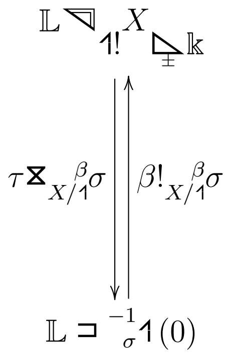
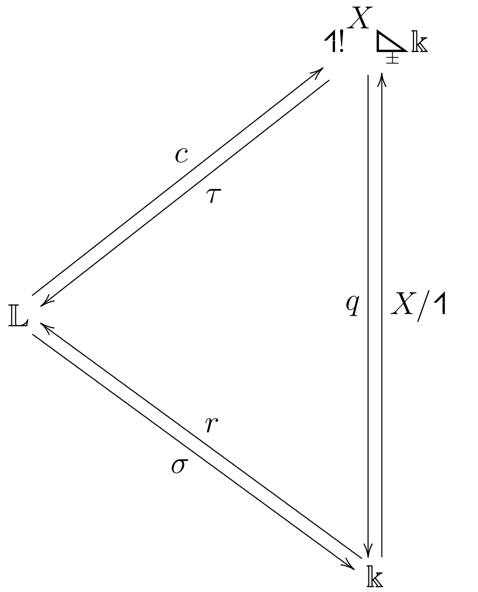
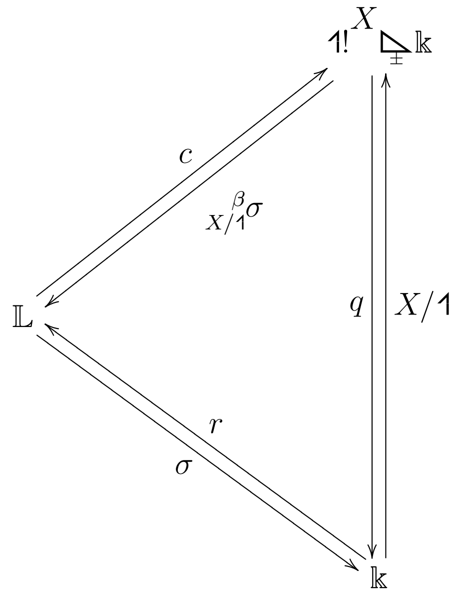


X
k
β!
σ
(0)



X
k
c
τ
L
q
X/
r
σ
k

$$\beta \in \mathbb{L}, {}^{\beta}_{\sigma}1 = 0 \Longrightarrow \bigvee_{\text{eind}}$$



$${}_{X/1}^{\beta}\sigma\ \underbrace{X + 1^{X} \triangle_{\pm} \mathbb{k}} = \beta$$

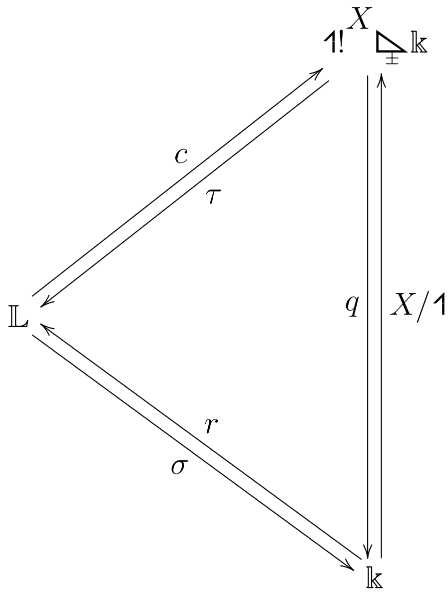
$${}_{X/1}^{\beta}\sigma\ \underbrace{\text{ɿ} + 1^{X} \triangle_{\pm} \mathbb{k}} = {}^{\beta}_{\sigma}\text{ɿ} \in \mathbb{L} \text{ well-def} : \text{ɿ} + 1^{X} \triangle_{\pm} \mathbb{k} = \acute{\text{ɿ}} + 1^{X} \triangle_{\pm} \mathbb{k} \Longrightarrow \text{ɿ} - \acute{\text{ɿ}} \in 1^{X} \triangle_{\pm} \mathbb{k}$$

$$\Longrightarrow \text{ɿ} - \acute{\text{ɿ}} = 1g \Longrightarrow {}_{\sigma}\text{ɿ} - {}_{\sigma}\acute{\text{ɿ}} = {}_{\sigma}\left(\text{ɿ} - \acute{\text{ɿ}}\right) = {}_{\sigma}(1g) = {}_{\sigma}1\ {}_{\sigma}g \Longrightarrow {}^{\beta}_{\sigma}\text{ɿ} - {}^{\beta}_{\sigma}\acute{\text{ɿ}} = \underbrace{{}^{\beta}_{\sigma}1}_{=0}\ {}^{\beta}_{\sigma}g = 0 \Longrightarrow {}^{\beta}_{\sigma}\text{ɿ} = {}^{\beta}_{\sigma}\acute{\text{ɿ}}$$

$${}_{X/1}^{\beta}\sigma\ \underbrace{X + 1^{X} \triangle_{\pm} \mathbb{k}} = {}^{\beta}_{\sigma}X = \beta$$

$$\beta \neq \acute{\beta} \Longrightarrow {}_{X/1}^{\beta}\sigma \neq {}_{X/1}^{\acute{\beta}}\sigma$$

$${}_{X/1}^{\beta}\sigma\ \underbrace{X + 1^{X} \triangle_{\pm} \mathbb{k}} = \beta \neq \acute{\beta} = {}_{X/1}^{\acute{\beta}}\sigma\ \underbrace{X + 1^{X} \triangle_{\pm} \mathbb{k}}$$



$$\Longrightarrow {}^{\tau|X+\mathsf{1}^{X}\underset{\pm}{\triangle}\mathbb{k}}{}_{\sigma}\mathsf{1} = 0, \tau = {}^{\tau|X+\mathsf{1}^{X}\underset{\pm}{\triangle}\mathbb{k}}{}_{X/\mathsf{1}}\sigma$$

$${}^{\tau|X+\mathsf{1}^{X}\underset{\pm}{\triangle}\mathbb{k}}{}_{\sigma}\mathsf{1} = {}^{\tau|X+\mathsf{1}^{X}\underset{\pm}{\triangle}\mathbb{k}}{}_{\tau}\Big|_{X/\mathsf{1}}\mathsf{1} = \tau\Big|^{X+\mathsf{1}^{X}\underset{\pm}{\triangle}\mathbb{k}}{}_{X/\mathsf{1}}\mathsf{1} = \tau\underbrace{0+\mathsf{1}^{X}\underset{\pm}{\triangle}\mathbb{k}} = 0$$

$${}^{\tau|X+\mathsf{1}^{X}\underset{\pm}{\triangle}\mathbb{k}}{}_{X/\mathsf{1}}\sigma\underbrace{\text{ɿ}+\mathsf{1}^{X}\underset{\pm}{\triangle}\mathbb{k}} = {}^{\tau|X+\mathsf{1}^{X}\underset{\pm}{\triangle}\mathbb{k}}{}_{\sigma}\text{ɿ} = {}^{\tau|X+\mathsf{1}^{X}\underset{\pm}{\triangle}\mathbb{k}}{}_{\tau}\Big|_{X/\mathsf{1}}\text{ɿ}$$

$$= \tau^{X+\mathsf{1}^{X}\underset{\pm}{\triangle}\mathbb{k}}{}_{X/\mathsf{1}}\text{ɿ} = \tau\underbrace{X+\mathsf{1}^{X}\underset{\pm}{\triangle}\mathbb{k}} \Longrightarrow {}^{\tau|X+\mathsf{1}^{X}\underset{\pm}{\triangle}\mathbb{k}}{}_{X/\mathsf{1}}\sigma = \tau$$