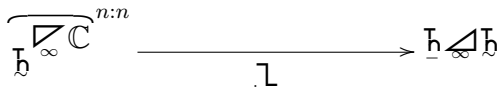
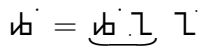
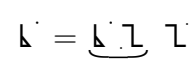


$$\underline{\mathfrak{h}}\underset{\infty}{\triangleleft}\underset{\sim}{\mathfrak{h}} \ni {}_i\mathfrak{l} \quad \text{Standardbasis}$$

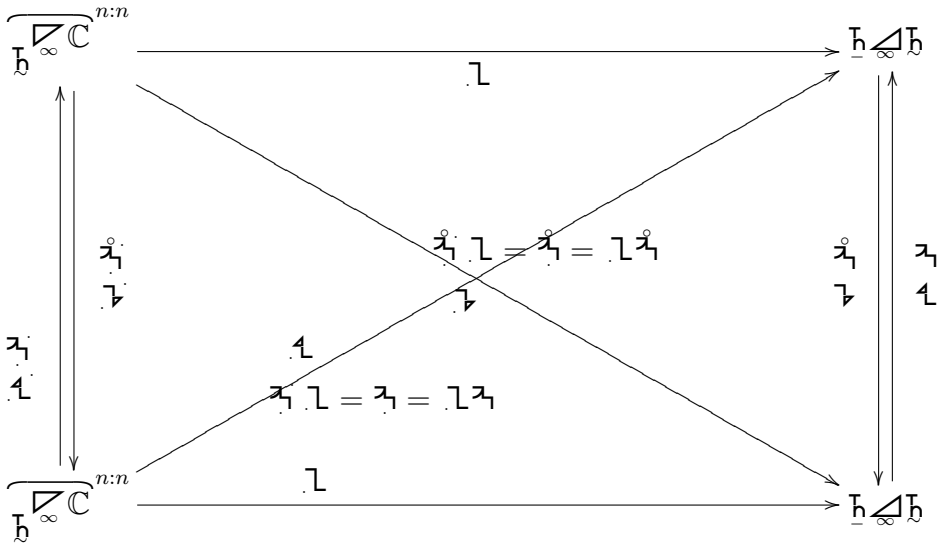
$$ {}_i\mathfrak{l} \;\underset{\sim}{\bowtie}\; {}_j\mathfrak{l} = {}_i\mathfrak{l}\;\eta\;{}_j\overset{*}{\mathfrak{l}} = {}_i\mathfrak{l}\;\eta\;\mathfrak{l}^j = {}_i\eta^j$$



$$ {}_\mu\delta^\nu = {}_\mu\mathfrak{l}\;\mathfrak{l}^\nu$$



$$ {}_i\delta^j = {}_i\mathfrak{l}\;{}_j\overset{*}{\mathfrak{l}} = {}_i\mathfrak{l}\;\mathfrak{l}^j$$



$$ {}_i\mathfrak{l} \;\overset{\mathfrak{h}}{\underset{\sim}{\bowtie}}\; {}_j\mathfrak{l} = \begin{cases} {}_i\mathfrak{l}\,\mathfrak{x}\,{}_j\overset{*}{\mathfrak{l}} = \mathfrak{x}_{ij} \\ {}_i\mathfrak{l}\,\mathfrak{t}\,{}_j\overset{*}{\mathfrak{l}} = {}_i\mathfrak{l}\,\mathfrak{t}\,\mathfrak{l}^j = {}_i\mathfrak{t}^j \end{cases}$$

$$\underline{\mathfrak{h}}\underset{\infty}{\triangleleft}\underset{\sim}{\mathfrak{h}} \ni \begin{cases} \overset{\circ}{\mathfrak{x}}_i = {}_i\mathfrak{l}\,\overset{\circ}{\mathfrak{x}} \\ {}_i\mathfrak{b} = {}_i\mathfrak{l}\,\mathfrak{b} \end{cases} \quad \text{ONBasis}$$

$$\begin{cases} \overset{\circ}{\mathfrak{x}} = \mathfrak{l}^i\,\overset{\circ}{\mathfrak{x}}_i \\ \mathfrak{b} = \mathfrak{l}^i\,{}_i\mathfrak{b} \end{cases}$$

$$\begin{cases} \overset{\circ}{\mathfrak{x}}_i \overset{\mathfrak{h}}{\underset{\sim}{\bowtie}} \overset{\circ}{\mathfrak{x}}_j = \overset{\circ}{\mathfrak{x}}_i\,\mathfrak{x}\,\overset{*}{\mathfrak{x}}_j = \overset{\circ}{\mathfrak{x}}_i\,\underbrace{\mathfrak{x}\eta\overset{-*}{\mathfrak{x}}}\,\overset{-*}{\mathfrak{x}}_j = \underbrace{\overset{\circ}{\mathfrak{x}}_i\,\mathfrak{x}}\,\eta\,\overbrace{\overset{\circ}{\mathfrak{x}}_j\,\mathfrak{x}}^{*} = \underbrace{{}_i\mathfrak{l}\,\overset{\circ}{\mathfrak{x}}}\,\underbrace{\mathfrak{x}\eta\overset{*}{\mathfrak{x}}}\,\overbrace{{}_j\mathfrak{l}\,\overset{\circ}{\mathfrak{x}}}^{*} = {}_i\mathfrak{l}\,\underbrace{\overset{\circ}{\mathfrak{x}}\,\mathfrak{x}\eta\overset{*}{\mathfrak{x}}\,\overset{-*}{\mathfrak{x}}}\,{}_j\overset{*}{\mathfrak{l}} \\ {}_i\mathfrak{b} \overset{\mathfrak{h}}{\underset{\sim}{\bowtie}} {}_j\mathfrak{b} = {}_i\mathfrak{b}\,\mathfrak{t}\,{}_j\mathfrak{b} = {}_i\mathfrak{b}\,\underbrace{\mathfrak{t}\eta\overset{*}{\mathfrak{t}}}\,{}_j\overset{*}{\mathfrak{b}} = \underbrace{{}_i\mathfrak{b}\,\mathfrak{t}}\,\eta\,\overbrace{{}_{\mathfrak{t}}\mathfrak{b}\,v}^{*} = \underbrace{{}_i\mathfrak{l}\,\mathfrak{b}}\,\underbrace{\mathfrak{t}\eta\overset{*}{\mathfrak{t}}}\,\overbrace{{}_j\mathfrak{l}\,\mathfrak{b}}^{*} = {}_i\mathfrak{l}\,\underbrace{\mathfrak{b}\,\mathfrak{t}\eta\overset{*}{\mathfrak{t}}\,\overset{-*}{\mathfrak{b}}}\,{}_j\overset{*}{\mathfrak{l}} \end{cases} = {}_i\mathfrak{l}\;\eta\;{}_j\overset{*}{\mathfrak{l}} = {}_{ij}\eta$$

$$\text{[illegible]} = \begin{cases} \underbrace{\text{[illegible]}}\,\text{[illegible]} \\ \underbrace{\text{[illegible]}}\,\text{[illegible]} \end{cases} \quad : \quad {}_i\delta^j = \begin{cases} \text{[illegible]}_i\,\text{[illegible]}^j \\ {}_i\text{[illegible]}\,\text{[illegible]}^j \end{cases}$$

$$\text{[illegible]} = \begin{cases} \underbrace{\text{[illegible]}}\,\text{[illegible]} \\ \underbrace{\text{[illegible]}}\,\text{[illegible]} \end{cases} \quad : \quad {}_\mu\delta^\nu = \begin{cases} \text{[illegible]}_\mu\,\text{[illegible]}^\nu \\ {}_\mu\text{[illegible]}\,\text{[illegible]}^\nu \end{cases}$$

$$\text{[illegible]} \quad \text{[illegible]} = \begin{cases} \underbrace{\text{[illegible]}}\,\text{[illegible]} & = \underbrace{\text{[illegible]}}\,\text{[illegible]} \\ \underbrace{\text{[illegible]}}\,\text{[illegible]} & = \underbrace{\text{[illegible]}}\,\text{[illegible]} \end{cases} : \quad {}_i\text{[illegible]} = \begin{cases} \text{[illegible]}_i^\lambda\,\text{[illegible]}_\lambda & = \text{[illegible]}_i\,\text{[illegible]} \\ {}_i\text{[illegible]}^\lambda\,{}_\lambda\text{[illegible]} & = {}_i\text{[illegible]}\,\text{[illegible]} \end{cases}$$

$$\text{[illegible]} \quad \text{[illegible]} = \begin{cases} \underbrace{\text{[illegible]}}\,\text{[illegible]} & = \underbrace{\text{[illegible]}}\,\text{[illegible]} \\ \underbrace{\text{[illegible]}}\,\text{[illegible]} & = \underbrace{\text{[illegible]}}\,\text{[illegible]} \end{cases} : \quad {}_\mu\text{[illegible]} = \begin{cases} \text{[illegible]}_\mu^k\,\text{[illegible]}_k & = \text{[illegible]}_\mu\,\text{[illegible]} \\ {}_\mu\text{[illegible]}^k\,{}_k\text{[illegible]} & = {}_\mu\text{[illegible]}\,\text{[illegible]} \end{cases}$$

$$\begin{cases} \text{[illegible]} & = \underbrace{\text{[illegible]}}\,\text{[illegible]} = \underbrace{\text{[illegible]}}\,\text{[illegible]} \\ \text{[illegible]} & = \underbrace{\text{[illegible]}}\,\text{[illegible]} = \underbrace{\text{[illegible]}}\,\text{[illegible]} \end{cases} \begin{cases} \text{[illegible]}_i & = {}_i\text{[illegible]} = \text{[illegible]}_i^\lambda\,{}_\lambda\text{[illegible]} \\ {}_i\text{[illegible]} & = {}_i\text{[illegible]} = {}_i\text{[illegible]}^\lambda\,{}_\lambda\text{[illegible]} \end{cases}$$

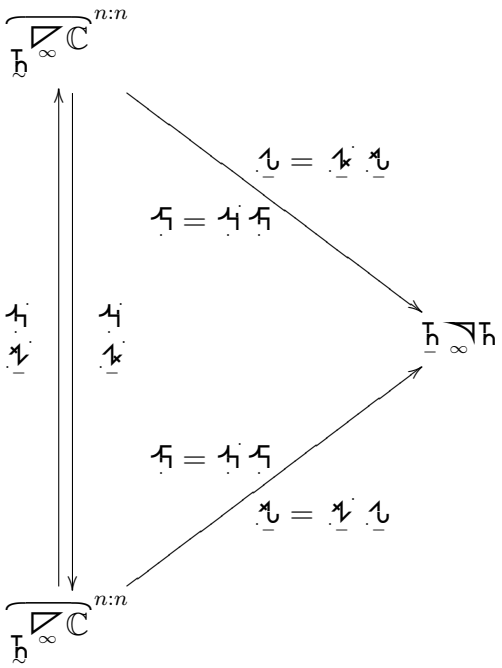
$$\begin{cases} \text{[illegible]} & = \underbrace{\text{[illegible]}}\,\text{[illegible]} = \underbrace{\text{[illegible]}}\,\text{[illegible]} \\ \text{[illegible]} & = \underbrace{\text{[illegible]}}\,\text{[illegible]} = \underbrace{\text{[illegible]}}\,\text{[illegible]} \end{cases} \begin{cases} \text{[illegible]}_\mu & = {}_\mu\text{[illegible]} = \text{[illegible]}_\mu^k\,{}_k\text{[illegible]} \\ {}_\mu\text{[illegible]} & = {}_\mu\text{[illegible]} = {}_\mu\text{[illegible]}^k\,{}_k\text{[illegible]} \end{cases}$$

$$\begin{cases} \text{[illegible]} & = \underbrace{\text{[illegible]}}\,\text{[illegible]} = \underbrace{\text{[illegible]}}\,\text{[illegible]} \\ \text{[illegible]} & = \underbrace{\text{[illegible]}}\,\text{[illegible]} = \underbrace{\text{[illegible]}}\,\text{[illegible]} \end{cases}$$

$$\begin{cases} \text{[illegible]}_i^\nu & = {}_i\text{[illegible]}^\nu = \text{[illegible]}_i\,\text{[illegible]}^\nu \\ {}_i\text{[illegible]}^\nu & = {}_i\text{[illegible]}^\nu = {}_i\text{[illegible]}\,\text{[illegible]}^\nu \end{cases}$$

$$\begin{cases} \text{[illegible]} & = \underbrace{\text{[illegible]}}\,\text{[illegible]} = \underbrace{\text{[illegible]}}\,\text{[illegible]} \\ \text{[illegible]} & = \underbrace{\text{[illegible]}}\,\text{[illegible]} = \underbrace{\text{[illegible]}}\,\text{[illegible]} \end{cases} \begin{cases} \text{[illegible]}_\mu^j & = {}_\mu\text{[illegible]}^j = \text{[illegible]}_\mu\,\text{[illegible]}^j \\ {}_\mu\text{[illegible]}^j & = {}_\mu\text{[illegible]}^j = {}_\mu\text{[illegible]}\,\text{[illegible]}^j \end{cases}$$

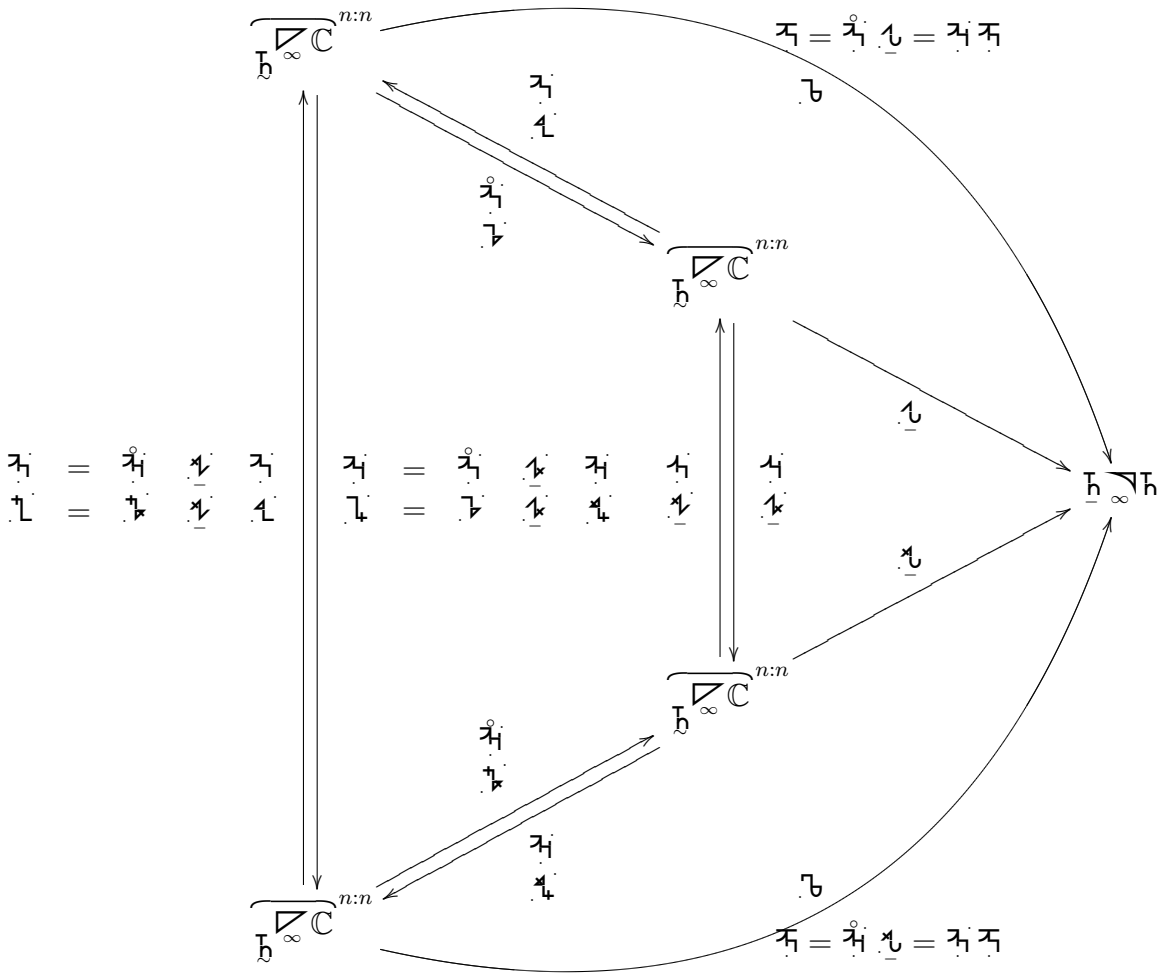
$$\overbrace{\text{[illegible]}_\infty\mathbb{C}}^{n:n} \xrightarrow[\text{[illegible]}]{} \text{[illegible]}_\infty\text{[illegible]}$$



$\underline{\mathfrak{h}} \underset{\infty}{\rotatebox{-90}{$\rightarrow$}} \mathfrak{h} \ni {}_{\mu}\underline{\mathfrak{l}}$ holonomic basis

$$\mathfrak{b}^{\cdot} = \underbrace{\mathfrak{b}^{\cdot}\,\underline{\mathfrak{l}}}\,\underline{\mathfrak{l}}^{\cdot}$$

$${}_{\mu}\delta^{\nu} = {}_{\mu}\underline{\mathfrak{l}}\,\underline{\mathfrak{l}}^{\nu}$$



$$\underline{\mathfrak{h}} \underset{\infty}{\rotatebox{-90}{$\triangleright$}} \mathfrak{h} \ni \begin{cases} \underset{i}{\mathfrak{x}} \\ {}_{i}\mathfrak{b} \end{cases} \quad \text{ONbasis}$$

$${}_{i}\mathfrak{b} \overset{\mathfrak{h}}{\blacktriangle} {}_{j}\mathfrak{b} = {}_{i}\eta^{j}$$

$$\mathfrak{b} = \begin{cases} \underbrace{\mathfrak{b}\,\mathfrak{x}}\,\mathfrak{x} \\ \underbrace{\mathfrak{b}\,\mathfrak{b}}\,\mathfrak{q} \end{cases}$$

$${}_{i}\delta^{j} = \begin{cases} \underset{i}{\mathfrak{x}}\,\mathfrak{x}^{j} \\ {}_{i}\mathfrak{b}\,\mathfrak{q}^{j} \end{cases}$$

$$\begin{cases} \mathfrak{b}\,\mathfrak{x} = \underbrace{\mathfrak{b}\,\mathring{\mathfrak{x}}}\,\underline{\mathfrak{b}} \\ \mathfrak{b}\,\mathfrak{b} = \underbrace{\mathfrak{b}\,\mathfrak{b}}\,\underline{\mathfrak{b}} \end{cases} \begin{cases} \underset{i}{\mathfrak{x}} = \underset{i}{\mathring{\mathfrak{x}}}^{\lambda}\,{}_{\lambda}\underline{\mathfrak{b}} \\ {}_{i}\mathfrak{b} = {}_{i}\mathfrak{b}^{\lambda}\,{}_{\lambda}\underline{\mathfrak{b}} \end{cases}$$

$$\text{Ꮒ}\ \underline{\text{ᒣ}} = \begin{cases} \underbrace{\text{Ꮒ}\ \text{ᒣ}}\ \text{ᒣ} \\ \underbrace{\text{Ꮒ}\ \text{ᒪ}}\ \text{ᖷ} \end{cases} \quad : \quad {}_{\mu}\underline{\text{ᒣ}} = \begin{cases} \text{ᒣ}_{\mu}^{k}\ \text{ᒣ} \\ {}_{\mu}\text{ᒪ}^{k}\ {}_{k}\text{ᖷ} \end{cases}$$

$$\begin{cases} \text{ᒪ}\ \mathring{\text{ᒣ}} & = \underbrace{\text{ᒪ}\ \text{ᒣ}}\ \underline{\text{ᒣ}} \\ \text{ᒪ}\ \text{ᖴ} & = \underbrace{\text{ᒪ}\ \text{ᖷ}}\ \underline{\text{ᒣ}} \end{cases} \quad \begin{cases} \text{ᒣ}_{\mu}^{j} & = {}_{\mu}\underline{\text{ᒣ}}\text{ᒧ}^{j} \\ {}_{\mu}\text{ᒪ}^{j} & = {}_{\mu}\underline{\text{ᒣ}}\text{ᖵ}^{j} \end{cases}$$

$$\begin{cases} \text{Ꮒ}\ \text{ᒣ} & = \underbrace{\text{Ꮒ}\ \underline{\text{ᒣ}}}\ \text{ᒧ} \\ \text{Ꮒ}\ \text{ᒪ} & = \underbrace{\text{Ꮒ}\ \underline{\text{ᒣ}}}\ \text{ᖵ} \end{cases} \quad \begin{cases} \mathring{\text{ᒣ}}_{i}^{\nu} & = \text{ᒣ}\underline{\text{ᒣ}}^{\nu} \\ {}_{i}\text{ᖴ}^{\nu} & = {}_{i}\text{ᖷ}\underline{\text{ᒣ}}^{\nu} \end{cases}$$

$$\underline{\text{ᒣ}}\ \text{Ꮒ} \ni {}_{i}\text{ᖴ} \text{ Basis}$$

$${}_{i}\text{ᖴ} = {}_{i}\text{ᒪ}\ \text{ᖴ}$$