$$^{u}\text{ɿ}^{n} = \sum_{m}^{n} {}^{o}_{m\_}\text{ɿ}\, \overbrace{u-o}^{\cancel{m}} \Rightarrow \bigwedge_{m}^{n} {}^{o}_{m-}\text{ɿ}^{n} = {}^{o}_{m\_}\text{ɿ}$$

$$o \in a \underset{\circ}{|} b \xrightarrow[\text{n-diff}]{\text{ɿ}} \mathbb{R} \underset{\text{TAY}}{\overset{\text{diff}}{\Longrightarrow}} \bigwedge_{u}^{a|b} \bigvee_{\bar u}^{o|u} {}^{u}\text{ɿ} = \sum_{m}^{n} {}^{o}_{m\_}\text{ɿ}\,\overbrace{u-o}^{\cancel{m}} + \underbrace{{}^{\bar u}_{n\_}\text{ɿ}\,\overbrace{u-o}^{\cancel{n}}}_{\text{diff error}}$$

$$u = x_0$$

$$g = \underbrace{\text{ɿ} - \text{ɿ}^{n}}\,\overbrace{x_0 - o}^{n} - \underbrace{{}^{x_0}\text{ɿ} - {}^{x_0}\text{ɿ}^{n}}\,\overbrace{()-o}^{n} \ \text{n-diff}$$

$$\bigwedge_{m}^{n} {}^{o}_{m\_}g = \overbrace{{}^{o}_{m\_}\text{ɿ} - {}^{o}_{m-}\text{ɿ}^{n}}^{=0}\,\overbrace{x_0-o}^{n} - \underbrace{{}^{x_0}\text{ɿ} - {}^{x_0}\text{ɿ}^{n}}\frac{n!}{(n-m)!}\underbrace{\overbrace{o-o}^{n-m}}_{=0} = 0$$

$${}^{x_0}g = 0 = {}^{o}g \underset{\text{ROL}}{\Longrightarrow} \bigvee_{x_1}^{o|x_0} {}^{x_1}\underline{g} = 0 = {}^{o}\underline{g} \underset{\text{ROL}}{\Longrightarrow} \bigvee_{x_2}^{o|x_1} {}^{x_2}\underline{\underline{g}} = 0 = {}^{o}\underline{\underline{g}} \underset{\text{ROL}}{\overset{\cdot\cdot}{\Longrightarrow}} \bigvee_{x_{n-}}^{o|x_{n}=} {}^{x_{n-}}_{n-\_}g = 0 = {}^{o}_{n-\_}g$$

$$\underset{\text{ROL}}{\Longrightarrow} \bigvee_{\bar u = x_n}^{o|x_{n-}} 0 = {}^{x_n}_{n\_}g = {}^{x_n}_{n\_}\text{ɿ}\,\overbrace{x_0-o}^{n} - n!\underbrace{{}^{x_0}\text{ɿ} - {}^{x_0}\text{ɿ}^{n}}$$

$$\Rightarrow n!\underbrace{{}^{x_0}\text{ɿ} - {}^{x_0}\text{ɿ}^{n}} = {}^{x_n}_{n\_}\text{ɿ}\,\overbrace{x_0-o}^{n} \Rightarrow {}^{x_0}\text{ɿ} - {}^{x_0}\text{ɿ}^{n} = {}^{x_n}_{n\_}\text{ɿ}\,\overbrace{x_0-o}^{\cancel{n}}$$

$$
{}^{t}\text{ɿ} = \sum_{m<n} t^{\cancel{m}}\, {}^{0}_{m\_}\text{ɿ} + \underbrace{\int_{ds}^{0|t} \overbrace{t-s}^{n \cancel{-} 1}\, {}^{s}_{n\_}\text{ɿ}}_{\text{int error}}
$$

$$
n=1\colon \quad \int_{ds}^{0|t} {}^{s}_{\_}\text{ɿ} \underset{\text{HS}}{=} {}^{t}\text{ɿ} - {}^{0}\text{ɿ} \Rightarrow {}^{t}\text{ɿ} = {}^{0}\text{ɿ} + \int_{ds}^{0|t} {}^{s}_{\_}\text{ɿ}
$$

$$
1 \leqslant n \curvearrowright n+1\colon \quad \text{ɿ}\underset{n+1}{\text{diff}}\colon \quad {}_{n+1}\bar{\text{ɿ}}\, du \ \text{int}
$$

$$
\Rightarrow -\frac{t^{n}}{n!}\, {}^{0}_{n\_}\text{ɿ} = \operatorname{Ev}{}^{t}_{0}\left(\overbrace{t-s}^{\cancel{n}}\, {}^{s}_{n\_}\text{ɿ} \right) \underset{\text{HS}}{=} \int_{ds}^{0|t} \frac{d}{ds} \underbrace{\overbrace{t-s}^{\cancel{n}}\, {}^{s}_{n\_}\text{ɿ}} \underset{\text{prod}}{=} \int_{ds}^{0|t} \underbrace{\frac{d}{ds} \overbrace{t-s}^{\cancel{n}}}\, {}^{s}_{n\_}\text{ɿ} + \int_{ds}^{0|t} \overbrace{t-s}^{\cancel{n}}\, \underbrace{\frac{d}{ds}\, {}^{s}_{n\_}\text{ɿ}}
$$

$$
= -\int_{ds}^{0|t} \overbrace{t-s}^{n \cancel{-} 1}\, {}^{s}_{n\_}\text{ɿ} + \int_{ds}^{0|t} \overbrace{t-s}^{\cancel{n}}\, {}^{s}_{n+1\_}\text{ɿ} \underset{\text{ind}}{=} \sum_{m<n} t^{\cancel{m}}\, {}^{0}_{m\_}\text{ɿ} - {}^{t}\text{ɿ} + \int_{ds}^{0|t} \overbrace{t-s}^{\cancel{n}}\, {}^{s}_{n+1\_}\text{ɿ}
$$

$$
a|b \xrightarrow[\infty\ \text{diff}]{\text{ɿ}} \mathbb{R}\colon \quad \curlyvee_{m}^{\mathbb{N}} \overline{{}_{m}\bar{\text{ɿ}}}^{\,a|b\,\bullet} < \infty \Rightarrow
$$

$$
{}^{\mathsf{h}}\text{ɿ} \underset{\text{glm}}{\Longleftarrow} \sum_{m}^{\mathbb{N}} \frac{(\mathsf{h}-o)^{m}}{m!}\, {}^{o}_{m\_}\text{ɿ}
$$

$$
\overline{{}^{\mathsf{h}}\text{ɿ} - \sum_{m}^{n} \frac{(\mathsf{h}-o)^{m}}{m!}\, {}^{o}_{m\_}\text{ɿ}} \leqslant C \frac{(\mathsf{h}-o)^{n}}{n!} \rightsquigarrow 0
$$