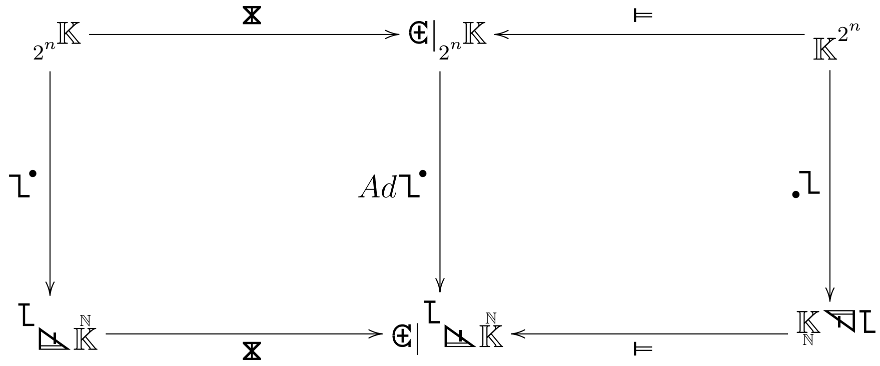
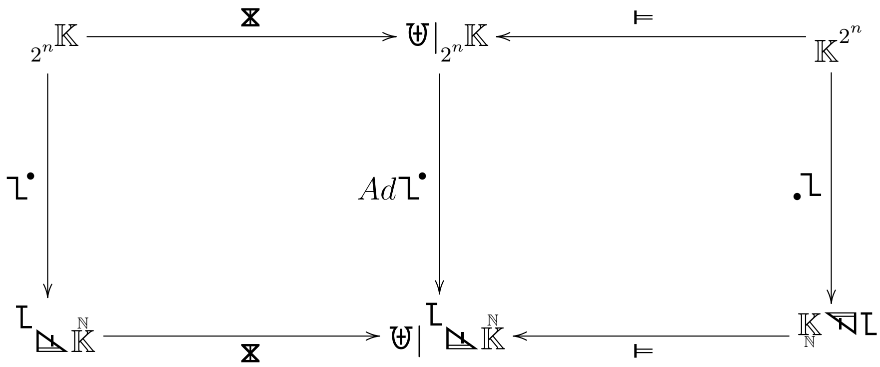
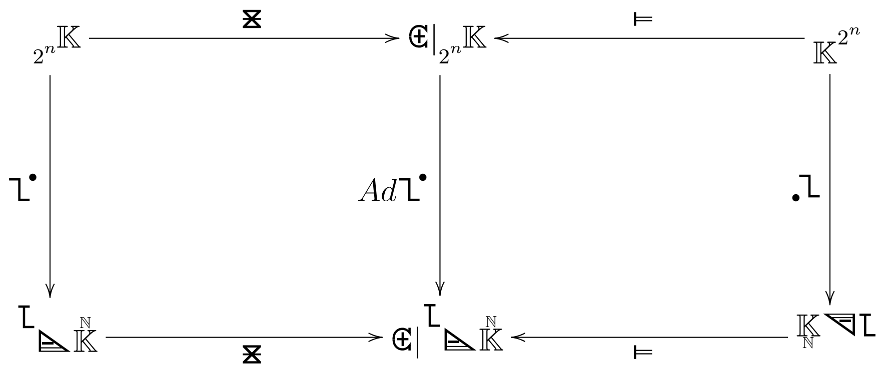




$$ {}_{P}ʅ^{\cdot} \vDash {}_{\cdot}ʅ^{M} = \begin{cases} 0 & P \not\subset M \\ {}_{\cdot}ʅ^{M\llcorner P} & P \subset M \end{cases} $$

$$ {}_{M\llcorner P}ʅ^{\cdot} \ \underbrace{{}_{P}ʅ^{\cdot} \vDash {}_{\cdot}ʅ^{M}} = \begin{bmatrix} {}_{P}ʅ^{\cdot} \\ {}_{M\llcorner P}ʅ^{\cdot} \end{bmatrix} {}_{\cdot}ʅ^{M} = \underbrace{{}_{M}ʅ^{\cdot}\ {}_{\cdot}ʅ^{M}}_{=1} = {}_{M\llcorner P}ʅ^{\cdot}\ \ {}_{\cdot}ʅ^{M\llcorner P} $$



$$
\begin{tikzcd}
{}_{2^n}\mathbb{K} \arrow[r, "\bowtie"] \arrow[d, "\daleth^{\bullet}"'] & \mho\big|_{2^n}\mathbb{K} \arrow[d, "Ad\,\daleth^{\bullet}"'] & \mathbb{K}^{2^n} \arrow[l, "\vDash"'] \arrow[d, "{}_{\bullet}\daleth"'] \\
{}^{\daleth}{\trianglerighteq}\overset{\mathbb{N}}{\mathbb{K}} \arrow[r, "\bowtie"'] & \mho\big|^{\daleth}{\trianglerighteq}\overset{\mathbb{N}}{\mathbb{K}} & \underset{\mathbb{N}}{\mathbb{K}}\triangleleft\daleth \arrow[l, "\vDash"]
\end{tikzcd}
$$

$$
{}_P\daleth^{\cdot} \vDash {}_{\cdot}\daleth^{M} = \begin{cases} 0 & P \not\subset M \\ (-1)^{\overline{P > M \llcorner P}}\, {}_{\cdot}\daleth^{M \llcorner P} & P \subset M \end{cases}
$$

$$
{}_{M\llcorner P}\daleth^{\cdot}\ \underbrace{{}_P\daleth^{\cdot} \vDash {}_{\cdot}\daleth^{M}} = \begin{bmatrix} {}_P\daleth^{\cdot} \\ {}_{M\llcorner P}\daleth^{\cdot} \end{bmatrix}\ {}_{\cdot}\daleth^{M} = (-1)^{\overline{P > M\llcorner P}}\ \underbrace{{}_M\daleth^{\cdot}\ {}_{\cdot}\daleth^{M}}_{=1} = (-1)^{\overline{P > M\llcorner P}}\ {}_{M\llcorner P}\daleth^{\cdot}\ {}_{\cdot}\daleth^{M\llcorner P}
$$