

Operator	Substitution Factor	Description
$(1 + (a^+)^2) a$	$s_\lambda(x) = \frac{x \cos(\lambda) + \sin(\lambda)}{\cos(\lambda) - x \sin(\lambda)}$	One-parameter group of homographies
$\frac{\sqrt{1 + (a^+)^2}}{a^+} a$	$s_\lambda(x) = \sqrt{x^2 + 2\lambda\sqrt{1 + x^2} + \lambda^2}$	Composition of quadratic direct and inverse functions

$$s_2(z) = e^{(e^z-1)} - 1; \quad s_3(z) = e^{(e^{(e^z-1)}-1)} - 1; \quad s_{-1}(z) = \log(1+z) \quad (1)$$

$$c_n = \binom{2n}{n} \quad (2)$$

$$\frac{(y \frac{d}{dx})^n x^m}{n! m!} \Big|_{x=0} = \delta_{mn} \frac{y^n}{n!} \quad (3)$$

$$\begin{aligned} \sum_{n,k} I(n,k) \frac{x^n}{n!} y^k &= \sum_{n \geq 0} \sum_{k \leq n} \binom{n}{k} k^{n-k} \frac{x^n}{n!} y^k = \\ &= \sum_{k \leq n} \sum_{n \geq k} \binom{n}{k} k^{n-k} \frac{x^{n-k} x^k}{n!} y^k = e^{yx} e^x \end{aligned} \quad (4)$$