Now, if m is odd, then $(m+1-2^{N-3})/2$ is an integer which may be taken as the value of b since it satisfies the conditions (7). It is easily seen that the set (6), in which $b=(m+1-2^{N-3})/2$ and c is determined by (8), is not the set (4). However, if m is even and not equal to 2^{N-3}, then $b=(m+2-2^{N-3})/2$ and c determined by (8) are integers which satisfy (7) and yield a set (6) which is not the set (4). But if $m=2^{N-3}$, then $N\geqq 6$ and $b=2$ satisfies the conditions (7) on b and yields a set (6) which is not the set (4).

An interesting choice of integers b and c is that given by $b=(m+1-2^{N-4})/2$ if m is odd and less than or equal to $(2^{N-4}+2^{N-3}-1)$, but by $b=(m-2^{N-4})/2$ if m is even and less than or equal to $(2^{N-4}+2^{N-3})$. Then (6) require no rearrangement, and c is respectively b or $b+1$. The resulting integers (6) differ from (4) when $m\neq 2^{N-4}+2^{N-3}-1,\ 2^{N-4}+2^{N-3}$.

NORTHWESTERN UNIVERSITY

HAUSDORFF METHODS OF SUMMATION WHICH INCLUDE ALL OF THE CESÀRO METHODS

H. L. GARABEDIAN

1. **Introduction.** The transformation[1]

$$\sigma_m = \sum_{n=0}^{m} C_{m,n}\Delta^{m-n}c_n\cdot s_n,$$

where $c_n=\int_0^1 u^n d\phi(u)$ and $\{s_n\}$ is a given sequence, defines a regular method of summation of the sequence $\{s_n\}$ provided that $\phi(u)$ is of bounded variation on the interval $0\leqq u\leqq 1$, continuous at $u=0$, and

$$\phi(u) = \begin{cases} 0 & \text{if} \quad u = 0, \\ 1 & \text{if} \quad u = 1, \\ \frac{1}{2}[\phi(u-0)+\phi(u+0)] & \text{if} \quad 0 \leqq u < 1. \end{cases}$$

If these conditions of regularity are fulfilled the sequence $\{c_n\}$ is said to be a *regular moment sequence* (briefly a *regular sequence*), the mass function $\phi(u)$ is said to be a *regular mass function*, and the method of summation involved is called a *Hausdorff method of summation* ([**1**] or [**2**]) and is designated by the symbol $[H, \phi(u)]$.

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[1] To define the symbolism used here we write $C_{m,n}=m(m-1)\cdots(m-n+1)/n!$, $C_{m,0}=1$; $\Delta^i x_j=x_j-C_{i,1}x_{j+1}+C_{i,2}x_{j+2}+\cdots$.