

$$\text{inv } \leq \in \mathfrak{h} \leq \mathfrak{h} \triangle \mathbb{K}$$

$$x = y: \quad x \leq^{-1} x = 1$$

$$x < y: \quad \begin{cases} \sum_{x \leq z \leq y} z \leq^{-1} y = 0 \\ x \leq^{-1} y = - \sum_{x < z \leq y} z \leq^{-1} y \end{cases}$$

$$x \leq^x = 1$$