

$${}^m\mathbb{K}_n$$

$${}^m\mathbb{K}_m \supseteq {}^m\mathbb{K}_{m+n} \xrightarrow{\cong} {}^m\mathbb{K}_n$$

$${}^m\mathbb{K}_m \xrightarrow{\Gamma} \mathbb{K}_m \xrightarrow{\Gamma} \mathbb{K}_{m+n}$$

$$\mathbb{K}_m \xrightarrow{\Gamma} \mathbb{K}_m \xrightarrow{\Gamma} \mathbb{K}_{m+n} \Rightarrow \text{well-def}$$

$$\mathbb{K}_m \xrightarrow{\Gamma} \mathbb{K}_m \xrightarrow{\Gamma} \mathbb{K}_{m+n} \Rightarrow \bigvee \Gamma \in {}^m\mathbb{K}_m : \Gamma \xrightarrow{\Gamma} \mathbb{K}_{m+n} \Rightarrow \text{inj}$$

$$\Gamma \xrightarrow{\Gamma} \mathbb{K}_{m+n} \Rightarrow \bigvee_{\text{basis}} \Gamma^1 \dots \Gamma^m \in \Gamma \Rightarrow \bigvee_{\text{basis}} \Gamma^1 \dots \Gamma^m : \Gamma^{m+1} \dots \Gamma^n \in \mathbb{K}_{m+n} \Rightarrow \mathbb{K}_m \xrightarrow{\Gamma} \mathbb{K}_{m+n} = \Gamma \Rightarrow \text{surj}$$