$$(x-1)^k=\sum_{j=0}^{k}(-1)^{k-j}\binom{k}{j}x^j$$

$$\{(x-I)^k\}=\sum_{j=0}^{k}(-1)^{k-j}\binom{k}{j}\{x^j\}$$

	$\int$	$\sum$
+	$\frac{x^k}{k!}=\sum_{j=0}^{k}(-1)^{k-j}\binom{k}{j}\cdot L_j(-x)$	$\binom{x}{k}=\sum_{j=0}^{k}(-1)^{k-j}\binom{k}{j}\cdot\frac{(x+j)!}{x!\,j!}$
*	$(-1)^k\cdot\frac{\gamma(k,-\log x)}{\Gamma(k)}=\sum_{j=0}^{k}(-1)^{k-j}\binom{k}{j}\cdot L_{-j}(\log x)$	$D_k{}'(x)=\sum_{j=0}^{k}(-1)^{k-j}\binom{k}{j}D_j(x)$

$$x-1=\sum_{j=0}\frac{1}{j!}\left(\lim_{t\to1}\frac{\partial^j}{\partial t^j}\frac{t-1}{\log t}\right)\cdot(x-1)^j\cdot\log x$$

$$\{x-I\}=\sum_{j=0}\frac{1}{j!}\left(\lim_{t\to1}\frac{\partial^j}{\partial t^j}\frac{t-1}{\log t}\right)\cdot\{(x-I)^j\cdot\log x\}$$

	$\int$	$\sum$
+	$\frac{x^k}{k!}=\sum_{j=0}^{k}(-1)^{k-j}\binom{k}{j}\cdot L_j(-x)$	$x=\sum_{j=0}C_j\cdot\sum_{t=0}^{x}\binom{t-1}{j-1}\cdot H_{x-t}$
*	$(-1)^k\cdot\frac{\gamma(k,-\log x)}{\Gamma(k)}=\sum_{j=0}^{k}(-1)^{k-j}\binom{k}{j}\cdot L_{-z}(\log x)$	$x-1=\sum_{j=0}C_j\cdot\sum_{t=1}^{x}d_j{}'(t)\cdot\Pi\left(\frac{x}{t}\right)$

$$(x-1)^k=\sum_{j=0}\frac{1}{j!}\left(\lim_{t\to1}\frac{\partial^j}{\partial t^j}\frac{t-1}{\log t}\right)\cdot(x-1)^{k-1+j}\cdot\log x$$

$$\{(x-I)^k\}=\sum_{j=0}\frac{1}{j!}\left(\lim_{t\to1}\frac{\partial^j}{\partial t^j}\frac{t-1}{\log t}\right)\cdot\{(x-I)^{k-1+j}\cdot\log x\}$$

	$\int$	$\sum$
+	$\frac{x^k}{k!}=\sum_{j=0}^{k}(-1)^{k-j}\binom{k}{j}\cdot L_j(-x)$	$\binom{x}{k}=\sum_{j=0}C_j\cdot\sum_{t=1}^{x-1}\binom{t-1}{k+j-2}\cdot H_{x-t}$
*	$(-1)^k\cdot\frac{\gamma(k,-\log x)}{\Gamma(k)}=\sum_{j=0}^{k}(-1)^{k-j}\binom{k}{j}\cdot L_{-z}(\log x)$	$D_k{}'(x)=\sum_{j=0}C_j\cdot\sum_{t=1}^{x}d_{k+j-1}{}'(t)\cdot\Pi\left(\frac{x}{t}\right)$

$$\log^k x=\sum_{j=1}\frac{(-1)^{j+1}}{j}(x-1)^j\cdot\log^{k-1}x$$

$$\{\log^k x\}=\sum_{j=1}\frac{(-1)^{j+1}}{j}\{(x-I)^j\cdot\log^{k-1}x\}$$

$$\log x = \sum_{k=0} \frac{B_k}{k!}(x-1) \cdot \log^k x$$

$$\{\log x\} = \sum_{k=0} \frac{B_k}{k!} \{(x-I) \cdot \log^k x\}$$

	$\int$	$\sum$
+		
*		

$$\log^a x = \sum_{k=0} \frac{B_k}{k!}(x-1) \cdot \log^{k+a-1} x$$

$$\{\log^a x\} = \sum_{k=0} \frac{B_k}{k!} \{(x-I) \cdot \log^{k+a-1} x\}$$

(which is)

$$\log x = \sum_{k=0} \frac{1}{k!} \cdot (\lim_{t \to 0} \frac{\partial^k}{\partial t^k} \frac{t}{e^t - 1}) \cdot (x-1) \cdot \log^k x$$

	$\int$	$\sum$
+	$\frac{x^k}{k!} = \sum_{j=0}^{k} (-1)^{k-j} \binom{k}{j} \cdot L_j(-x)$	$\binom{x}{k} = \sum_{j=0} C_j \cdot \sum_{t=1}^{x-1} \binom{t-1}{k+j-2} \cdot H_{x-t}$
*	$(-1)^k \cdot \frac{\gamma(k, -\log x)}{\Gamma(k)} = \sum_{j=0}^{k} (-1)^{k-j} \binom{k}{j} \cdot L_{-z}(\log x)$	$D_k{}'(x) = \sum_{j=0} C_j \cdot \sum_{t=1}^{x} d_{k+j-1}{}'(t) \cdot \Pi(\frac{x}{t})$

$$\log x^z = z \log x$$

$$\{\log x^z\} = z\{\log x\}$$

$$\log a \cdot b = \log a + \log b$$

$$\{\log a \cdot b\} = \{\log a\} + \{\log b\}$$

$$\log \frac{a}{b} = \log a - \log b$$

$$\{\log \frac{a}{b}\} = \{\log a\} - \{\log b\}$$

...

$$t \cdot \log x = \lim_{z \to 0} \frac{\partial}{\partial z}(x^{z \cdot t})$$

$$t \cdot \{\log x\} = \lim_{z \to 0} \frac{\partial}{\partial z}\{x^{z \cdot t}\}$$

	$\int$	$\sum$
+	$t \cdot (\Gamma(0, x-1) + \log(x-1) + \gamma) = \lim_{z \to 0} \frac{\partial}{\partial z} L_{z \cdot t}(1-x)$	$t \cdot H_{x-1} = \lim_{z \to 0} \frac{\partial}{\partial z} \frac{x^{(z \cdot t)}}{(z t)!}$
*	$t \cdot (li(x) - \log \log x - \gamma) = \lim_{z \to 0} \frac{\partial}{\partial z} L_{-(z \cdot t)}(\log x)$	$t \cdot \Pi(x) = \lim_{z \to 0} \frac{\partial}{\partial z} D_{z \cdot t}(x)$

...

$$\log n + \log m = \lim_{z \to 0} \frac{\partial}{\partial z}(n^z \cdot m^z)$$

$$\{\log n\} + \{\log m\} = \lim_{z \to 0} \frac{\partial}{\partial z}(\{n^z\} \cdot \{m^z\})$$

$$\log n - \log m = \lim_{z \to 0} \frac{\partial}{\partial z}(\frac{n^z}{m^z})$$

$$\{\log n\} - \{\log m\} = \lim_{z \to 0} \frac{\partial}{\partial z}(\frac{\{n^z\}}{\{m^z\}})$$

...

$$\{(n \cdot m)^z\} = \sum_{\frac{\log j}{\log n} + \frac{\log k}{\log m} \leq 1} \nabla\{j^z\} \cdot \nabla\{k^z\}$$

$$\{(\frac{n}{m})^z\} = \sum_{\frac{\log j}{\log n} + \frac{\log k}{\log m} \leq 1} \nabla\{j^z\} \cdot \nabla\{k^{-z}\}$$

...

$$\log(n \cdot m) = \log n + \log m$$

$$\{\log(n \cdot m)\} = \{\log n\} + \{\log m\}$$

$$\log \frac{n}{m} = \log n - \log m$$

$$\{\log \frac{n}{m}\} = \{\log n\} - \{\log m\}$$