^5 + 2^5 + 8^5 + 9^5$$

$$92060 := 3^5 + 8^5 + 9^5$$

$$92061 := 1^5 + 3^5 + 8^5 + 9^5$$

$$92092 := 2^5 + 3^5 + 8^5 + 9^5$$

$$92093 := 1^5 + 2^5 + 3^5 + 8^5 + 9^5$$

$$92841 := 4^5 + 8^5 + 9^5$$

$$92842 := 1^5 + 4^5 + 8^5 + 9^5$$

$$92873 := 2^5 + 4^5 + 8^5 + 9^5$$

$$92874 := 1^5 + 2^5 + 4^5 + 8^5 + 9^5$$

$$93084 := 3^5 + 4^5 + 8^5 + 9^5$$

$$93085 := 1^5 + 3^5 + 4^5 + 8^5 + 9^5$$

$$93116 := 2^5 + 3^5 + 4^5 + 8^5 + 9^5$$

$$93117 := 1^5 + 2^5 + 3^5 + 4^5 + 8^5 + 9^5$$

$$94509 := 4^7 + 5^7$$

$$94510 := 1^7 + 4^7 + 5^7$$

$$94637 := 2^7 + 4^7 + 5^7$$

94638 := $1^7 + 2^7 + 4^7 + 5^7$	102719 := $1^5 + 5^5 + 6^5 + 8^5 + 9^5$
94942 := $5^5 + 8^5 + 9^5$	102750 := $2^5 + 5^5 + 6^5 + 8^5 + 9^5$
94943 := $1^5 + 5^5 + 8^5 + 9^5$	102751 := $1^5 + 2^5 + 5^5 + 6^5 + 8^5 + 9^5$
94974 := $2^5 + 5^5 + 8^5 + 9^5$	102961 := $3^5 + 5^5 + 6^5 + 8^5 + 9^5$
94975 := $1^5 + 2^5 + 5^5 + 8^5 + 9^5$	102962 := $1^5 + 3^5 + 5^5 + 6^5 + 8^5 + 9^5$
95185 := $3^5 + 5^5 + 8^5 + 9^5$	102993 := $2^5 + 3^5 + 5^5 + 6^5 + 8^5 + 9^5$
95186 := $1^5 + 3^5 + 5^5 + 8^5 + 9^5$	102994 := $1^5 + 2^5 + 3^5 + 5^5 + 6^5 + 8^5 + 9^5$
95217 := $2^5 + 3^5 + 5^5 + 8^5 + 9^5$	103742 := $4^5 + 5^5 + 6^5 + 8^5 + 9^5$
95218 := $1^5 + 2^5 + 3^5 + 5^5 + 8^5 + 9^5$	103743 := $1^5 + 4^5 + 5^5 + 6^5 + 8^5 + 9^5$
95966 := $4^5 + 5^5 + 8^5 + 9^5$	103774 := $2^5 + 4^5 + 5^5 + 6^5 + 8^5 + 9^5$
95967 := $1^5 + 4^5 + 5^5 + 8^5 + 9^5$	103775 := $1^5 + 2^5 + 4^5 + 5^5 + 6^5 + 8^5 + 9^5$
95998 := $2^5 + 4^5 + 5^5 + 8^5 + 9^5$	103985 := $3^5 + 4^5 + 5^5 + 6^5 + 8^5 + 9^5$
95999 := $1^5 + 2^5 + 4^5 + 5^5 + 8^5 + 9^5$	103986 := $1^5 + 3^5 + 4^5 + 5^5 + 6^5 + 8^5 + 9^5$
96209 := $3^5 + 4^5 + 5^5 + 8^5 + 9^5$	104017 := $2^5 + 3^5 + 4^5 + 5^5 + 6^5 + 8^5 + 9^5$
96210 := $1^5 + 3^5 + 4^5 + 5^5 + 8^5 + 9^5$	104018 := $1^5 + 2^5 + 3^5 + 4^5 + 5^5 + 6^5 + 8^5 + 9^5$
96241 := $2^5 + 3^5 + 4^5 + 5^5 + 8^5 + 9^5$	108624 := $7^5 + 8^5 + 9^5$
96242 := $1^5 + 2^5 + 3^5 + 4^5 + 5^5 + 8^5 + 9^5$	108625 := $1^5 + 7^5 + 8^5 + 9^5$
96696 := $3^7 + 4^7 + 5^7$	108656 := $2^5 + 7^5 + 8^5 + 9^5$
96697 := $1^7 + 3^7 + 4^7 + 5^7$	108657 := $1^5 + 2^5 + 7^5 + 8^5 + 9^5$
96824 := $2^7 + 3^7 + 4^7 + 5^7$	108867 := $3^5 + 7^5 + 8^5 + 9^5$
96825 := $1^7 + 2^7 + 3^7 + 4^7 + 5^7$	108868 := $1^5 + 3^5 + 7^5 + 8^5 + 9^5$
99593 := $6^5 + 8^5 + 9^5$	108899 := $2^5 + 3^5 + 7^5 + 8^5 + 9^5$
99594 := $1^5 + 6^5 + 8^5 + 9^5$	108900 := $1^5 + 2^5 + 3^5 + 7^5 + 8^5 + 9^5$
99625 := $2^5 + 6^5 + 8^5 + 9^5$	109648 := $4^5 + 7^5 + 8^5 + 9^5$
99626 := $1^5 + 2^5 + 6^5 + 8^5 + 9^5$	109649 := $1^5 + 4^5 + 7^5 + 8^5 + 9^5$
99836 := $3^5 + 6^5 + 8^5 + 9^5$	109680 := $2^5 + 4^5 + 7^5 + 8^5 + 9^5$
99837 := $1^5 + 3^5 + 6^5 + 8^5 + 9^5$	109681 := $1^5 + 2^5 + 4^5 + 7^5 + 8^5 + 9^5$
99868 := $2^5 + 3^5 + 6^5 + 8^5 + 9^5$	109891 := $3^5 + 4^5 + 7^5 + 8^5 + 9^5$
99869 := $1^5 + 2^5 + 3^5 + 6^5 + 8^5 + 9^5$	109892 := $1^5 + 3^5 + 4^5 + 7^5 + 8^5 + 9^5$
100617 := $4^5 + 6^5 + 8^5 + 9^5$	109923 := $2^5 + 3^5 + 4^5 + 7^5 + 8^5 + 9^5$
100618 := $1^5 + 4^5 + 6^5 + 8^5 + 9^5$	109924 := $1^5 + 2^5 + 3^5 + 4^5 + 7^5 + 8^5 + 9^5$
100649 := $2^5 + 4^5 + 6^5 + 8^5 + 9^5$	111749 := $5^5 + 7^5 + 8^5 + 9^5$
100650 := $1^5 + 2^5 + 4^5 + 6^5 + 8^5 + 9^5$	111750 := $1^5 + 5^5 + 7^5 + 8^5 + 9^5$
100860 := $3^5 + 4^5 + 6^5 + 8^5 + 9^5$	111781 := $2^5 + 5^5 + 7^5 + 8^5 + 9^5$
100861 := $1^5 + 3^5 + 4^5 + 6^5 + 8^5 + 9^5$	111782 := $1^5 + 2^5 + 5^5 + 7^5 + 8^5 + 9^5$
100892 := $2^5 + 3^5 + 4^5 + 6^5 + 8^5 + 9^5$	111992 := $3^5 + 5^5 + 7^5 + 8^5 + 9^5$
100893 := $1^5 + 2^5 + 3^5 + 4^5 + 6^5 + 8^5 + 9^5$	111993 := $1^5 + 3^5 + 5^5 + 7^5 + 8^5 + 9^5$
102718 := $5^5 + 6^5 + 8^5 + 9^5$	112024 := $2^5 + 3^5 + 5^5 + 7^5 + 8^5 + 9^5$

$$\mathbf{112025} := 1^5 + 2^5 + 3^5 + 5^5 + 7^5 + 8^5 + 9^5$$

$$\mathbf{112773} := 4^5 + 5^5 + 7^5 + 8^5 + 9^5$$

$$\mathbf{112774} := 1^5 + 4^5 + 5^5 + 7^5 + 8^5 + 9^5$$

$$\mathbf{112805} := 2^5 + 4^5 + 5^5 + 7^5 + 8^5 + 9^5$$

$$\mathbf{112806} := 1^5 + 2^5 + 4^5 + 5^5 + 7^5 + 8^5 + 9^5$$

$$\mathbf{113016} := 3^5 + 4^5 + 5^5 + 7^5 + 8^5 + 9^5$$

$$\mathbf{113017} := 1^5 + 3^5 + 4^5 + 5^5 + 7^5 + 8^5 + 9^5$$

$$\mathbf{113048} := 2^5 + 3^5 + 4^5 + 5^5 + 7^5 + 8^5 + 9^5$$

$$\mathbf{113049} := 1^5 + 2^5 + 3^5 + 4^5 + 5^5 + 7^5 + 8^5 + 9^5$$

$$\mathbf{116400} := 6^5 + 7^5 + 8^5 + 9^5$$

$$\mathbf{116401} := 1^5 + 6^5 + 7^5 + 8^5 + 9^5$$

$$\mathbf{116432} := 2^5 + 6^5 + 7^5 + 8^5 + 9^5$$

$$\mathbf{116433} := 1^5 + 2^5 + 6^5 + 7^5 + 8^5 + 9^5$$

$$\mathbf{116643} := 3^5 + 6^5 + 7^5 + 8^5 + 9^5$$

$$\mathbf{116644} := 1^5 + 3^5 + 6^5 + 7^5 + 8^5 + 9^5$$

$$\mathbf{116675} := 2^5 + 3^5 + 6^5 + 7^5 + 8^5 + 9^5$$

$$\mathbf{116676} := 1^5 + 2^5 + 3^5 + 6^5 + 7^5 + 8^5 + 9^5$$

$$\mathbf{117424} := 4^5 + 6^5 + 7^5 + 8^5 + 9^5$$

$$\mathbf{117425} := 1^5 + 4^5 + 6^5 + 7^5 + 8^5 + 9^5$$

$$\mathbf{117456} := 2^5 + 4^5 + 6^5 + 7^5 + 8^5 + 9^5$$

$$\mathbf{117457} := 1^5 + 2^5 + 4^5 + 6^5 + 7^5 + 8^5 + 9^5$$

$$\mathbf{117649} := 7^6$$

$$\mathbf{117650} := 1^6 + 7^6$$

$$\mathbf{117667} := 3^5 + 4^5 + 6^5 + 7^5 + 8^5 + 9^5$$

$$\mathbf{117668} := 1^5 + 3^5 + 4^5 + 6^5 + 7^5 + 8^5 + 9^5$$

$$\mathbf{117699} := 2^5 + 3^5 + 4^5 + 6^5 + 7^5 + 8^5 + 9^5$$

$$\mathbf{117700} := 1^5 + 2^5 + 3^5 + 4^5 + 6^5 + 7^5 + 8^5 + 9^5$$

$$\mathbf{117713} := 2^6 + 7^6$$

$$\mathbf{117714} := 1^6 + 2^6 + 7^6$$

$$\mathbf{118378} := 3^6 + 7^6$$

$$\mathbf{118379} := 1^6 + 3^6 + 7^6$$

$$\mathbf{118442} := 2^6 + 3^6 + 7^6$$

$$\mathbf{118443} := 1^6 + 2^6 + 3^6 + 7^6$$

$$\mathbf{119525} := 5^5 + 6^5 + 7^5 + 8^5 + 9^5$$

$$\mathbf{119526} := 1^5 + 5^5 + 6^5 + 7^5 + 8^5 + 9^5$$

$$\mathbf{119557} := 2^5 + 5^5 + 6^5 + 7^5 + 8^5 + 9^5$$

$$\mathbf{119558} := 1^5 + 2^5 + 5^5 + 6^5 + 7^5 + 8^5 + 9^5$$

$$\mathbf{119768} := 3^5 + 5^5 + 6^5 + 7^5 + 8^5 + 9^5$$

$$\mathbf{119769} := 1^5 + 3^5 + 5^5 + 6^5 + 7^5 + 8^5 + 9^5$$

$$\mathbf{119800} := 2^5 + 3^5 + 5^5 + 6^5 + 7^5 + 8^5 + 9^5$$

$$\mathbf{119801} := 1^5 + 2^5 + 3^5 + 5^5 + 6^5 + 7^5 + 8^5 + 9^5$$

$$\mathbf{120549} := 4^5 + 5^5 + 6^5 + 7^5 + 8^5 + 9^5$$

$$\mathbf{120550} := 1^5 + 4^5 + 5^5 + 6^5 + 7^5 + 8^5 + 9^5$$

$$\mathbf{120581} := 2^5 + 4^5 + 5^5 + 6^5 + 7^5 + 8^5 + 9^5$$

$$\mathbf{120582} := 1^5 + 2^5 + 4^5 + 5^5 + 6^5 + 7^5 + 8^5 + 9^5$$

$$\mathbf{120792} := 3^5 + 4^5 + 5^5 + 6^5 + 7^5 + 8^5 + 9^5$$

$$\mathbf{120793} := 1^5 + 3^5 + 4^5 + 5^5 + 6^5 + 7^5 + 8^5 + 9^5$$

$$\mathbf{120824} := 2^5 + 3^5 + 4^5 + 5^5 + 6^5 + 7^5 + 8^5 + 9^5$$

$$\mathbf{120825} := 1^5 + 2^5 + 3^5 + 4^5 + 5^5 + 6^5 + 7^5 + 8^5 + 9^5$$

$$\mathbf{121745} := 4^6 + 7^6$$

$$\mathbf{121746} := 1^6 + 4^6 + 7^6$$

$$\mathbf{121809} := 2^6 + 4^6 + 7^6$$

$$\mathbf{121810} := 1^6 + 2^6 + 4^6 + 7^6$$

$$\mathbf{122474} := 3^6 + 4^6 + 7^6$$

$$\mathbf{122475} := 1^6 + 3^6 + 4^6 + 7^6$$

$$\mathbf{122538} := 2^6 + 3^6 + 4^6 + 7^6$$

$$\mathbf{122539} := 1^6 + 2^6 + 3^6 + 4^6 + 7^6$$

$$\mathbf{131072} := 2^{17}$$

$$\mathbf{131073} := 1^{17} + 2^{17}$$

$$\mathbf{133274} := 5^6 + 7^6$$

$$\mathbf{133275} := 1^6 + 5^6 + 7^6$$

$$\mathbf{133338} := 2^6 + 5^6 + 7^6$$

$$\mathbf{133339} := 1^6 + 2^6 + 5^6 + 7^6$$

$$\mathbf{134003} := 3^6 + 5^6 + 7^6$$

$$\mathbf{134004} := 1^6 + 3^6 + 5^6 + 7^6$$

$$\mathbf{134067} := 2^6 + 3^6 + 5^6 + 7^6$$

$$\mathbf{134068} := 1^6 + 2^6 + 3^6 + 5^6 + 7^6$$

$$\mathbf{137370} := 4^6 + 5^6 + 7^6$$

$$\mathbf{137371} := 1^6 + 4^6 + 5^6 + 7^6$$

$$\mathbf{137434} := 2^6 + 4^6 + 5^6 + 7^6$$

$$\mathbf{137435} := 1^6 + 2^6 + 4^6 + 5^6 + 7^6$$

$$\mathbf{138099} := 3^6 + 4^6 + 5^6 + 7^6$$

$$\mathbf{138100} := 1^6 + 3^6 + 4^6 + 5^6 + 7^6$$

$$\mathbf{138163} := 2^6 + 3^6 + 4^6 + 5^6 + 7^6$$

$$\mathbf{138164} := 1^6 + 2^6 + 3^6 + 4^6 + 5^6 + 7^6$$

$$\mathbf{164305} := 6^6 + 7^6$$

164306 := $1^6 + 6^6 + 7^6$	262145 := $1^{18} + 2^{18}$
164369 := $2^6 + 6^6 + 7^6$:= $1^6 + 8^6$
164370 := $1^6 + 2^6 + 6^6 + 7^6$:= $1^9 + 4^9$
165034 := $3^6 + 6^6 + 7^6$	262208 := $2^6 + 8^6$
165035 := $1^6 + 3^6 + 6^6 + 7^6$	262209 := $1^6 + 2^6 + 8^6$
165098 := $2^6 + 3^6 + 6^6 + 7^6$	262656 := $2^9 + 4^9$
165099 := $1^6 + 2^6 + 3^6 + 6^6 + 7^6$	262657 := $1^9 + 2^9 + 4^9$
168401 := $4^6 + 6^6 + 7^6$	262873 := $3^6 + 8^6$
168402 := $1^6 + 4^6 + 6^6 + 7^6$	262874 := $1^6 + 3^6 + 8^6$
168465 := $2^6 + 4^6 + 6^6 + 7^6$	262937 := $2^6 + 3^6 + 8^6$
168466 := $1^6 + 2^6 + 4^6 + 6^6 + 7^6$	262938 := $1^6 + 2^6 + 3^6 + 8^6$
169130 := $3^6 + 4^6 + 6^6 + 7^6$	266240 := $4^6 + 8^6$
169131 := $1^6 + 3^6 + 4^6 + 6^6 + 7^6$	266241 := $1^6 + 4^6 + 8^6$
169194 := $2^6 + 3^6 + 4^6 + 6^6 + 7^6$	266304 := $2^6 + 4^6 + 8^6$
169195 := $1^6 + 2^6 + 3^6 + 4^6 + 6^6 + 7^6$	266305 := $1^6 + 2^6 + 4^6 + 8^6$
177147 := 3^{11}	266969 := $3^6 + 4^6 + 8^6$
177148 := $1^{11} + 3^{11}$	266970 := $1^6 + 3^6 + 4^6 + 8^6$
179195 := $2^{11} + 3^{11}$	267033 := $2^6 + 3^6 + 4^6 + 8^6$
179196 := $1^{11} + 2^{11} + 3^{11}$	267034 := $1^6 + 2^6 + 3^6 + 4^6 + 8^6$
179930 := $5^6 + 6^6 + 7^6$	277769 := $5^6 + 8^6$
179931 := $1^6 + 5^6 + 6^6 + 7^6$	277770 := $1^6 + 5^6 + 8^6$
179994 := $2^6 + 5^6 + 6^6 + 7^6$	277833 := $2^6 + 5^6 + 8^6$
179995 := $1^6 + 2^6 + 5^6 + 6^6 + 7^6$	277834 := $1^6 + 2^6 + 5^6 + 8^6$
180659 := $3^6 + 5^6 + 6^6 + 7^6$	278498 := $3^6 + 5^6 + 8^6$
180660 := $1^6 + 3^6 + 5^6 + 6^6 + 7^6$	278499 := $1^6 + 3^6 + 5^6 + 8^6$
180723 := $2^6 + 3^6 + 5^6 + 6^6 + 7^6$	278562 := $2^6 + 3^6 + 5^6 + 8^6$
180724 := $1^6 + 2^6 + 3^6 + 5^6 + 6^6 + 7^6$	278563 := $1^6 + 2^6 + 3^6 + 5^6 + 8^6$
184026 := $4^6 + 5^6 + 6^6 + 7^6$	279936 := 6^7
184027 := $1^6 + 4^6 + 5^6 + 6^6 + 7^6$	279937 := $1^7 + 6^7$
184090 := $2^6 + 4^6 + 5^6 + 6^6 + 7^6$	280064 := $2^7 + 6^7$
184091 := $1^6 + 2^6 + 4^6 + 5^6 + 6^6 + 7^6$	280065 := $1^7 + 2^7 + 6^7$
184755 := $3^6 + 4^6 + 5^6 + 6^6 + 7^6$	281827 := $3^9 + 4^9$
184756 := $1^6 + 3^6 + 4^6 + 5^6 + 6^6 + 7^6$	281828 := $1^9 + 3^9 + 4^9$
184819 := $2^6 + 3^6 + 4^6 + 5^6 + 6^6 + 7^6$	281865 := $4^6 + 5^6 + 8^6$
184820 := $1^6 + 2^6 + 3^6 + 4^6 + 5^6 + 6^6 + 7^6$	281866 := $1^6 + 4^6 + 5^6 + 8^6$
262144 := 2^{18}	281929 := $2^6 + 4^6 + 5^6 + 8^6$
:= 4^9	281930 := $1^6 + 2^6 + 4^6 + 5^6 + 8^6$
:= 8^6	282123 := $3^7 + 6^7$

$$\mathbf{282124} := 1^7 + 3^7 + 6^7$$

$$\mathbf{282251} := 2^7 + 3^7 + 6^7$$

$$\mathbf{282252} := 1^7 + 2^7 + 3^7 + 6^7$$

$$\mathbf{282339} := 2^9 + 3^9 + 4^9$$

$$\mathbf{282340} := 1^9 + 2^9 + 3^9 + 4^9$$

$$\mathbf{282594} := 3^6 + 4^6 + 5^6 + 8^6$$

$$\mathbf{282595} := 1^6 + 3^6 + 4^6 + 5^6 + 8^6$$

$$\mathbf{282658} := 2^6 + 3^6 + 4^6 + 5^6 + 8^6$$

$$\mathbf{282659} := 1^6 + 2^6 + 3^6 + 4^6 + 5^6 + 8^6$$

$$\mathbf{296320} := 4^7 + 6^7$$

$$\mathbf{296321} := 1^7 + 4^7 + 6^7$$

$$\mathbf{296448} := 2^7 + 4^7 + 6^7$$

$$\mathbf{296449} := 1^7 + 2^7 + 4^7 + 6^7$$

$$\mathbf{298507} := 3^7 + 4^7 + 6^7$$

$$\mathbf{298508} := 1^7 + 3^7 + 4^7 + 6^7$$

$$\mathbf{298635} := 2^7 + 3^7 + 4^7 + 6^7$$

$$\mathbf{298636} := 1^7 + 2^7 + 3^7 + 4^7 + 6^7$$

$$\mathbf{308800} := 6^6 + 8^6$$

$$\mathbf{308801} := 1^6 + 6^6 + 8^6$$

$$\mathbf{308864} := 2^6 + 6^6 + 8^6$$

$$\mathbf{308865} := 1^6 + 2^6 + 6^6 + 8^6$$

$$\mathbf{309529} := 3^6 + 6^6 + 8^6$$

$$\mathbf{309530} := 1^6 + 3^6 + 6^6 + 8^6$$

$$\mathbf{309593} := 2^6 + 3^6 + 6^6 + 8^6$$

$$\mathbf{309594} := 1^6 + 2^6 + 3^6 + 6^6 + 8^6$$

$$\mathbf{312896} := 4^6 + 6^6 + 8^6$$

$$\mathbf{312897} := 1^6 + 4^6 + 6^6 + 8^6$$

$$\mathbf{312960} := 2^6 + 4^6 + 6^6 + 8^6$$

$$\mathbf{312961} := 1^6 + 2^6 + 4^6 + 6^6 + 8^6$$

$$\mathbf{313625} := 3^6 + 4^6 + 6^6 + 8^6$$

$$\mathbf{313626} := 1^6 + 3^6 + 4^6 + 6^6 + 8^6$$

$$\mathbf{313689} := 2^6 + 3^6 + 4^6 + 6^6 + 8^6$$

$$\mathbf{313690} := 1^6 + 2^6 + 3^6 + 4^6 + 6^6 + 8^6$$

$$\mathbf{324425} := 5^6 + 6^6 + 8^6$$

$$\mathbf{324426} := 1^6 + 5^6 + 6^6 + 8^6$$

$$\mathbf{324489} := 2^6 + 5^6 + 6^6 + 8^6$$

$$\mathbf{324490} := 1^6 + 2^6 + 5^6 + 6^6 + 8^6$$

$$\mathbf{325154} := 3^6 + 5^6 + 6^6 + 8^6$$

$$\mathbf{325155} := 1^6 + 3^6 + 5^6 + 6^6 + 8^6$$

$$\mathbf{325218} := 2^6 + 3^6 + 5^6 + 6^6 + 8^6$$

$$\mathbf{325219} := 1^6 + 2^6 + 3^6 + 5^6 + 6^6 + 8^6$$

$$\mathbf{328521} := 4^6 + 5^6 + 6^6 + 8^6$$

$$\mathbf{328522} := 1^6 + 4^6 + 5^6 + 6^6 + 8^6$$

$$\mathbf{328585} := 2^6 + 4^6 + 5^6 + 6^6 + 8^6$$

$$\mathbf{328586} := 1^6 + 2^6 + 4^6 + 5^6 + 6^6 + 8^6$$

$$\mathbf{329250} := 3^6 + 4^6 + 5^6 + 6^6 + 8^6$$

$$\mathbf{329251} := 1^6 + 3^6 + 4^6 + 5^6 + 6^6 + 8^6$$

$$\mathbf{329314} := 2^6 + 3^6 + 4^6 + 5^6 + 6^6 + 8^6$$

$$\mathbf{329315} := 1^6 + 2^6 + 3^6 + 4^6 + 5^6 + 6^6 + 8^6$$

$$\mathbf{358061} := 5^7 + 6^7$$

$$\mathbf{358062} := 1^7 + 5^7 + 6^7$$

$$\mathbf{358189} := 2^7 + 5^7 + 6^7$$

$$\mathbf{358190} := 1^7 + 2^7 + 5^7 + 6^7$$

$$\mathbf{360248} := 3^7 + 5^7 + 6^7$$

$$\mathbf{360249} := 1^7 + 3^7 + 5^7 + 6^7$$

$$\mathbf{360376} := 2^7 + 3^7 + 5^7 + 6^7$$

$$\mathbf{360377} := 1^7 + 2^7 + 3^7 + 5^7 + 6^7$$

$$\mathbf{374445} := 4^7 + 5^7 + 6^7$$

$$\mathbf{374446} := 1^7 + 4^7 + 5^7 + 6^7$$

$$\mathbf{374573} := 2^7 + 4^7 + 5^7 + 6^7$$

$$\mathbf{374574} := 1^7 + 2^7 + 4^7 + 5^7 + 6^7$$

$$\mathbf{376632} := 3^7 + 4^7 + 5^7 + 6^7$$

$$\mathbf{376633} := 1^7 + 3^7 + 4^7 + 5^7 + 6^7$$

$$\mathbf{376760} := 2^7 + 3^7 + 4^7 + 5^7 + 6^7$$

$$\mathbf{376761} := 1^7 + 2^7 + 3^7 + 4^7 + 5^7 + 6^7$$

$$\mathbf{379793} := 7^6 + 8^6$$

$$\mathbf{379794} := 1^6 + 7^6 + 8^6$$

$$\mathbf{379857} := 2^6 + 7^6 + 8^6$$

$$\mathbf{379858} := 1^6 + 2^6 + 7^6 + 8^6$$

$$\mathbf{380522} := 3^6 + 7^6 + 8^6$$

$$\mathbf{380523} := 1^6 + 3^6 + 7^6 + 8^6$$

$$\mathbf{380586} := 2^6 + 3^6 + 7^6 + 8^6$$

$$\mathbf{380587} := 1^6 + 2^6 + 3^6 + 7^6 + 8^6$$

$$\mathbf{383889} := 4^6 + 7^6 + 8^6$$

$$\mathbf{383890} := 1^6 + 4^6 + 7^6 + 8^6$$

$$\mathbf{383953} := 2^6 + 4^6 + 7^6 + 8^6$$

$$\mathbf{383954} := 1^6 + 2^6 + 4^6 + 7^6 + 8^6$$

$$\mathbf{384618} := 3^6 + 4^6 + 7^6 + 8^6$$

$$\mathbf{384619} := 1^6 + 3^6 + 4^6 + 7^6 + 8^6$$

$$\mathbf{384682} := 2^6 + 3^6 + 4^6 + 7^6 + 8^6$$

$$\mathbf{384683} := 1^6 + 2^6 + 3^6 + 4^6 + 7^6 + 8^6$$

$$\mathbf{390625} := 5^8$$

$$\mathbf{390626} := 1^8 + 5^8$$

$$\mathbf{390881} := 2^8 + 5^8$$

$$\mathbf{390882} := 1^8 + 2^8 + 5^8$$

$$\mathbf{395418} := 5^6 + 7^6 + 8^6$$

$$\mathbf{395419} := 1^6 + 5^6 + 7^6 + 8^6$$

$$\mathbf{395482} := 2^6 + 5^6 + 7^6 + 8^6$$

$$\mathbf{395483} := 1^6 + 2^6 + 5^6 + 7^6 + 8^6$$

$$\mathbf{396147} := 3^6 + 5^6 + 7^6 + 8^6$$

$$\mathbf{396148} := 1^6 + 3^6 + 5^6 + 7^6 + 8^6$$

$$\mathbf{396211} := 2^6 + 3^6 + 5^6 + 7^6 + 8^6$$

$$\mathbf{396212} := 1^6 + 2^6 + 3^6 + 5^6 + 7^6 + 8^6$$

$$\mathbf{397186} := 3^8 + 5^8$$

$$\mathbf{397187} := 1^8 + 3^8 + 5^8$$

$$\mathbf{397442} := 2^8 + 3^8 + 5^8$$

$$\mathbf{397443} := 1^8 + 2^8 + 3^8 + 5^8$$

$$\mathbf{399514} := 4^6 + 5^6 + 7^6 + 8^6$$

$$\mathbf{399515} := 1^6 + 4^6 + 5^6 + 7^6 + 8^6$$

$$\mathbf{399578} := 2^6 + 4^6 + 5^6 + 7^6 + 8^6$$

$$\mathbf{399579} := 1^6 + 2^6 + 4^6 + 5^6 + 7^6 + 8^6$$

$$\mathbf{400243} := 3^6 + 4^6 + 5^6 + 7^6 + 8^6$$

$$\mathbf{400244} := 1^6 + 3^6 + 4^6 + 5^6 + 7^6 + 8^6$$

$$\mathbf{400307} := 2^6 + 3^6 + 4^6 + 5^6 + 7^6 + 8^6$$

$$\mathbf{400308} := 1^6 + 2^6 + 3^6 + 4^6 + 5^6 + 7^6 + 8^6$$

$$\mathbf{426449} := 6^6 + 7^6 + 8^6$$

$$\mathbf{426450} := 1^6 + 6^6 + 7^6 + 8^6$$

$$\mathbf{426513} := 2^6 + 6^6 + 7^6 + 8^6$$

$$\mathbf{426514} := 1^6 + 2^6 + 6^6 + 7^6 + 8^6$$

$$\mathbf{427178} := 3^6 + 6^6 + 7^6 + 8^6$$

$$\mathbf{427179} := 1^6 + 3^6 + 6^6 + 7^6 + 8^6$$

$$\mathbf{427242} := 2^6 + 3^6 + 6^6 + 7^6 + 8^6$$

$$\mathbf{427243} := 1^6 + 2^6 + 3^6 + 6^6 + 7^6 + 8^6$$

$$\mathbf{430545} := 4^6 + 6^6 + 7^6 + 8^6$$

$$\mathbf{430546} := 1^6 + 4^6 + 6^6 + 7^6 + 8^6$$

$$\mathbf{430609} := 2^6 + 4^6 + 6^6 + 7^6 + 8^6$$

$$\mathbf{430610} := 1^6 + 2^6 + 4^6 + 6^6 + 7^6 + 8^6$$

$$\mathbf{431274} := 3^6 + 4^6 + 6^6 + 7^6 + 8^6$$

$$\mathbf{431275} := 1^6 + 3^6 + 4^6 + 6^6 + 7^6 + 8^6$$

$$\mathbf{431338} := 2^6 + 3^6 + 4^6 + 6^6 + 7^6 + 8^6$$

$$\mathbf{431339} := 1^6 + 2^6 + 3^6 + 4^6 + 6^6 + 7^6 + 8^6$$

$$\mathbf{442074} := 5^6 + 6^6 + 7^6 + 8^6$$

$$\mathbf{442075} := 1^6 + 5^6 + 6^6 + 7^6 + 8^6$$

$$\mathbf{442138} := 2^6 + 5^6 + 6^6 + 7^6 + 8^6$$

$$\mathbf{442139} := 1^6 + 2^6 + 5^6 + 6^6 + 7^6 + 8^6$$

$$\mathbf{442803} := 3^6 + 5^6 + 6^6 + 7^6 + 8^6$$

$$\mathbf{442804} := 1^6 + 3^6 + 5^6 + 6^6 + 7^6 + 8^6$$

$$\mathbf{442867} := 2^6 + 3^6 + 5^6 + 6^6 + 7^6 + 8^6$$

$$\mathbf{442868} := 1^6 + 2^6 + 3^6 + 5^6 + 6^6 + 7^6 + 8^6$$

$$\mathbf{446170} := 4^6 + 5^6 + 6^6 + 7^6 + 8^6$$

$$\mathbf{446171} := 1^6 + 4^6 + 5^6 + 6^6 + 7^6 + 8^6$$

$$\mathbf{446234} := 2^6 + 4^6 + 5^6 + 6^6 + 7^6 + 8^6$$

$$\mathbf{446235} := 1^6 + 2^6 + 4^6 + 5^6 + 6^6 + 7^6 + 8^6$$

$$\mathbf{446899} := 3^6 + 4^6 + 5^6 + 6^6 + 7^6 + 8^6$$

$$\mathbf{446900} := 1^6 + 3^6 + 4^6 + 5^6 + 6^6 + 7^6 + 8^6$$

$$\mathbf{446963} := 2^6 + 3^6 + 4^6 + 5^6 + 6^6 + 7^6 + 8^6$$

$$\mathbf{446964} := 1^6 + 2^6 + 3^6 + 4^6 + 5^6 + 6^6 + 7^6 + 8^6$$

$$\mathbf{456161} := 4^8 + 5^8$$

$$\mathbf{456162} := 1^8 + 4^8 + 5^8$$

$$\mathbf{456417} := 2^8 + 4^8 + 5^8$$

$$\mathbf{456418} := 1^8 + 2^8 + 4^8 + 5^8$$

$$\mathbf{462722} := 3^8 + 4^8 + 5^8$$

$$\mathbf{462723} := 1^8 + 3^8 + 4^8 + 5^8$$

$$\mathbf{462978} := 2^8 + 3^8 + 4^8 + 5^8$$

$$\mathbf{462979} := 1^8 + 2^8 + 3^8 + 4^8 + 5^8$$

$$\mathbf{524288} := 2^{19}$$

$$\mathbf{524289} := 1^{19} + 2^{19}$$

$$\mathbf{531441} := 3^{12}$$

$$:= 9^6$$

$$\mathbf{531442} := 1^{12} + 3^{12}$$

$$:= 1^6 + 9^6$$

$$\mathbf{531505} := 2^6 + 9^6$$

$$\mathbf{531506} := 1^6 + 2^6 + 9^6$$

$$\mathbf{532170} := 3^6 + 9^6$$

$$\mathbf{532171} := 1^6 + 3^6 + 9^6$$

$$\mathbf{532234} := 2^6 + 3^6 + 9^6$$

$$\mathbf{532235} := 1^6 + 2^6 + 3^6 + 9^6$$

$$\mathbf{535537} := 2^{12} + 3^{12}$$

$$:= 4^6 + 9^6$$

$$\mathbf{535538} := 1^{12} + 2^{12} + 3^{12}$$

$$:= 1^6 + 4^6 + 9^6$$

$$\mathbf{535601} := 2^6 + 4^6 + 9^6$$

$$\mathbf{535602} := 1^6 + 2^6 + 4^6 + 9^6$$

$$\mathbf{536266} := 3^6 + 4^6 + 9^6$$

$$\mathbf{536267} := 1^6 + 3^6 + 4^6 + 9^6$$

$$\mathbf{536330} := 2^6 + 3^6 + 4^6 + 9^6$$

$$\mathbf{536331} := 1^6 + 2^6 + 3^6 + 4^6 + 9^6$$

$$\mathbf{547066} := 5^6 + 9^6$$

$$\mathbf{547067} := 1^6 + 5^6 + 9^6$$

$$\mathbf{547130} := 2^6 + 5^6 + 9^6$$

$$\mathbf{547131} := 1^6 + 2^6 + 5^6 + 9^6$$

$$\mathbf{547795} := 3^6 + 5^6 + 9^6$$

$$\mathbf{547796} := 1^6 + 3^6 + 5^6 + 9^6$$

$$\mathbf{547859} := 2^6 + 3^6 + 5^6 + 9^6$$

$$\mathbf{547860} := 1^6 + 2^6 + 3^6 + 5^6 + 9^6$$

$$\mathbf{551162} := 4^6 + 5^6 + 9^6$$

$$\mathbf{551163} := 1^6 + 4^6 + 5^6 + 9^6$$

$$\mathbf{551226} := 2^6 + 4^6 + 5^6 + 9^6$$

$$\mathbf{551227} := 1^6 + 2^6 + 4^6 + 5^6 + 9^6$$

$$\mathbf{551891} := 3^6 + 4^6 + 5^6 + 9^6$$

$$\mathbf{551892} := 1^6 + 3^6 + 4^6 + 5^6 + 9^6$$

$$\mathbf{551955} := 2^6 + 3^6 + 4^6 + 5^6 + 9^6$$

$$\mathbf{551956} := 1^6 + 2^6 + 3^6 + 4^6 + 5^6 + 9^6$$

$$\mathbf{578097} := 6^6 + 9^6$$

$$\mathbf{578098} := 1^6 + 6^6 + 9^6$$

$$\mathbf{578161} := 2^6 + 6^6 + 9^6$$

$$\mathbf{578162} := 1^6 + 2^6 + 6^6 + 9^6$$

$$\mathbf{578826} := 3^6 + 6^6 + 9^6$$

$$\mathbf{578827} := 1^6 + 3^6 + 6^6 + 9^6$$

$$\mathbf{578890} := 2^6 + 3^6 + 6^6 + 9^6$$

$$\mathbf{578891} := 1^6 + 2^6 + 3^6 + 6^6 + 9^6$$

$$\mathbf{582193} := 4^6 + 6^6 + 9^6$$

$$\mathbf{582194} := 1^6 + 4^6 + 6^6 + 9^6$$

$$\mathbf{582257} := 2^6 + 4^6 + 6^6 + 9^6$$

$$\mathbf{582258} := 1^6 + 2^6 + 4^6 + 6^6 + 9^6$$

$$\mathbf{582922} := 3^6 + 4^6 + 6^6 + 9^6$$

$$\mathbf{582923} := 1^6 + 3^6 + 4^6 + 6^6 + 9^6$$

$$\mathbf{582986} := 2^6 + 3^6 + 4^6 + 6^6 + 9^6$$

$$\mathbf{582987} := 1^6 + 2^6 + 3^6 + 4^6 + 6^6 + 9^6$$

$$\mathbf{593722} := 5^6 + 6^6 + 9^6$$

$$\mathbf{593723} := 1^6 + 5^6 + 6^6 + 9^6$$

$$\mathbf{593786} := 2^6 + 5^6 + 6^6 + 9^6$$

$$\mathbf{593787} := 1^6 + 2^6 + 5^6 + 6^6 + 9^6$$

$$\mathbf{594451} := 3^6 + 5^6 + 6^6 + 9^6$$

$$\mathbf{594452} := 1^6 + 3^6 + 5^6 + 6^6 + 9^6$$

$$\mathbf{594515} := 2^6 + 3^6 + 5^6 + 6^6 + 9^6$$

$$\mathbf{594516} := 1^6 + 2^6 + 3^6 + 5^6 + 6^6 + 9^6$$

$$\mathbf{597818} := 4^6 + 5^6 + 6^6 + 9^6$$

$$\mathbf{597819} := 1^6 + 4^6 + 5^6 + 6^6 + 9^6$$

$$\mathbf{597882} := 2^6 + 4^6 + 5^6 + 6^6 + 9^6$$

$$\mathbf{597883} := 1^6 + 2^6 + 4^6 + 5^6 + 6^6 + 9^6$$

$$\mathbf{598547} := 3^6 + 4^6 + 5^6 + 6^6 + 9^6$$

$$\mathbf{598548} := 1^6 + 3^6 + 4^6 + 5^6 + 6^6 + 9^6$$

$$\mathbf{598611} := 2^6 + 3^6 + 4^6 + 5^6 + 6^6 + 9^6$$

$$\mathbf{598612} := 1^6 + 2^6 + 3^6 + 4^6 + 5^6 + 6^6 + 9^6$$

$$\mathbf{649090} := 7^6 + 9^6$$

$$\mathbf{649091} := 1^6 + 7^6 + 9^6$$

$$\mathbf{649154} := 2^6 + 7^6 + 9^6$$

$$\mathbf{649155} := 1^6 + 2^6 + 7^6 + 9^6$$

$$\mathbf{649819} := 3^6 + 7^6 + 9^6$$

$$\mathbf{649820} := 1^6 + 3^6 + 7^6 + 9^6$$

$$\mathbf{649883} := 2^6 + 3^6 + 7^6 + 9^6$$

$$\mathbf{649884} := 1^6 + 2^6 + 3^6 + 7^6 + 9^6$$

$$\mathbf{653186} := 4^6 + 7^6 + 9^6$$

$$\mathbf{653187} := 1^6 + 4^6 + 7^6 + 9^6$$

$$\mathbf{653250} := 2^6 + 4^6 + 7^6 + 9^6$$

$$\mathbf{653251} := 1^6 + 2^6 + 4^6 + 7^6 + 9^6$$

$$\mathbf{653915} := 3^6 + 4^6 + 7^6 + 9^6$$

$$653916 := 1^6 + 3^6 + 4^6 + 7^6 + 9^6$$

$$653979 := 2^6 + 3^6 + 4^6 + 7^6 + 9^6$$

$$653980 := 1^6 + 2^6 + 3^6 + 4^6 + 7^6 + 9^6$$

$$664715 := 5^6 + 7^6 + 9^6$$

$$664716 := 1^6 + 5^6 + 7^6 + 9^6$$

$$664779 := 2^6 + 5^6 + 7^6 + 9^6$$

$$664780 := 1^6 + 2^6 + 5^6 + 7^6 + 9^6$$

$$665444 := 3^6 + 5^6 + 7^6 + 9^6$$

$$665445 := 1^6 + 3^6 + 5^6 + 7^6 + 9^6$$

$$665508 := 2^6 + 3^6 + 5^6 + 7^6 + 9^6$$

$$665509 := 1^6 + 2^6 + 3^6 + 5^6 + 7^6 + 9^6$$

$$668811 := 4^6 + 5^6 + 7^6 + 9^6$$

$$668812 := 1^6 + 4^6 + 5^6 + 7^6 + 9^6$$

$$668875 := 2^6 + 4^6 + 5^6 + 7^6 + 9^6$$

$$668876 := 1^6 + 2^6 + 4^6 + 5^6 + 7^6 + 9^6$$

$$669540 := 3^6 + 4^6 + 5^6 + 7^6 + 9^6$$

$$669541 := 1^6 + 3^6 + 4^6 + 5^6 + 7^6 + 9^6$$

$$669604 := 2^6 + 3^6 + 4^6 + 5^6 + 7^6 + 9^6$$

$$669605 := 1^6 + 2^6 + 3^6 + 4^6 + 5^6 + 7^6 + 9^6$$

$$695746 := 6^6 + 7^6 + 9^6$$

$$695747 := 1^6 + 6^6 + 7^6 + 9^6$$

$$695810 := 2^6 + 6^6 + 7^6 + 9^6$$

$$695811 := 1^6 + 2^6 + 6^6 + 7^6 + 9^6$$

$$696475 := 3^6 + 6^6 + 7^6 + 9^6$$

$$696476 := 1^6 + 3^6 + 6^6 + 7^6 + 9^6$$

$$696539 := 2^6 + 3^6 + 6^6 + 7^6 + 9^6$$

$$696540 := 1^6 + 2^6 + 3^6 + 6^6 + 7^6 + 9^6$$

$$699842 := 4^6 + 6^6 + 7^6 + 9^6$$

$$699843 := 1^6 + 4^6 + 6^6 + 7^6 + 9^6$$

$$699906 := 2^6 + 4^6 + 6^6 + 7^6 + 9^6$$

$$699907 := 1^6 + 2^6 + 4^6 + 6^6 + 7^6 + 9^6$$

$$700571 := 3^6 + 4^6 + 6^6 + 7^6 + 9^6$$

$$700572 := 1^6 + 3^6 + 4^6 + 6^6 + 7^6 + 9^6$$

$$700635 := 2^6 + 3^6 + 4^6 + 6^6 + 7^6 + 9^6$$

$$700636 := 1^6 + 2^6 + 3^6 + 4^6 + 6^6 + 7^6 + 9^6$$

$$711371 := 5^6 + 6^6 + 7^6 + 9^6$$

$$711372 := 1^6 + 5^6 + 6^6 + 7^6 + 9^6$$

$$711435 := 2^6 + 5^6 + 6^6 + 7^6 + 9^6$$

$$711436 := 1^6 + 2^6 + 5^6 + 6^6 + 7^6 + 9^6$$

$$712100 := 3^6 + 5^6 + 6^6 + 7^6 + 9^6$$

$$712101 := 1^6 + 3^6 + 5^6 + 6^6 + 7^6 + 9^6$$

$$712164 := 2^6 + 3^6 + 5^6 + 6^6 + 7^6 + 9^6$$

$$712165 := 1^6 + 2^6 + 3^6 + 5^6 + 6^6 + 7^6 + 9^6$$

$$715467 := 4^6 + 5^6 + 6^6 + 7^6 + 9^6$$

$$715468 := 1^6 + 4^6 + 5^6 + 6^6 + 7^6 + 9^6$$

$$715531 := 2^6 + 4^6 + 5^6 + 6^6 + 7^6 + 9^6$$

$$715532 := 1^6 + 2^6 + 4^6 + 5^6 + 6^6 + 7^6 + 9^6$$

$$716196 := 3^6 + 4^6 + 5^6 + 6^6 + 7^6 + 9^6$$

$$716197 := 1^6 + 3^6 + 4^6 + 5^6 + 6^6 + 7^6 + 9^6$$

$$716260 := 2^6 + 3^6 + 4^6 + 5^6 + 6^6 + 7^6 + 9^6$$

$$716261 := 1^6 + 2^6 + 3^6 + 4^6 + 5^6 + 6^6 + 7^6 + 9^6$$

$$793585 := 8^6 + 9^6$$

$$793586 := 1^6 + 8^6 + 9^6$$

$$793649 := 2^6 + 8^6 + 9^6$$

$$793650 := 1^6 + 2^6 + 8^6 + 9^6$$

$$794314 := 3^6 + 8^6 + 9^6$$

$$794315 := 1^6 + 3^6 + 8^6 + 9^6$$

$$794378 := 2^6 + 3^6 + 8^6 + 9^6$$

$$794379 := 1^6 + 2^6 + 3^6 + 8^6 + 9^6$$

$$797681 := 4^6 + 8^6 + 9^6$$

$$797682 := 1^6 + 4^6 + 8^6 + 9^6$$

$$797745 := 2^6 + 4^6 + 8^6 + 9^6$$

$$797746 := 1^6 + 2^6 + 4^6 + 8^6 + 9^6$$

$$798410 := 3^6 + 4^6 + 8^6 + 9^6$$

$$798411 := 1^6 + 3^6 + 4^6 + 8^6 + 9^6$$

$$798474 := 2^6 + 3^6 + 4^6 + 8^6 + 9^6$$

$$798475 := 1^6 + 2^6 + 3^6 + 4^6 + 8^6 + 9^6$$

$$809210 := 5^6 + 8^6 + 9^6$$

$$809211 := 1^6 + 5^6 + 8^6 + 9^6$$

$$809274 := 2^6 + 5^6 + 8^6 + 9^6$$

$$809275 := 1^6 + 2^6 + 5^6 + 8^6 + 9^6$$

$$809939 := 3^6 + 5^6 + 8^6 + 9^6$$

$$809940 := 1^6 + 3^6 + 5^6 + 8^6 + 9^6$$

$$810003 := 2^6 + 3^6 + 5^6 + 8^6 + 9^6$$

$$810004 := 1^6 + 2^6 + 3^6 + 5^6 + 8^6 + 9^6$$

$$813306 := 4^6 + 5^6 + 8^6 + 9^6$$

$$813307 := 1^6 + 4^6 + 5^6 + 8^6 + 9^6$$

$$813370 := 2^6 + 4^6 + 5^6 + 8^6 + 9^6$$

$$813371 := 1^6 + 2^6 + 4^6 + 5^6 + 8^6 + 9^6$$

$$814035 := 3^6 + 4^6 + 5^6 + 8^6 + 9^6$$

$$814036 := 1^6 + 3^6 + 4^6 + 5^6 + 8^6 + 9^6$$

$$814099 := 2^6 + 3^6 + 4^6 + 5^6 + 8^6 + 9^6$$

$$814100 := 1^6 + 2^6 + 3^6 + 4^6 + 5^6 + 8^6 + 9^6$$

$$823543 := 7^7$$

$$823544 := 1^7 + 7^7$$

$$823671 := 2^7 + 7^7$$

$$823672 := 1^7 + 2^7 + 7^7$$

$$825730 := 3^7 + 7^7$$

$$825731 := 1^7 + 3^7 + 7^7$$

$$825858 := 2^7 + 3^7 + 7^7$$

$$825859 := 1^7 + 2^7 + 3^7 + 7^7$$

$$839927 := 4^7 + 7^7$$

$$839928 := 1^7 + 4^7 + 7^7$$

$$840055 := 2^7 + 4^7 + 7^7$$

$$840056 := 1^7 + 2^7 + 4^7 + 7^7$$

$$840241 := 6^6 + 8^6 + 9^6$$

$$840242 := 1^6 + 6^6 + 8^6 + 9^6$$

$$840305 := 2^6 + 6^6 + 8^6 + 9^6$$

$$840306 := 1^6 + 2^6 + 6^6 + 8^6 + 9^6$$

$$840970 := 3^6 + 6^6 + 8^6 + 9^6$$

$$840971 := 1^6 + 3^6 + 6^6 + 8^6 + 9^6$$

$$841034 := 2^6 + 3^6 + 6^6 + 8^6 + 9^6$$

$$841035 := 1^6 + 2^6 + 3^6 + 6^6 + 8^6 + 9^6$$

$$842114 := 3^7 + 4^7 + 7^7$$

$$842115 := 1^7 + 3^7 + 4^7 + 7^7$$

$$842242 := 2^7 + 3^7 + 4^7 + 7^7$$

$$842243 := 1^7 + 2^7 + 3^7 + 4^7 + 7^7$$

$$844337 := 4^6 + 6^6 + 8^6 + 9^6$$

$$844338 := 1^6 + 4^6 + 6^6 + 8^6 + 9^6$$

$$844401 := 2^6 + 4^6 + 6^6 + 8^6 + 9^6$$

$$844402 := 1^6 + 2^6 + 4^6 + 6^6 + 8^6 + 9^6$$

$$845066 := 3^6 + 4^6 + 6^6 + 8^6 + 9^6$$

$$845067 := 1^6 + 3^6 + 4^6 + 6^6 + 8^6 + 9^6$$

$$845130 := 2^6 + 3^6 + 4^6 + 6^6 + 8^6 + 9^6$$

$$845131 := 1^6 + 2^6 + 3^6 + 4^6 + 6^6 + 8^6 + 9^6$$

$$855866 := 5^6 + 6^6 + 8^6 + 9^6$$

$$855867 := 1^6 + 5^6 + 6^6 + 8^6 + 9^6$$

$$855930 := 2^6 + 5^6 + 6^6 + 8^6 + 9^6$$

$$855931 := 1^6 + 2^6 + 5^6 + 6^6 + 8^6 + 9^6$$

$$856595 := 3^6 + 5^6 + 6^6 + 8^6 + 9^6$$

$$856596 := 1^6 + 3^6 + 5^6 + 6^6 + 8^6 + 9^6$$

$$856659 := 2^6 + 3^6 + 5^6 + 6^6 + 8^6 + 9^6$$

$$856660 := 1^6 + 2^6 + 3^6 + 5^6 + 6^6 + 8^6 + 9^6$$

$$859962 := 4^6 + 5^6 + 6^6 + 8^6 + 9^6$$

$$859963 := 1^6 + 4^6 + 5^6 + 6^6 + 8^6 + 9^6$$

$$860026 := 2^6 + 4^6 + 5^6 + 6^6 + 8^6 + 9^6$$

$$860027 := 1^6 + 2^6 + 4^6 + 5^6 + 6^6 + 8^6 + 9^6$$

$$860691 := 3^6 + 4^6 + 5^6 + 6^6 + 8^6 + 9^6$$

$$860692 := 1^6 + 3^6 + 4^6 + 5^6 + 6^6 + 8^6 + 9^6$$

$$860755 := 2^6 + 3^6 + 4^6 + 5^6 + 6^6 + 8^6 + 9^6$$

$$860756 := 1^6 + 2^6 + 3^6 + 4^6 + 5^6 + 6^6 + 8^6 + 9^6$$

$$901668 := 5^7 + 7^7$$

$$901669 := 1^7 + 5^7 + 7^7$$

$$901796 := 2^7 + 5^7 + 7^7$$

$$901797 := 1^7 + 2^7 + 5^7 + 7^7$$

$$903855 := 3^7 + 5^7 + 7^7$$

$$903856 := 1^7 + 3^7 + 5^7 + 7^7$$

$$903983 := 2^7 + 3^7 + 5^7 + 7^7$$

$$903984 := 1^7 + 2^7 + 3^7 + 5^7 + 7^7$$

$$911234 := 7^6 + 8^6 + 9^6$$

$$911235 := 1^6 + 7^6 + 8^6 + 9^6$$

$$911298 := 2^6 + 7^6 + 8^6 + 9^6$$

$$911299 := 1^6 + 2^6 + 7^6 + 8^6 + 9^6$$

$$911963 := 3^6 + 7^6 + 8^6 + 9^6$$

$$911964 := 1^6 + 3^6 + 7^6 + 8^6 + 9^6$$

$$912027 := 2^6 + 3^6 + 7^6 + 8^6 + 9^6$$

$$912028 := 1^6 + 2^6 + 3^6 + 7^6 + 8^6 + 9^6$$

$$915330 := 4^6 + 7^6 + 8^6 + 9^6$$

$$915331 := 1^6 + 4^6 + 7^6 + 8^6 + 9^6$$

$$915394 := 2^6 + 4^6 + 7^6 + 8^6 + 9^6$$

$$915395 := 1^6 + 2^6 + 4^6 + 7^6 + 8^6 + 9^6$$

$$916059 := 3^6 + 4^6 + 7^6 + 8^6 + 9^6$$

$$916060 := 1^6 + 3^6 + 4^6 + 7^6 + 8^6 + 9^6$$

$$916123 := 2^6 + 3^6 + 4^6 + 7^6 + 8^6 + 9^6$$

$$916124 := 1^6 + 2^6 + 3^6 + 4^6 + 7^6 + 8^6 + 9^6$$

$$918052 := 4^7 + 5^7 + 7^7$$

$$918053 := 1^7 + 4^7 + 5^7 + 7^7$$

$$918180 := 2^7 + 4^7 + 5^7 + 7^7$$

$$918181 := 1^7 + 2^7 + 4^7 + 5^7 + 7^7$$

$$920239 := 3^7 + 4^7 + 5^7 + 7^7$$

$$920240 := 1^7 + 3^7 + 4^7 + 5^7 + 7^7$$

$$920367 := 2^7 + 3^7 + 4^7 + 5^7 + 7^7$$

$$920368 := 1^7 + 2^7 + 3^7 + 4^7 + 5^7 + 7^7$$

$$926859 := 5^6 + 7^6 + 8^6 + 9^6$$

$$926860 := 1^6 + 5^6 + 7^6 + 8^6 + 9^6$$

$$926923 := 2^6 + 5^6 + 7^6 + 8^6 + 9^6$$

$$926924 := 1^6 + 2^6 + 5^6 + 7^6 + 8^6 + 9^6$$

$$927588 := 3^6 + 5^6 + 7^6 + 8^6 + 9^6$$

$$927589 := 1^6 + 3^6 + 5^6 + 7^6 + 8^6 + 9^6$$

$$927652 := 2^6 + 3^6 + 5^6 + 7^6 + 8^6 + 9^6$$

$$927653 := 1^6 + 2^6 + 3^6 + 5^6 + 7^6 + 8^6 + 9^6$$

$$930955 := 4^6 + 5^6 + 7^6 + 8^6 + 9^6$$

$$930956 := 1^6 + 4^6 + 5^6 + 7^6 + 8^6 + 9^6$$

$$931019 := 2^6 + 4^6 + 5^6 + 7^6 + 8^6 + 9^6$$

$$931020 := 1^6 + 2^6 + 4^6 + 5^6 + 7^6 + 8^6 + 9^6$$

$$931684 := 3^6 + 4^6 + 5^6 + 7^6 + 8^6 + 9^6$$

$$931685 := 1^6 + 3^6 + 4^6 + 5^6 + 7^6 + 8^6 + 9^6$$

$$931748 := 2^6 + 3^6 + 4^6 + 5^6 + 7^6 + 8^6 + 9^6$$

$$931749 := 1^6 + 2^6 + 3^6 + 4^6 + 5^6 + 7^6 + 8^6 + 9^6$$

$$957890 := 6^6 + 7^6 + 8^6 + 9^6$$

$$957891 := 1^6 + 6^6 + 7^6 + 8^6 + 9^6$$

$$957954 := 2^6 + 6^6 + 7^6 + 8^6 + 9^6$$

$$957955 := 1^6 + 2^6 + 6^6 + 7^6 + 8^6 + 9^6$$

$$958619 := 3^6 + 6^6 + 7^6 + 8^6 + 9^6$$

$$958620 := 1^6 + 3^6 + 6^6 + 7^6 + 8^6 + 9^6$$

$$958683 := 2^6 + 3^6 + 6^6 + 7^6 + 8^6 + 9^6$$

$$958684 := 1^6 + 2^6 + 3^6 + 6^6 + 7^6 + 8^6 + 9^6$$

$$961986 := 4^6 + 6^6 + 7^6 + 8^6 + 9^6$$

$$961987 := 1^6 + 4^6 + 6^6 + 7^6 + 8^6 + 9^6$$

$$962050 := 2^6 + 4^6 + 6^6 + 7^6 + 8^6 + 9^6$$

$$962051 := 1^6 + 2^6 + 4^6 + 6^6 + 7^6 + 8^6 + 9^6$$

$$962715 := 3^6 + 4^6 + 6^6 + 7^6 + 8^6 + 9^6$$

$$962716 := 1^6 + 3^6 + 4^6 + 6^6 + 7^6 + 8^6 + 9^6$$

$$962779 := 2^6 + 3^6 + 4^6 + 6^6 + 7^6 + 8^6 + 9^6$$

$$962780 := 1^6 + 2^6 + 3^6 + 4^6 + 6^6 + 7^6 + 8^6 + 9^6$$

$$973515 := 5^6 + 6^6 + 7^6 + 8^6 + 9^6$$

$$973516 := 1^6 + 5^6 + 6^6 + 7^6 + 8^6 + 9^6$$

$$973579 := 2^6 + 5^6 + 6^6 + 7^6 + 8^6 + 9^6$$

$$973580 := 1^6 + 2^6 + 5^6 + 6^6 + 7^6 + 8^6 + 9^6$$

$$974244 := 3^6 + 5^6 + 6^6 + 7^6 + 8^6 + 9^6$$

$$974245 := 1^6 + 3^6 + 5^6 + 6^6 + 7^6 + 8^6 + 9^6$$

$$974308 := 2^6 + 3^6 + 5^6 + 6^6 + 7^6 + 8^6 + 9^6$$

$$974309 := 1^6 + 2^6 + 3^6 + 5^6 + 6^6 + 7^6 + 8^6 + 9^6$$

$$977611 := 4^6 + 5^6 + 6^6 + 7^6 + 8^6 + 9^6$$

$$977612 := 1^6 + 4^6 + 5^6 + 6^6 + 7^6 + 8^6 + 9^6$$

$$977675 := 2^6 + 4^6 + 5^6 + 6^6 + 7^6 + 8^6 + 9^6$$

$$977676 := 1^6 + 2^6 + 4^6 + 5^6 + 6^6 + 7^6 + 8^6 + 9^6$$

$$978340 := 3^6 + 4^6 + 5^6 + 6^6 + 7^6 + 8^6 + 9^6$$

$$978341 := 1^6 + 3^6 + 4^6 + 5^6 + 6^6 + 7^6 + 8^6 + 9^6$$

$$978404 := 2^6 + 3^6 + 4^6 + 5^6 + 6^6 + 7^6 + 8^6 + 9^6$$

$$978405 := 1^6 + 2^6 + 3^6 + 4^6 + 5^6 + 6^6 + 7^6 + 8^6 + 9^6$$

$$1048576 := 4^{10}$$

$$1048577 := 1^{10} + 4^{10}$$

$$1049600 := 2^{10} + 4^{10}$$

$$1049601 := 1^{10} + 2^{10} + 4^{10}$$

$$1103479 := 6^7 + 7^7$$

$$1103480 := 1^7 + 6^7 + 7^7$$

$$1103607 := 2^7 + 6^7 + 7^7$$

$$1103608 := 1^7 + 2^7 + 6^7 + 7^7$$

$$1105666 := 3^7 + 6^7 + 7^7$$

$$1105667 := 1^7 + 3^7 + 6^7 + 7^7$$

$$1105794 := 2^7 + 3^7 + 6^7 + 7^7$$

$$1105795 := 1^7 + 2^7 + 3^7 + 6^7 + 7^7$$

$$1107625 := 3^{10} + 4^{10}$$

$$1107626 := 1^{10} + 3^{10} + 4^{10}$$

$$1108649 := 2^{10} + 3^{10} + 4^{10}$$

$$1108650 := 1^{10} + 2^{10} + 3^{10} + 4^{10}$$

$$1119863 := 4^7 + 6^7 + 7^7$$

$$\begin{aligned}
1119864 &:= 1^7 + 4^7 + 6^7 + 7^7 \\
1119991 &:= 2^7 + 4^7 + 6^7 + 7^7 \\
1119992 &:= 1^7 + 2^7 + 4^7 + 6^7 + 7^7 \\
1122050 &:= 3^7 + 4^7 + 6^7 + 7^7 \\
1122051 &:= 1^7 + 3^7 + 4^7 + 6^7 + 7^7 \\
1122178 &:= 2^7 + 3^7 + 4^7 + 6^7 + 7^7 \\
1122179 &:= 1^7 + 2^7 + 3^7 + 4^7 + 6^7 + 7^7 \\
1181604 &:= 5^7 + 6^7 + 7^7 \\
1181605 &:= 1^7 + 5^7 + 6^7 + 7^7 \\
1181732 &:= 2^7 + 5^7 + 6^7 + 7^7 \\
1181733 &:= 1^7 + 2^7 + 5^7 + 6^7 + 7^7 \\
1183791 &:= 3^7 + 5^7 + 6^7 + 7^7 \\
1183792 &:= 1^7 + 3^7 + 5^7 + 6^7 + 7^7 \\
1183919 &:= 2^7 + 3^7 + 5^7 + 6^7 + 7^7 \\
1183920 &:= 1^7 + 2^7 + 3^7 + 5^7 + 6^7 + 7^7 \\
1197988 &:= 4^7 + 5^7 + 6^7 + 7^7 \\
1197989 &:= 1^7 + 4^7 + 5^7 + 6^7 + 7^7 \\
1198116 &:= 2^7 + 4^7 + 5^7 + 6^7 + 7^7 \\
1198117 &:= 1^7 + 2^7 + 4^7 + 5^7 + 6^7 + 7^7 \\
1200175 &:= 3^7 + 4^7 + 5^7 + 6^7 + 7^7 \\
1200176 &:= 1^7 + 3^7 + 4^7 + 5^7 + 6^7 + 7^7 \\
1200303 &:= 2^7 + 3^7 + 4^7 + 5^7 + 6^7 + 7^7 \\
1200304 &:= 1^7 + 2^7 + 3^7 + 4^7 + 5^7 + 6^7 + 7^7 \\
1594323 &:= 3^{13} \\
1594324 &:= 1^{13} + 3^{13} \\
1602515 &:= 2^{13} + 3^{13} \\
1602516 &:= 1^{13} + 2^{13} + 3^{13} \\
1679616 &:= 6^8 \\
1679617 &:= 1^8 + 6^8 \\
1679872 &:= 2^8 + 6^8 \\
1679873 &:= 1^8 + 2^8 + 6^8 \\
1686177 &:= 3^8 + 6^8 \\
1686178 &:= 1^8 + 3^8 + 6^8 \\
1686433 &:= 2^8 + 3^8 + 6^8 \\
1686434 &:= 1^8 + 2^8 + 3^8 + 6^8 \\
1745152 &:= 4^8 + 6^8 \\
1745153 &:= 1^8 + 4^8 + 6^8 \\
1745408 &:= 2^8 + 4^8 + 6^8
\end{aligned}$$

$$\begin{aligned}
1745409 &:= 1^8 + 2^8 + 4^8 + 6^8 \\
1751713 &:= 3^8 + 4^8 + 6^8 \\
1751714 &:= 1^8 + 3^8 + 4^8 + 6^8 \\
1751969 &:= 2^8 + 3^8 + 4^8 + 6^8 \\
1751970 &:= 1^8 + 2^8 + 3^8 + 4^8 + 6^8 \\
1953125 &:= 5^9 \\
1953126 &:= 1^9 + 5^9 \\
1953637 &:= 2^9 + 5^9 \\
1953638 &:= 1^9 + 2^9 + 5^9 \\
1972808 &:= 3^9 + 5^9 \\
1972809 &:= 1^9 + 3^9 + 5^9 \\
1973320 &:= 2^9 + 3^9 + 5^9 \\
1973321 &:= 1^9 + 2^9 + 3^9 + 5^9 \\
2070241 &:= 5^8 + 6^8 \\
2070242 &:= 1^8 + 5^8 + 6^8 \\
2070497 &:= 2^8 + 5^8 + 6^8 \\
2070498 &:= 1^8 + 2^8 + 5^8 + 6^8 \\
2076802 &:= 3^8 + 5^8 + 6^8 \\
2076803 &:= 1^8 + 3^8 + 5^8 + 6^8 \\
2077058 &:= 2^8 + 3^8 + 5^8 + 6^8 \\
2077059 &:= 1^8 + 2^8 + 3^8 + 5^8 + 6^8 \\
2097152 &:= 8^7 \\
2097153 &:= 1^7 + 8^7 \\
2097280 &:= 2^7 + 8^7 \\
2097281 &:= 1^7 + 2^7 + 8^7 \\
2099339 &:= 3^7 + 8^7 \\
2099340 &:= 1^7 + 3^7 + 8^7 \\
2099467 &:= 2^7 + 3^7 + 8^7 \\
2099468 &:= 1^7 + 2^7 + 3^7 + 8^7 \\
2113536 &:= 4^7 + 8^7 \\
2113537 &:= 1^7 + 4^7 + 8^7 \\
2113664 &:= 2^7 + 4^7 + 8^7 \\
2113665 &:= 1^7 + 2^7 + 4^7 + 8^7 \\
2115723 &:= 3^7 + 4^7 + 8^7 \\
2115724 &:= 1^7 + 3^7 + 4^7 + 8^7 \\
2115851 &:= 2^7 + 3^7 + 4^7 + 8^7 \\
2115852 &:= 1^7 + 2^7 + 3^7 + 4^7 + 8^7 \\
2135777 &:= 4^8 + 5^8 + 6^8
\end{aligned}$$

2135778 := $1^8 + 4^8 + 5^8 + 6^8$	2379404 := $1^7 + 2^7 + 3^7 + 6^7 + 8^7$
2136033 := $2^8 + 4^8 + 5^8 + 6^8$	2393472 := $4^7 + 6^7 + 8^7$
2136034 := $1^8 + 2^8 + 4^8 + 5^8 + 6^8$	2393473 := $1^7 + 4^7 + 6^7 + 8^7$
2142338 := $3^8 + 4^8 + 5^8 + 6^8$	2393600 := $2^7 + 4^7 + 6^7 + 8^7$
2142339 := $1^8 + 3^8 + 4^8 + 5^8 + 6^8$	2393601 := $1^7 + 2^7 + 4^7 + 6^7 + 8^7$
2142594 := $2^8 + 3^8 + 4^8 + 5^8 + 6^8$	2395659 := $3^7 + 4^7 + 6^7 + 8^7$
2142595 := $1^8 + 2^8 + 3^8 + 4^8 + 5^8 + 6^8$	2395660 := $1^7 + 3^7 + 4^7 + 6^7 + 8^7$
2175277 := $5^7 + 8^7$	2395787 := $2^7 + 3^7 + 4^7 + 6^7 + 8^7$
2175278 := $1^7 + 5^7 + 8^7$	2395788 := $1^7 + 2^7 + 3^7 + 4^7 + 6^7 + 8^7$
2175405 := $2^7 + 5^7 + 8^7$	2455213 := $5^7 + 6^7 + 8^7$
2175406 := $1^7 + 2^7 + 5^7 + 8^7$	2455214 := $1^7 + 5^7 + 6^7 + 8^7$
2177464 := $3^7 + 5^7 + 8^7$	2455341 := $2^7 + 5^7 + 6^7 + 8^7$
2177465 := $1^7 + 3^7 + 5^7 + 8^7$	2455342 := $1^7 + 2^7 + 5^7 + 6^7 + 8^7$
2177592 := $2^7 + 3^7 + 5^7 + 8^7$	2457400 := $3^7 + 5^7 + 6^7 + 8^7$
2177593 := $1^7 + 2^7 + 3^7 + 5^7 + 8^7$	2457401 := $1^7 + 3^7 + 5^7 + 6^7 + 8^7$
2191661 := $4^7 + 5^7 + 8^7$	2457528 := $2^7 + 3^7 + 5^7 + 6^7 + 8^7$
2191662 := $1^7 + 4^7 + 5^7 + 8^7$	2457529 := $1^7 + 2^7 + 3^7 + 5^7 + 6^7 + 8^7$
2191789 := $2^7 + 4^7 + 5^7 + 8^7$	2471597 := $4^7 + 5^7 + 6^7 + 8^7$
2191790 := $1^7 + 2^7 + 4^7 + 5^7 + 8^7$	2471598 := $1^7 + 4^7 + 5^7 + 6^7 + 8^7$
2193848 := $3^7 + 4^7 + 5^7 + 8^7$	2471725 := $2^7 + 4^7 + 5^7 + 6^7 + 8^7$
2193849 := $1^7 + 3^7 + 4^7 + 5^7 + 8^7$	2471726 := $1^7 + 2^7 + 4^7 + 5^7 + 6^7 + 8^7$
2193976 := $2^7 + 3^7 + 4^7 + 5^7 + 8^7$	2473784 := $3^7 + 4^7 + 5^7 + 6^7 + 8^7$
2193977 := $1^7 + 2^7 + 3^7 + 4^7 + 5^7 + 8^7$	2473785 := $1^7 + 3^7 + 4^7 + 5^7 + 6^7 + 8^7$
2215269 := $4^9 + 5^9$	2473912 := $2^7 + 3^7 + 4^7 + 5^7 + 6^7 + 8^7$
2215270 := $1^9 + 4^9 + 5^9$	2473913 := $1^7 + 2^7 + 3^7 + 4^7 + 5^7 + 6^7 + 8^7$
2215781 := $2^9 + 4^9 + 5^9$	2920695 := $7^7 + 8^7$
2215782 := $1^9 + 2^9 + 4^9 + 5^9$	2920696 := $1^7 + 7^7 + 8^7$
2234952 := $3^9 + 4^9 + 5^9$	2920823 := $2^7 + 7^7 + 8^7$
2234953 := $1^9 + 3^9 + 4^9 + 5^9$	2920824 := $1^7 + 2^7 + 7^7 + 8^7$
2235464 := $2^9 + 3^9 + 4^9 + 5^9$	2922882 := $3^7 + 7^7 + 8^7$
2235465 := $1^9 + 2^9 + 3^9 + 4^9 + 5^9$	2922883 := $1^7 + 3^7 + 7^7 + 8^7$
2377088 := $6^7 + 8^7$	2923010 := $2^7 + 3^7 + 7^7 + 8^7$
2377089 := $1^7 + 6^7 + 8^7$	2923011 := $1^7 + 2^7 + 3^7 + 7^7 + 8^7$
2377216 := $2^7 + 6^7 + 8^7$	2937079 := $4^7 + 7^7 + 8^7$
2377217 := $1^7 + 2^7 + 6^7 + 8^7$	2937080 := $1^7 + 4^7 + 7^7 + 8^7$
2379275 := $3^7 + 6^7 + 8^7$	2937207 := $2^7 + 4^7 + 7^7 + 8^7$
2379276 := $1^7 + 3^7 + 6^7 + 8^7$	2937208 := $1^7 + 2^7 + 4^7 + 7^7 + 8^7$
2379403 := $2^7 + 3^7 + 6^7 + 8^7$	2939266 := $3^7 + 4^7 + 7^7 + 8^7$

$$2939267 := 1^7 + 3^7 + 4^7 + 7^7 + 8^7$$

$$2939394 := 2^7 + 3^7 + 4^7 + 7^7 + 8^7$$

$$2939395 := 1^7 + 2^7 + 3^7 + 4^7 + 7^7 + 8^7$$

$$2998820 := 5^7 + 7^7 + 8^7$$

$$2998821 := 1^7 + 5^7 + 7^7 + 8^7$$

$$2998948 := 2^7 + 5^7 + 7^7 + 8^7$$

$$2998949 := 1^7 + 2^7 + 5^7 + 7^7 + 8^7$$

$$3001007 := 3^7 + 5^7 + 7^7 + 8^7$$

$$3001008 := 1^7 + 3^7 + 5^7 + 7^7 + 8^7$$

$$3001135 := 2^7 + 3^7 + 5^7 + 7^7 + 8^7$$

$$3001136 := 1^7 + 2^7 + 3^7 + 5^7 + 7^7 + 8^7$$

$$3015204 := 4^7 + 5^7 + 7^7 + 8^7$$

$$3015205 := 1^7 + 4^7 + 5^7 + 7^7 + 8^7$$

$$3015332 := 2^7 + 4^7 + 5^7 + 7^7 + 8^7$$

$$3015333 := 1^7 + 2^7 + 4^7 + 5^7 + 7^7 + 8^7$$

$$3017391 := 3^7 + 4^7 + 5^7 + 7^7 + 8^7$$

$$3017392 := 1^7 + 3^7 + 4^7 + 5^7 + 7^7 + 8^7$$

$$3017519 := 2^7 + 3^7 + 4^7 + 5^7 + 7^7 + 8^7$$

$$3017520 := 1^7 + 2^7 + 3^7 + 4^7 + 5^7 + 7^7 + 8^7$$

$$3200631 := 6^7 + 7^7 + 8^7$$

$$3200632 := 1^7 + 6^7 + 7^7 + 8^7$$

$$3200759 := 2^7 + 6^7 + 7^7 + 8^7$$

$$3200760 := 1^7 + 2^7 + 6^7 + 7^7 + 8^7$$

$$3202818 := 3^7 + 6^7 + 7^7 + 8^7$$

$$3202819 := 1^7 + 3^7 + 6^7 + 7^7 + 8^7$$

$$3202946 := 2^7 + 3^7 + 6^7 + 7^7 + 8^7$$

$$3202947 := 1^7 + 2^7 + 3^7 + 6^7 + 7^7 + 8^7$$

$$3217015 := 4^7 + 6^7 + 7^7 + 8^7$$

$$3217016 := 1^7 + 4^7 + 6^7 + 7^7 + 8^7$$

$$3217143 := 2^7 + 4^7 + 6^7 + 7^7 + 8^7$$

$$3217144 := 1^7 + 2^7 + 4^7 + 6^7 + 7^7 + 8^7$$

$$3219202 := 3^7 + 4^7 + 6^7 + 7^7 + 8^7$$

$$3219203 := 1^7 + 3^7 + 4^7 + 6^7 + 7^7 + 8^7$$

$$3219330 := 2^7 + 3^7 + 4^7 + 6^7 + 7^7 + 8^7$$

$$3219331 := 1^7 + 2^7 + 3^7 + 4^7 + 6^7 + 7^7 + 8^7$$

$$3278756 := 5^7 + 6^7 + 7^7 + 8^7$$

$$3278757 := 1^7 + 5^7 + 6^7 + 7^7 + 8^7$$

$$3278884 := 2^7 + 5^7 + 6^7 + 7^7 + 8^7$$

$$3278885 := 1^7 + 2^7 + 5^7 + 6^7 + 7^7 + 8^7$$

$$3280943 := 3^7 + 5^7 + 6^7 + 7^7 + 8^7$$

$$3280944 := 1^7 + 3^7 + 5^7 + 6^7 + 7^7 + 8^7$$

$$3281071 := 2^7 + 3^7 + 5^7 + 6^7 + 7^7 + 8^7$$

$$3281072 := 1^7 + 2^7 + 3^7 + 5^7 + 6^7 + 7^7 + 8^7$$

$$3295140 := 4^7 + 5^7 + 6^7 + 7^7 + 8^7$$

$$3295141 := 1^7 + 4^7 + 5^7 + 6^7 + 7^7 + 8^7$$

$$3295268 := 2^7 + 4^7 + 5^7 + 6^7 + 7^7 + 8^7$$

$$3295269 := 1^7 + 2^7 + 4^7 + 5^7 + 6^7 + 7^7 + 8^7$$

$$3297327 := 3^7 + 4^7 + 5^7 + 6^7 + 7^7 + 8^7$$

$$3297328 := 1^7 + 3^7 + 4^7 + 5^7 + 6^7 + 7^7 + 8^7$$

$$3297455 := 2^7 + 3^7 + 4^7 + 5^7 + 6^7 + 7^7 + 8^7$$

$$3297456 := 1^7 + 2^7 + 3^7 + 4^7 + 5^7 + 6^7 + 7^7 + 8^7$$

$$4194304 := 4^{11}$$

$$4194305 := 1^{11} + 4^{11}$$

$$4196352 := 2^{11} + 4^{11}$$

$$4196353 := 1^{11} + 2^{11} + 4^{11}$$

$$4371451 := 3^{11} + 4^{11}$$

$$4371452 := 1^{11} + 3^{11} + 4^{11}$$

$$4373499 := 2^{11} + 3^{11} + 4^{11}$$

$$4373500 := 1^{11} + 2^{11} + 3^{11} + 4^{11}$$

$$4782969 := 9^7$$

$$4782970 := 1^7 + 9^7$$

$$4783097 := 2^7 + 9^7$$

$$4783098 := 1^7 + 2^7 + 9^7$$

$$4785156 := 3^7 + 9^7$$

$$4785157 := 1^7 + 3^7 + 9^7$$

$$4785284 := 2^7 + 3^7 + 9^7$$

$$4785285 := 1^7 + 2^7 + 3^7 + 9^7$$

$$4799353 := 4^7 + 9^7$$

$$4799354 := 1^7 + 4^7 + 9^7$$

$$4799481 := 2^7 + 4^7 + 9^7$$

$$4799482 := 1^7 + 2^7 + 4^7 + 9^7$$

$$4801540 := 3^7 + 4^7 + 9^7$$

$$4801541 := 1^7 + 3^7 + 4^7 + 9^7$$

$$4801668 := 2^7 + 3^7 + 4^7 + 9^7$$

$$4801669 := 1^7 + 2^7 + 3^7 + 4^7 + 9^7$$

$$4861094 := 5^7 + 9^7$$

$$4861095 := 1^7 + 5^7 + 9^7$$

$$4861222 := 2^7 + 5^7 + 9^7$$

$$4861223 := 1^7 + 2^7 + 5^7 + 9^7$$

$$4863281 := 3^7 + 5^7 + 9^7$$

$$4863282 := 1^7 + 3^7 + 5^7 + 9^7$$

$$4863409 := 2^7 + 3^7 + 5^7 + 9^7$$

$$4863410 := 1^7 + 2^7 + 3^7 + 5^7 + 9^7$$

$$4877478 := 4^7 + 5^7 + 9^7$$

$$4877479 := 1^7 + 4^7 + 5^7 + 9^7$$

$$4877606 := 2^7 + 4^7 + 5^7 + 9^7$$

$$4877607 := 1^7 + 2^7 + 4^7 + 5^7 + 9^7$$

$$4879665 := 3^7 + 4^7 + 5^7 + 9^7$$

$$4879666 := 1^7 + 3^7 + 4^7 + 5^7 + 9^7$$

$$4879793 := 2^7 + 3^7 + 4^7 + 5^7 + 9^7$$

$$4879794 := 1^7 + 2^7 + 3^7 + 4^7 + 5^7 + 9^7$$

$$5062905 := 6^7 + 9^7$$

$$5062906 := 1^7 + 6^7 + 9^7$$

$$5063033 := 2^7 + 6^7 + 9^7$$

$$5063034 := 1^7 + 2^7 + 6^7 + 9^7$$

$$5065092 := 3^7 + 6^7 + 9^7$$

$$5065093 := 1^7 + 3^7 + 6^7 + 9^7$$

$$5065220 := 2^7 + 3^7 + 6^7 + 9^7$$

$$5065221 := 1^7 + 2^7 + 3^7 + 6^7 + 9^7$$

$$5079289 := 4^7 + 6^7 + 9^7$$

$$5079290 := 1^7 + 4^7 + 6^7 + 9^7$$

$$5079417 := 2^7 + 4^7 + 6^7 + 9^7$$

$$5079418 := 1^7 + 2^7 + 4^7 + 6^7 + 9^7$$

$$5081476 := 3^7 + 4^7 + 6^7 + 9^7$$

$$5081477 := 1^7 + 3^7 + 4^7 + 6^7 + 9^7$$

$$5081604 := 2^7 + 3^7 + 4^7 + 6^7 + 9^7$$

$$5081605 := 1^7 + 2^7 + 3^7 + 4^7 + 6^7 + 9^7$$

$$5141030 := 5^7 + 6^7 + 9^7$$

$$5141031 := 1^7 + 5^7 + 6^7 + 9^7$$

$$5141158 := 2^7 + 5^7 + 6^7 + 9^7$$

$$5141159 := 1^7 + 2^7 + 5^7 + 6^7 + 9^7$$

$$5143217 := 3^7 + 5^7 + 6^7 + 9^7$$

$$5143218 := 1^7 + 3^7 + 5^7 + 6^7 + 9^7$$

$$5143345 := 2^7 + 3^7 + 5^7 + 6^7 + 9^7$$

$$5143346 := 1^7 + 2^7 + 3^7 + 5^7 + 6^7 + 9^7$$

$$5157414 := 4^7 + 5^7 + 6^7 + 9^7$$

$$5157415 := 1^7 + 4^7 + 5^7 + 6^7 + 9^7$$

$$5157542 := 2^7 + 4^7 + 5^7 + 6^7 + 9^7$$

$$5157543 := 1^7 + 2^7 + 4^7 + 5^7 + 6^7 + 9^7$$

$$5159601 := 3^7 + 4^7 + 5^7 + 6^7 + 9^7$$

$$5159602 := 1^7 + 3^7 + 4^7 + 5^7 + 6^7 + 9^7$$

$$5159729 := 2^7 + 3^7 + 4^7 + 5^7 + 6^7 + 9^7$$

$$5159730 := 1^7 + 2^7 + 3^7 + 4^7 + 5^7 + 6^7 + 9^7$$

$$5606512 := 7^7 + 9^7$$

$$5606513 := 1^7 + 7^7 + 9^7$$

$$5606640 := 2^7 + 7^7 + 9^7$$

$$5606641 := 1^7 + 2^7 + 7^7 + 9^7$$

$$5608699 := 3^7 + 7^7 + 9^7$$

$$5608700 := 1^7 + 3^7 + 7^7 + 9^7$$

$$5608827 := 2^7 + 3^7 + 7^7 + 9^7$$

$$5608828 := 1^7 + 2^7 + 3^7 + 7^7 + 9^7$$

$$5622896 := 4^7 + 7^7 + 9^7$$

$$5622897 := 1^7 + 4^7 + 7^7 + 9^7$$

$$5623024 := 2^7 + 4^7 + 7^7 + 9^7$$

$$5623025 := 1^7 + 2^7 + 4^7 + 7^7 + 9^7$$

$$5625083 := 3^7 + 4^7 + 7^7 + 9^7$$

$$5625084 := 1^7 + 3^7 + 4^7 + 7^7 + 9^7$$

$$5625211 := 2^7 + 3^7 + 4^7 + 7^7 + 9^7$$

$$5625212 := 1^7 + 2^7 + 3^7 + 4^7 + 7^7 + 9^7$$

$$5684637 := 5^7 + 7^7 + 9^7$$

$$5684638 := 1^7 + 5^7 + 7^7 + 9^7$$

$$5684765 := 2^7 + 5^7 + 7^7 + 9^7$$

$$5684766 := 1^7 + 2^7 + 5^7 + 7^7 + 9^7$$

$$5686824 := 3^7 + 5^7 + 7^7 + 9^7$$

$$5686825 := 1^7 + 3^7 + 5^7 + 7^7 + 9^7$$

$$5686952 := 2^7 + 3^7 + 5^7 + 7^7 + 9^7$$

$$5686953 := 1^7 + 2^7 + 3^7 + 5^7 + 7^7 + 9^7$$

$$5701021 := 4^7 + 5^7 + 7^7 + 9^7$$

$$5701022 := 1^7 + 4^7 + 5^7 + 7^7 + 9^7$$

$$5701149 := 2^7 + 4^7 + 5^7 + 7^7 + 9^7$$

$$5701150 := 1^7 + 2^7 + 4^7 + 5^7 + 7^7 + 9^7$$

$$5703208 := 3^7 + 4^7 + 5^7 + 7^7 + 9^7$$

$$5703209 := 1^7 + 3^7 + 4^7 + 5^7 + 7^7 + 9^7$$

$$5703336 := 2^7 + 3^7 + 4^7 + 5^7 + 7^7 + 9^7$$

$$5703337 := 1^7 + 2^7 + 3^7 + 4^7 + 5^7 + 7^7 + 9^7$$

$$5764801 := 7^8$$

$$5764802 := 1^8 + 7^8$$

$$5765057 := 2^8 + 7^8$$

$$5765058 := 1^8 + 2^8 + 7^8$$

$$5771362 := 3^8 + 7^8$$

$$5771363 := 1^8 + 3^8 + 7^8$$

$$5771618 := 2^8 + 3^8 + 7^8$$

$$5771619 := 1^8 + 2^8 + 3^8 + 7^8$$

$$5830337 := 4^8 + 7^8$$

$$5830338 := 1^8 + 4^8 + 7^8$$

$$5830593 := 2^8 + 4^8 + 7^8$$

$$5830594 := 1^8 + 2^8 + 4^8 + 7^8$$

$$5836898 := 3^8 + 4^8 + 7^8$$

$$5836899 := 1^8 + 3^8 + 4^8 + 7^8$$

$$5837154 := 2^8 + 3^8 + 4^8 + 7^8$$

$$5837155 := 1^8 + 2^8 + 3^8 + 4^8 + 7^8$$

$$5886448 := 6^7 + 7^7 + 9^7$$

$$5886449 := 1^7 + 6^7 + 7^7 + 9^7$$

$$5886576 := 2^7 + 6^7 + 7^7 + 9^7$$

$$5886577 := 1^7 + 2^7 + 6^7 + 7^7 + 9^7$$

$$5888635 := 3^7 + 6^7 + 7^7 + 9^7$$

$$5888636 := 1^7 + 3^7 + 6^7 + 7^7 + 9^7$$

$$5888763 := 2^7 + 3^7 + 6^7 + 7^7 + 9^7$$

$$5888764 := 1^7 + 2^7 + 3^7 + 6^7 + 7^7 + 9^7$$

$$5902832 := 4^7 + 6^7 + 7^7 + 9^7$$

$$5902833 := 1^7 + 4^7 + 6^7 + 7^7 + 9^7$$

$$5902960 := 2^7 + 4^7 + 6^7 + 7^7 + 9^7$$

$$5902961 := 1^7 + 2^7 + 4^7 + 6^7 + 7^7 + 9^7$$

$$5905019 := 3^7 + 4^7 + 6^7 + 7^7 + 9^7$$

$$5905020 := 1^7 + 3^7 + 4^7 + 6^7 + 7^7 + 9^7$$

$$5905147 := 2^7 + 3^7 + 4^7 + 6^7 + 7^7 + 9^7$$

$$5905148 := 1^7 + 2^7 + 3^7 + 4^7 + 6^7 + 7^7 + 9^7$$

$$5964573 := 5^7 + 6^7 + 7^7 + 9^7$$

$$5964574 := 1^7 + 5^7 + 6^7 + 7^7 + 9^7$$

$$5964701 := 2^7 + 5^7 + 6^7 + 7^7 + 9^7$$

$$5964702 := 1^7 + 2^7 + 5^7 + 6^7 + 7^7 + 9^7$$

$$5966760 := 3^7 + 5^7 + 6^7 + 7^7 + 9^7$$

$$5966761 := 1^7 + 3^7 + 5^7 + 6^7 + 7^7 + 9^7$$

$$5966888 := 2^7 + 3^7 + 5^7 + 6^7 + 7^7 + 9^7$$

$$5966889 := 1^7 + 2^7 + 3^7 + 5^7 + 6^7 + 7^7 + 9^7$$

$$5980957 := 4^7 + 5^7 + 6^7 + 7^7 + 9^7$$

$$5980958 := 1^7 + 4^7 + 5^7 + 6^7 + 7^7 + 9^7$$

$$5981085 := 2^7 + 4^7 + 5^7 + 6^7 + 7^7 + 9^7$$

$$5981086 := 1^7 + 2^7 + 4^7 + 5^7 + 6^7 + 7^7 + 9^7$$

$$5983144 := 3^7 + 4^7 + 5^7 + 6^7 + 7^7 + 9^7$$

$$5983145 := 1^7 + 3^7 + 4^7 + 5^7 + 6^7 + 7^7 + 9^7$$

$$5983272 := 2^7 + 3^7 + 4^7 + 5^7 + 6^7 + 7^7 + 9^7$$

$$5983273 := 1^7 + 2^7 + 3^7 + 4^7 + 5^7 + 6^7 + 7^7 + 9^7$$

$$6155426 := 5^8 + 7^8$$

$$6155427 := 1^8 + 5^8 + 7^8$$

$$6155682 := 2^8 + 5^8 + 7^8$$

$$6155683 := 1^8 + 2^8 + 5^8 + 7^8$$

$$6161987 := 3^8 + 5^8 + 7^8$$

$$6161988 := 1^8 + 3^8 + 5^8 + 7^8$$

$$6162243 := 2^8 + 3^8 + 5^8 + 7^8$$

$$6162244 := 1^8 + 2^8 + 3^8 + 5^8 + 7^8$$

$$6220962 := 4^8 + 5^8 + 7^8$$

$$6220963 := 1^8 + 4^8 + 5^8 + 7^8$$

$$6221218 := 2^8 + 4^8 + 5^8 + 7^8$$

$$6221219 := 1^8 + 2^8 + 4^8 + 5^8 + 7^8$$

$$6227523 := 3^8 + 4^8 + 5^8 + 7^8$$

$$6227524 := 1^8 + 3^8 + 4^8 + 5^8 + 7^8$$

$$6227779 := 2^8 + 3^8 + 4^8 + 5^8 + 7^8$$

$$6227780 := 1^8 + 2^8 + 3^8 + 4^8 + 5^8 + 7^8$$

$$6880121 := 8^7 + 9^7$$

$$6880122 := 1^7 + 8^7 + 9^7$$

$$6880249 := 2^7 + 8^7 + 9^7$$

$$6880250 := 1^7 + 2^7 + 8^7 + 9^7$$

$$6882308 := 3^7 + 8^7 + 9^7$$

$$6882309 := 1^7 + 3^7 + 8^7 + 9^7$$

$$6882436 := 2^7 + 3^7 + 8^7 + 9^7$$

$$6882437 := 1^7 + 2^7 + 3^7 + 8^7 + 9^7$$

$$6896505 := 4^7 + 8^7 + 9^7$$

$$\begin{aligned}
6896506 &:= 1^7 + 4^7 + 8^7 + 9^7 \\
6896633 &:= 2^7 + 4^7 + 8^7 + 9^7 \\
6896634 &:= 1^7 + 2^7 + 4^7 + 8^7 + 9^7 \\
6898692 &:= 3^7 + 4^7 + 8^7 + 9^7 \\
6898693 &:= 1^7 + 3^7 + 4^7 + 8^7 + 9^7 \\
6898820 &:= 2^7 + 3^7 + 4^7 + 8^7 + 9^7 \\
6898821 &:= 1^7 + 2^7 + 3^7 + 4^7 + 8^7 + 9^7 \\
6958246 &:= 5^7 + 8^7 + 9^7 \\
6958247 &:= 1^7 + 5^7 + 8^7 + 9^7 \\
6958374 &:= 2^7 + 5^7 + 8^7 + 9^7 \\
6958375 &:= 1^7 + 2^7 + 5^7 + 8^7 + 9^7 \\
6960433 &:= 3^7 + 5^7 + 8^7 + 9^7 \\
6960434 &:= 1^7 + 3^7 + 5^7 + 8^7 + 9^7 \\
6960561 &:= 2^7 + 3^7 + 5^7 + 8^7 + 9^7 \\
6960562 &:= 1^7 + 2^7 + 3^7 + 5^7 + 8^7 + 9^7 \\
6974630 &:= 4^7 + 5^7 + 8^7 + 9^7 \\
6974631 &:= 1^7 + 4^7 + 5^7 + 8^7 + 9^7 \\
6974758 &:= 2^7 + 4^7 + 5^7 + 8^7 + 9^7 \\
6974759 &:= 1^7 + 2^7 + 4^7 + 5^7 + 8^7 + 9^7 \\
6976817 &:= 3^7 + 4^7 + 5^7 + 8^7 + 9^7 \\
6976818 &:= 1^7 + 3^7 + 4^7 + 5^7 + 8^7 + 9^7 \\
6976945 &:= 2^7 + 3^7 + 4^7 + 5^7 + 8^7 + 9^7 \\
6976946 &:= 1^7 + 2^7 + 3^7 + 4^7 + 5^7 + 8^7 + 9^7 \\
7160057 &:= 6^7 + 8^7 + 9^7 \\
7160058 &:= 1^7 + 6^7 + 8^7 + 9^7 \\
7160185 &:= 2^7 + 6^7 + 8^7 + 9^7 \\
7160186 &:= 1^7 + 2^7 + 6^7 + 8^7 + 9^7 \\
7162244 &:= 3^7 + 6^7 + 8^7 + 9^7 \\
7162245 &:= 1^7 + 3^7 + 6^7 + 8^7 + 9^7 \\
7162372 &:= 2^7 + 3^7 + 6^7 + 8^7 + 9^7 \\
7162373 &:= 1^7 + 2^7 + 3^7 + 6^7 + 8^7 + 9^7 \\
7176441 &:= 4^7 + 6^7 + 8^7 + 9^7 \\
7176442 &:= 1^7 + 4^7 + 6^7 + 8^7 + 9^7 \\
7176569 &:= 2^7 + 4^7 + 6^7 + 8^7 + 9^7 \\
7176570 &:= 1^7 + 2^7 + 4^7 + 6^7 + 8^7 + 9^7 \\
7178628 &:= 3^7 + 4^7 + 6^7 + 8^7 + 9^7 \\
7178629 &:= 1^7 + 3^7 + 4^7 + 6^7 + 8^7 + 9^7 \\
7178756 &:= 2^7 + 3^7 + 4^7 + 6^7 + 8^7 + 9^7
\end{aligned}$$

$$\begin{aligned}
7178757 &:= 1^7 + 2^7 + 3^7 + 4^7 + 6^7 + 8^7 + 9^7 \\
7238182 &:= 5^7 + 6^7 + 8^7 + 9^7 \\
7238183 &:= 1^7 + 5^7 + 6^7 + 8^7 + 9^7 \\
7238310 &:= 2^7 + 5^7 + 6^7 + 8^7 + 9^7 \\
7238311 &:= 1^7 + 2^7 + 5^7 + 6^7 + 8^7 + 9^7 \\
7240369 &:= 3^7 + 5^7 + 6^7 + 8^7 + 9^7 \\
7240370 &:= 1^7 + 3^7 + 5^7 + 6^7 + 8^7 + 9^7 \\
7240497 &:= 2^7 + 3^7 + 5^7 + 6^7 + 8^7 + 9^7 \\
7240498 &:= 1^7 + 2^7 + 3^7 + 5^7 + 6^7 + 8^7 + 9^7 \\
7254566 &:= 4^7 + 5^7 + 6^7 + 8^7 + 9^7 \\
7254567 &:= 1^7 + 4^7 + 5^7 + 6^7 + 8^7 + 9^7 \\
7254694 &:= 2^7 + 4^7 + 5^7 + 6^7 + 8^7 + 9^7 \\
7254695 &:= 1^7 + 2^7 + 4^7 + 5^7 + 6^7 + 8^7 + 9^7 \\
7256753 &:= 3^7 + 4^7 + 5^7 + 6^7 + 8^7 + 9^7 \\
7256754 &:= 1^7 + 3^7 + 4^7 + 5^7 + 6^7 + 8^7 + 9^7 \\
7256881 &:= 2^7 + 3^7 + 4^7 + 5^7 + 6^7 + 8^7 + 9^7 \\
7256882 &:= 1^7 + 2^7 + 3^7 + 4^7 + 5^7 + 6^7 + 8^7 + 9^7 \\
7444417 &:= 6^8 + 7^8 \\
7444418 &:= 1^8 + 6^8 + 7^8 \\
7444673 &:= 2^8 + 6^8 + 7^8 \\
7444674 &:= 1^8 + 2^8 + 6^8 + 7^8 \\
7450978 &:= 3^8 + 6^8 + 7^8 \\
7450979 &:= 1^8 + 3^8 + 6^8 + 7^8 \\
7451234 &:= 2^8 + 3^8 + 6^8 + 7^8 \\
7451235 &:= 1^8 + 2^8 + 3^8 + 6^8 + 7^8 \\
7509953 &:= 4^8 + 6^8 + 7^8 \\
7509954 &:= 1^8 + 4^8 + 6^8 + 7^8 \\
7510209 &:= 2^8 + 4^8 + 6^8 + 7^8 \\
7510210 &:= 1^8 + 2^8 + 4^8 + 6^8 + 7^8 \\
7516514 &:= 3^8 + 4^8 + 6^8 + 7^8 \\
7516515 &:= 1^8 + 3^8 + 4^8 + 6^8 + 7^8 \\
7516770 &:= 2^8 + 3^8 + 4^8 + 6^8 + 7^8 \\
7516771 &:= 1^8 + 2^8 + 3^8 + 4^8 + 6^8 + 7^8 \\
7703664 &:= 7^7 + 8^7 + 9^7 \\
7703665 &:= 1^7 + 7^7 + 8^7 + 9^7 \\
7703792 &:= 2^7 + 7^7 + 8^7 + 9^7 \\
7703793 &:= 1^7 + 2^7 + 7^7 + 8^7 + 9^7 \\
7705851 &:= 3^7 + 7^7 + 8^7 + 9^7
\end{aligned}$$

$$7705852 := 1^7 + 3^7 + 7^7 + 8^7 + 9^7$$

$$7705979 := 2^7 + 3^7 + 7^7 + 8^7 + 9^7$$

$$7705980 := 1^7 + 2^7 + 3^7 + 7^7 + 8^7 + 9^7$$

$$7720048 := 4^7 + 7^7 + 8^7 + 9^7$$

$$7720049 := 1^7 + 4^7 + 7^7 + 8^7 + 9^7$$

$$7720176 := 2^7 + 4^7 + 7^7 + 8^7 + 9^7$$

$$7720177 := 1^7 + 2^7 + 4^7 + 7^7 + 8^7 + 9^7$$

$$7722235 := 3^7 + 4^7 + 7^7 + 8^7 + 9^7$$

$$7722236 := 1^7 + 3^7 + 4^7 + 7^7 + 8^7 + 9^7$$

$$7722363 := 2^7 + 3^7 + 4^7 + 7^7 + 8^7 + 9^7$$

$$7722364 := 1^7 + 2^7 + 3^7 + 4^7 + 7^7 + 8^7 + 9^7$$

$$7781789 := 5^7 + 7^7 + 8^7 + 9^7$$

$$7781790 := 1^7 + 5^7 + 7^7 + 8^7 + 9^7$$

$$7781917 := 2^7 + 5^7 + 7^7 + 8^7 + 9^7$$

$$7781918 := 1^7 + 2^7 + 5^7 + 7^7 + 8^7 + 9^7$$

$$7783976 := 3^7 + 5^7 + 7^7 + 8^7 + 9^7$$

$$7783977 := 1^7 + 3^7 + 5^7 + 7^7 + 8^7 + 9^7$$

$$7784104 := 2^7 + 3^7 + 5^7 + 7^7 + 8^7 + 9^7$$

$$7784105 := 1^7 + 2^7 + 3^7 + 5^7 + 7^7 + 8^7 + 9^7$$

$$7798173 := 4^7 + 5^7 + 7^7 + 8^7 + 9^7$$

$$7798174 := 1^7 + 4^7 + 5^7 + 7^7 + 8^7 + 9^7$$

$$7798301 := 2^7 + 4^7 + 5^7 + 7^7 + 8^7 + 9^7$$

$$7798302 := 1^7 + 2^7 + 4^7 + 5^7 + 7^7 + 8^7 + 9^7$$

$$7800360 := 3^7 + 4^7 + 5^7 + 7^7 + 8^7 + 9^7$$

$$7800361 := 1^7 + 3^7 + 4^7 + 5^7 + 7^7 + 8^7 + 9^7$$

$$7800488 := 2^7 + 3^7 + 4^7 + 5^7 + 7^7 + 8^7 + 9^7$$

$$7800489 := 1^7 + 2^7 + 3^7 + 4^7 + 5^7 + 7^7 + 8^7 + 9^7$$

$$7835042 := 5^8 + 6^8 + 7^8$$

$$7835043 := 1^8 + 5^8 + 6^8 + 7^8$$

$$7835298 := 2^8 + 5^8 + 6^8 + 7^8$$

$$7835299 := 1^8 + 2^8 + 5^8 + 6^8 + 7^8$$

$$7841603 := 3^8 + 5^8 + 6^8 + 7^8$$

$$7841604 := 1^8 + 3^8 + 5^8 + 6^8 + 7^8$$

$$7841859 := 2^8 + 3^8 + 5^8 + 6^8 + 7^8$$

$$7841860 := 1^8 + 2^8 + 3^8 + 5^8 + 6^8 + 7^8$$

$$7900578 := 4^8 + 5^8 + 6^8 + 7^8$$

$$7900579 := 1^8 + 4^8 + 5^8 + 6^8 + 7^8$$

$$7900834 := 2^8 + 4^8 + 5^8 + 6^8 + 7^8$$

$$7900835 := 1^8 + 2^8 + 4^8 + 5^8 + 6^8 + 7^8$$

$$7907139 := 3^8 + 4^8 + 5^8 + 6^8 + 7^8$$

$$7907140 := 1^8 + 3^8 + 4^8 + 5^8 + 6^8 + 7^8$$

$$7907395 := 2^8 + 3^8 + 4^8 + 5^8 + 6^8 + 7^8$$

$$7907396 := 1^8 + 2^8 + 3^8 + 4^8 + 5^8 + 6^8 + 7^8$$

$$7983600 := 6^7 + 7^7 + 8^7 + 9^7$$

$$7983601 := 1^7 + 6^7 + 7^7 + 8^7 + 9^7$$

$$7983728 := 2^7 + 6^7 + 7^7 + 8^7 + 9^7$$

$$7983729 := 1^7 + 2^7 + 6^7 + 7^7 + 8^7 + 9^7$$

$$7985787 := 3^7 + 6^7 + 7^7 + 8^7 + 9^7$$

$$7985788 := 1^7 + 3^7 + 6^7 + 7^7 + 8^7 + 9^7$$

$$7985915 := 2^7 + 3^7 + 6^7 + 7^7 + 8^7 + 9^7$$

$$7985916 := 1^7 + 2^7 + 3^7 + 6^7 + 7^7 + 8^7 + 9^7$$

$$7999984 := 4^7 + 6^7 + 7^7 + 8^7 + 9^7$$

$$7999985 := 1^7 + 4^7 + 6^7 + 7^7 + 8^7 + 9^7$$

$$8000112 := 2^7 + 4^7 + 6^7 + 7^7 + 8^7 + 9^7$$

$$8000113 := 1^7 + 2^7 + 4^7 + 6^7 + 7^7 + 8^7 + 9^7$$

$$8002171 := 3^7 + 4^7 + 6^7 + 7^7 + 8^7 + 9^7$$

$$8002172 := 1^7 + 3^7 + 4^7 + 6^7 + 7^7 + 8^7 + 9^7$$

$$8002299 := 2^7 + 3^7 + 4^7 + 6^7 + 7^7 + 8^7 + 9^7$$

$$8002300 := 1^7 + 2^7 + 3^7 + 4^7 + 6^7 + 7^7 + 8^7 + 9^7$$

$$8061725 := 5^7 + 6^7 + 7^7 + 8^7 + 9^7$$

$$8061726 := 1^7 + 5^7 + 6^7 + 7^7 + 8^7 + 9^7$$

$$8061853 := 2^7 + 5^7 + 6^7 + 7^7 + 8^7 + 9^7$$

$$8061854 := 1^7 + 2^7 + 5^7 + 6^7 + 7^7 + 8^7 + 9^7$$

$$8063912 := 3^7 + 5^7 + 6^7 + 7^7 + 8^7 + 9^7$$

$$8063913 := 1^7 + 3^7 + 5^7 + 6^7 + 7^7 + 8^7 + 9^7$$

$$8064040 := 2^7 + 3^7 + 5^7 + 6^7 + 7^7 + 8^7 + 9^7$$

$$8064041 := 1^7 + 2^7 + 3^7 + 5^7 + 6^7 + 7^7 + 8^7 + 9^7$$

$$8078109 := 4^7 + 5^7 + 6^7 + 7^7 + 8^7 + 9^7$$

$$8078110 := 1^7 + 4^7 + 5^7 + 6^7 + 7^7 + 8^7 + 9^7$$

$$8078237 := 2^7 + 4^7 + 5^7 + 6^7 + 7^7 + 8^7 + 9^7$$

$$8078238 := 1^7 + 2^7 + 4^7 + 5^7 + 6^7 + 7^7 + 8^7 + 9^7$$

$$8080296 := 3^7 + 4^7 + 5^7 + 6^7 + 7^7 + 8^7 + 9^7$$

$$8080297 := 1^7 + 3^7 + 4^7 + 5^7 + 6^7 + 7^7 + 8^7 + 9^7$$

$$8080424 := 2^7 + 3^7 + 4^7 + 5^7 + 6^7 + 7^7 + 8^7 + 9^7$$

$$8080425 := 1^7 + 2^7 + 3^7 + 4^7 + 5^7 + 6^7 + 7^7 + 8^7 + 9^7$$

$$8388608 := 2^{23}$$

$$8388609 := 1^{23} + 2^{23}$$

$$9765625 := 5^{10}$$

$$9765626 := 1^{10} + 5^{10}$$

$$9766649 := 2^{10} + 5^{10}$$

$$9766650 := 1^{10} + 2^{10} + 5^{10}$$

$$9824674 := 3^{10} + 5^{10}$$

$$9824675 := 1^{10} + 3^{10} + 5^{10}$$

$$9825698 := 2^{10} + 3^{10} + 5^{10}$$

$$9825699 := 1^{10} + 2^{10} + 3^{10} + 5^{10}$$

section*Acknowledgement

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

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