## COMMENTS ON "THE GENERATED, COMPOSITIONS YIELD FIBONACCI NUMBERS"

HENRY WINTHROP University of South Florida, Tampa, Florida

The following explanations will serve to round out the paper mentioned above which appears in <u>The Fibonacci Quarterly</u> (Vol. 3, No. 2, 131-4).

The expression  $F(h_i, \phi)$  of model display (1) designates the partitions of the integer, i, in which the partitions are expressed as functions in  $\phi$  and in which the coefficient of each partition represents the number of possible permutations of that partition.

The general term of model display (3) can be given as

(1) 
$$= ik + \frac{[(i-1) + 2]!k^{2}}{(i-2)!3!} + \frac{[(i-2) + 4]!k^{3} + \dots}{(i-3)!5!}$$

$$+ \frac{[i-(n-1) + 2(n-1)]!k^{n}}{(i-n)!(2n-1)!} + \dots + \frac{k^{i}}{(i-n)!(2n-1)!}$$

where the coefficient of  $k^n$  is the n-th term of the 2r-th order of the figurate numbers.

A discussion of figurate numbers of various orders will be found in <u>Higher Algebra</u> by Hall and Knight (Macmillan, 1936, 4th edition), pp. 319-22.

The following additional references to the paper in question will be found of value by the reader.

- 1. H. Winthrop, "Mathematics In The Social Sciences," School Science and Mathematics, 1957, Vol. 57, pp. 9-16.
- 2. H. Winthrop, "On The Use of Difference Equations In Behavioral Diffusion Theory," School Science and Mathematics, 1958, Vol. 58, pp. 1-6.
- 3. H. Winthrop, "A Kinetic Theory Of Socio-Psychological Diffusion," Journal of Social Psychology, 1945, Vol. 22, 31-60.
- 4. H. Winthrop, "Experimental Results In Relations To A Mathematical Theory Of Behavioral Diffusion," <u>Journal of Social Psychology</u>, 1958, Vol. 47, 85-99.

Continued on page 240.