Little Learner Reference Formulas.

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1 Synopsis:

LET the following notes on Little Learner's state the tactic on its training. LiL adopts a dynamic approach to training. Letting it be able to unlearn and relearn missing or wrong concepts.

2 Introduction and Definitions:

One may ask for definitions and rigorous mathematical grounding before proceeding development of LiL. The two sub-sections provides exactly that.
One may note that the remarks and theorems are currently being benchmarked, addendum will be added accordingly.

2.1 Definitions and Theorems:

One may train LiL using the following theorems and remarks:

Theorem 2.1. *Let the following variables in $\mathbb{R}$ be defined as follow:*

$$\mathcal{X}_n = \sum_{k=1}^{+\infty} (\mathcal{T}_k \otimes \mathcal{Y}_k \otimes C_k).$$

And for the training nabla operator in $\mathbb{R}$ given for a single coordinate system of x to be defined as follow:

$$\nabla \mathcal{X}_n = i \cdot \frac{\partial x}{\partial \left(\sum_{k=1}^{+\infty} \mathcal{T}_k \otimes \mathcal{Y}_k \otimes C_k \right)} + F(x).$$

Where C_k is a non-zero constant term in $\mathbb{R}$. Where $\mathcal{X}$ is a sum of tensor products of $\mathcal{T}_k$ and $\mathcal{Y}_k$ for a sequence $k = 1, 2, \ldots$ that holds for $\mathbb{N}$. Such that $\forall F(x) \in \mathbb{R}$ and $F(x) \subset \mathcal{T}$. Thus for $\mathcal{X}_n$ being part of a subset $\mathbb{D}$:

$$\forall \mathcal{X}_n \neq 0,\ \mathcal{X}_n \subset \mathbb{D},\ \mathbb{D} \subset \mathbb{R}. \tag{1}$$

Ausming that for a set $\mathbb{D}$, $\mathbb{D} \neq \emptyset$.

Remark 2.2. $\mathcal{L}$ shall be non-zero and non-negative, as it is a sum of positive terms in $\mathbb{R}$.
Inserting the theorem to LiL' training tree alongside an hash-value pair. One may be able to query for the theorem.

Remark 2.3. Another example of a definition this time, would be a Taylor Series for $f(x) \in \mathbb{R}$ and $a \in \mathbb{R}$, which states:

$$\mathcal{T}(x) = \sum_{n=0}^{\infty} \frac{f^{(n)}(a)}{n!} (x-a)^n.$$

For $\mathcal{T}(x)$ representing the Taylor Series expansion of $f(x)$ about the point a.

3 Going Forward:

NEXT we will observe and study several tactics we can consider for LiL's Input/Output training.