Parent Table Development

Most of the numerical tables that will be found here in various articles by the author result from a combination of two well-known mathematical procedures.

1. The famous *Fibonacci number series* that appears in many natural growth processes, i.e. (1, 1, 2, 3, 5, 8, 13, 21, 34 ······^{oo}) where each number is the sum of the previous two numbers.

2. The numerical reduction of multi-digit numbers to single digits. This numerical reduction by digit addition to produce single digit numbers is referred to by this author as *distillation.* It is also known as "*The casting out of nines*" e.g. 39→12 → 3 or 397→19→10→ 1.

The *distilled Fibonacci* numbers and multiples thereof form nine horizontal rows, each containing 24 digits. Continuation of the rows beyond 24 digits merely reproduces the original digits. Likewise, continuation of the row multiples beyond nine only reproduces each original column.

The tables are shown with differing shades of gray to simplify discussion of table summation processes. Column and row sums are generally displayed in white cells along the border of the tables. It should be noted that only the series numbers displayed in the gray shaded portions of the tables were obtained by distillation.

In Table-1, the distilled Fibonacci numbers each occupy a cell which produces a horizontal cell count of twenty-four. In Table-2, the distilled series digits are placed two to a cell in their original order thereby reducing the horizontal cell count to twelve. These two digits are now treated as double-digit numbers for the column and row summations. A similar row reduction to eight cells occurs for Table-3 where three sequential series digits occupy each cell and are treated as triple digit numbers when summing.

The tables and sub-tables to be presented on occasion herein will display a surprising amount of symmetry, both numerical and graphical, as might be expected by such a modification of this mathematical series first reported by Leonardo Fibonacci of Pisa, Italy in the 13^{th} century.

Table-1

Row sum ∇

1	1	2	3	5	8	4	3	7	1	8	9	8	8	7	6	4	1	5	6	2	8	1	9	117
2	2	4	6	1	7	8	6	5	2	7	9	7	7	5	3	8	2	1	3	4	7	2	9	117
3	3	6	9	6	6	3	9	3	3	6	9	6	6	3	9	3	3	6	9	6	6	3	9	135
4	4	8	3	2	5	7	3	1	4	5	9	5	5	1	6	7	4	2	6	8	5	4	9	117
5	5	1	6	7	4	2	6	8	5	4	9	4	4	8	3	2	5	7	3	1	4	5	9	117
6	6	3	9	3	3	6	9	6	6	3	9	3	3	6	9	6	6	3	9	3	3	6	9	135
7	7	5	3	8	2	1	3	4	7	2	9	2	2	4	6	1	7	8	6	5	2	7	9	117
8	8	7	6	4	1	5	6	2	8	1	9	1	1	2	3	5	8	4	3	7	1	8	9	117
9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	216
45	45	45	54	45	45	45	54	45	45	45	81	45	45	45	54	45	45	45	54	45	45	45	81	1188
189				189				216				189				189				216				
594												594												

Table-1 Notes

- Baseline Width (feet) of the Great Pyramid = **1188 – 2(216)** = **4 (189)** = **756** feet.
- The total sum minus the sum of all the nines = **1188 - 9(48)** = **1188 – 432** = **756** feet.
- The digit sum of the two central squares = **216** ⇒ Also, **216** is the number of table cells.
- The sum of the perimeter digits (light gray cells) = **612** ⇒ **Apothem** length = **612** feet.
- The sum of the forty border nines (dark gray cells) = **9(40)** = **360** ⇒ **360** degrees
- Great Pyramid scale size to the Earth = (**1 : 43200**) ⇒ **2(216) = 432** = Base ten factor.
- Pyramid Pi Factor (π_p) = **594 ÷ 189 = 22/7 = 3.142857**
- Pyramid's Height = Base Area Circumference ÷ $2\pi_p$ = (**4** x **756** ft) ÷ **2(22/7)** = **481.1** feet
- Pyramid's Height = Base Area ÷ Total Sum of Table-1 = **(756** ft**)^2** ÷ **1188** ft = **481.1** feet