<u>Theorem 2.</u> For all sequences formed by sums of terms on parallel diagonals of the generalized Pascal's triangle, and for all sequences defined by (9) given r + 1 initial terms,

$$\lim_{n \to \infty} \frac{u_{n+s}}{u_n}$$

exists and is the greatest root in absolute value of

$$\frac{r+1}{s} - ax^{s} - b = 0$$

provided this absolute value is not shared by two distinct roots.

REFERENCES

- 1. W. S. Burnside and A. W. Panton, <u>Introduction to the Theory of Binary</u> Algebraic Forms, Dublin University Press, 1918, p. 197.
- 2. L. E. Dickson, <u>History of the Theory of Numbers</u>, Washington, D. C., Carnegie Institute, 1919-1923.
- 3. B. W. Jones, <u>The Theory of Numbers</u>, Rinehart and Company, 1955, pp. 77-99.

- V. E. Hoggatt and C. King, Prob. E1424, <u>American Mathematical Monthly</u>, Vol. 66, 1959, pp. 129-130.
- H. L. Alder, "The Number System in More General Scales," <u>Mathematical</u> <u>Magazine</u>, June 1962, pp. 147-148.
- 3. J. L. Brown, Jr., "Note on Complete Sequences of Integers," <u>American</u> Mathematical Monthly, Vol. 68, 1961, pp. 557-560.

##