

$$D_a^\alpha f(x) = \lim_{n \rightarrow \infty} \left(\frac{n}{x-a} \right)^{\alpha} \sum_{m=0}^n \frac{(-1)^m \Gamma(\alpha+1)}{\Gamma(m+1)} f\left[x - \frac{m}{\frac{n}{x-a}} \right]$$