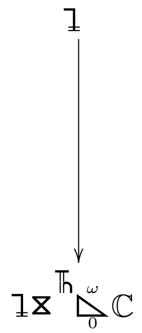
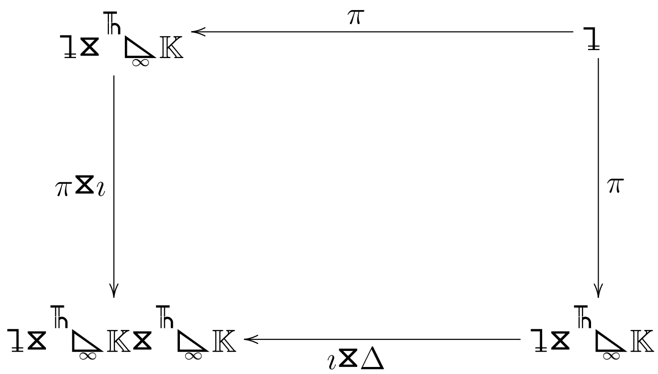
$$\daleth\boxtimes{}^{\mathbb{h}}\triangle_{\infty}\mathbb{K}\xleftarrow{\pi}\daleth$$





$$\pi\urcorner=\urcorner_{\alpha}\boxtimes\Upsilon^{\alpha}\Leftrightarrow\mathbb{h}^{\pi}\urcorner=\urcorner_{\iota}{}^{\mathbb{h}}\Upsilon^{\alpha}$$

$$\pi\urcorner_{\alpha}={}^{\beta}\urcorner_{\alpha}\boxtimes{}_{\beta}\Upsilon_{\alpha}\Leftrightarrow\mathbb{h}^{\pi}\urcorner_{\alpha}={}^{\beta}\urcorner_{\alpha}{}^{\mathbb{h}}_{\beta}\Upsilon_{\alpha}$$

$$\underbrace{\pi\boxtimes\imath}\pi\urcorner=\underbrace{\pi\boxtimes\imath}\urcorner_{\alpha}\boxtimes\Upsilon^{\alpha}=\underbrace{\pi\urcorner_{\alpha}}\boxtimes\Upsilon^{\alpha}={}^{\beta}\urcorner_{\alpha}\boxtimes{}_{\beta}\Upsilon_{\alpha}\boxtimes\Upsilon^{\alpha}$$

$$\underbrace{\imath\boxtimes\Delta}\pi\urcorner=\urcorner_{\alpha}\boxtimes\underbrace{\Delta\Upsilon^{\alpha}}$$

$$\underbrace{\pi\boxtimes\imath}\pi\urcorner=\underbrace{\imath\boxtimes\Delta}\pi\Leftrightarrow\mathbb{h}^{\pi}\mathbb{h}'^{\pi}=\overbrace{\mathbb{h}\mathbb{h}'}^{\pi}$$

$$^{\beta}\urcorner_{\alpha}\boxtimes{}_{\beta}\Upsilon_{\alpha}\boxtimes\Upsilon^{\alpha}=\urcorner_{\alpha}\boxtimes\underbrace{\Delta\Upsilon^{\alpha}}\Leftrightarrow$$

$$\mathbb{h}^{\pi}\underbrace{\mathbb{h}'^{\pi}\urcorner}=\mathbb{h}^{\pi}\underbrace{\urcorner_{\iota}{}^{\mathbb{h}'}\Upsilon^{\alpha}}=\underbrace{\mathbb{h}^{\pi}\urcorner_{\alpha}}{}^{\mathbb{h}'}\Upsilon^{\alpha}=\underbrace{{}^{\beta}\urcorner_{\alpha}{}^{\mathbb{h}}_{\beta}\Upsilon_{\alpha}}{}^{\mathbb{h}'}\Upsilon^{\alpha}={}^{\beta}\urcorner_{\alpha}\underbrace{{}^{\mathbb{h}}_{\beta}\Upsilon_{\alpha}{}^{\mathbb{h}'}\Upsilon^{\alpha}}=\urcorner_{\alpha}{}^{\mathbb{h}:\mathbb{h}'}\overbrace{\Delta\Upsilon^{\alpha}}=\urcorner_{\iota}{}^{\mathbb{h}\mathbb{h}'}\Upsilon^{\alpha}=\overbrace{\mathbb{h}\mathbb{h}'}^{\pi}\urcorner$$

$$\underbrace{\daleth\boxtimes\daleth}\boxtimes{}^{\mathbb{h}}\triangle_{\infty}\mathbb{K}\xleftarrow{\pi}\underbrace{\daleth\boxtimes\daleth}$$

$$\pi\urcorner=\urcorner_{\alpha}\boxtimes\Upsilon^{\alpha}\ \varrho\urcorner=\urcorner_{\beta}\boxtimes\Upsilon^{\beta}\Rightarrow(\pi\boxtimes\varrho)\urcorner\boxtimes\urcorner=\urcorner_{\alpha}\boxtimes\urcorner_{\beta}\boxtimes\underbrace{\Upsilon^{\alpha}\Upsilon^{\beta}}$$