partitions p(0) through p(4) to find p(16). This reduction rule is applicable in finding the value of any p(n), however it defeats the purpose of the method to reduce too much.

Of course, applying the method of this paper to find small partitions like p(16) or p(17) does not show the method to its fullest — but when used to find a value for large partitions, like say, p(243) = 133978259344888, the method shown in this paper very greatly reduces the work involved.

[Continued from p. 364.]

and the induction is complete. Thus the C-array is precisely the B-array. Thus, $B_{m,p} \equiv C_{m,p}$, and further, the pattern observed by Umansky and Karst persists for all $n \geq 1$, $m \geq 2$. The case $m = 1$ was earlier verified.

Theorem 2 (Independent). If one ignores the signs of the coefficients in Array C, then the sum across the m^{th} row is L_m.

Proof. Interchange the first column on the right with the column on the left and set $n = 1$. The left column is now $-L_m$ and all of the terms on the right are negative. Equality still holds since Theorem 1 is true. Thus

$$1 + \sum_{j=1}^{[m/2]} C_{m,j} = \sum_{j=0}^{[m/2]} C_{m,j} = L_m .$$

REFERENCES

1. Mark Feinberg, "Lucas Triangle," Fibonacci Quarterly, Vol. 5, No. 5, Dec., 1967, pp. 486-490.
2. Harlan Umansky, "Letters to the Editor," Fibonacci Quarterly, Vol. 8, No. 1, Feb., 1970, p. 89.
3. V. E. Hoggatt, Jr., "Convolution Triangles for Generalized Fibonacci Numbers," Fibonacci Quarterly, Vol. 8, No. 2, Mar., 1970, pp. 158-171.