

$${}^m\mathbb{K}_{m+n} = \frac{\vartriangleleft \in {}^m\mathbb{K}_{m+n}}{\text{rang } \vartriangleleft = m} = \left\{ \mathbb{K}_m \xrightarrow[\text{inj}]{\vartriangleleft} \mathbb{K}_{m+n} \right\}$$

$${}^m\mathbb{K}_{m+n} \leftarrow {}^m\mathbb{K}_m \ltimes {}^m\mathbb{K}_{m+n}$$

$$\nabla \vartriangleleft \longleftrightarrow \nabla : \vartriangleleft$$