If m is even and n odd, then

$$\left|\frac{m}{2}, 0\right| \,\triangle\, \left|0, \frac{n-1}{2}\right| \qquad \text{and} \qquad K\left(\frac{m}{2}, 0\right) \,\triangledown\, K\left(0, \frac{n-1}{2}\right) .$$

Thus we have shown that $m > n$ if and only if $f(m) \,\triangledown\, f(n)$.

The operations $\oplus$, of addition and $\otimes$, of multiplication are defined on B as follows:

$$(8) \qquad K(a,b) \oplus K(c,d) = \begin{cases} K(a+c,\, b+d) & \text{if } m,n \text{ are even} \\ K(b+d+1,\, a+c) & \text{if } m,n \text{ are odd} \\ K(b+c,\, a+d) & \text{if } m \text{ is even, } n \text{ odd} \\ K(a+d,\, b+c) & \text{if } m \text{ is odd, } n \text{ even} \end{cases}$$

$$K(a,b) \otimes K(c,d) = \begin{cases} K(2(a-b)(c-d),0) & \text{if } m,n \text{ are even} \\ K(c,d+2(a-b)(c-d)+b-a) & \text{if } m,n \text{ odd} \\ K(a+2(a-b)(d-c),b) & \text{if } m \text{ is even, } n \text{ odd} \\ K(c+2(a-b)(d-c),d) & \text{if } m \text{ is odd, } n \text{ even} \end{cases}$$

where m,n are the positive integers corresponding to (a,b) and (c,d), respectively in (4).

It is easy to show that

$$f(m+n) = f(m) \oplus f(n) \qquad \text{and} \qquad f(mn) = f(m) \otimes f(n).$$

A treatment similar to that above for arithmetic and geometric progressions can be found in [1].

REFERENCE

1. M. D. Darkow, "Interpretations of the Peano Postulates," *Amer. Math. Monthly,* Vol. 64, 1957, pp. 270–271.

****

A FIBONACCI CURIOSITY

LEON BANKOFF
Los Angeles, California 90048

In the Fibonacci sequence $F_0 = 0, F_1 = 1, \cdots, F_n = F_{n-1} + F_{n-2}$,

the sum of the digits of $F_0 = 0$
" " " " " " $F_1 = 1$
" " " " " " $F_5 = 5$
" " " " " " $F_{10} = 10$
" " " " " " $F_{31} = 31$
" " " " " " $F_{35} = 35$
" " " " " " $F_{62} = 62$
" " " " " " $F_{72} = 72$

****