

$$\text{fin } \mathfrak{K} \in \mathbb{H}\Delta^0$$

$$\mathfrak{K} \leftarrow \mathbb{H} \times \mathfrak{K}$$

$$\mathfrak{K} \Delta_{\mathbb{F}} \in \overset{0}{\Delta} \mathbb{H} \Rightarrow \mathbb{F} \text{ split}$$

$$\dim_{\mathbb{H} \Rightarrow \mathbb{F}} \mathfrak{K} \Delta_{\mathbb{F}} = \# \mathfrak{K}$$

$$\mathfrak{K} \Delta_{\mathbb{F}} \leftarrow \mathbb{H} \times \mathfrak{K} \Delta_{\mathbb{F}}$$

$$\overline{\sigma \times \gamma}^{\mathfrak{K}} = \overline{\sigma^{\mathfrak{K}} \gamma}^{\mathfrak{K}}$$

$$\mathbb{H} \Rightarrow \mathfrak{K} \Delta_{\mathbb{F}} = \mathfrak{K} \Delta_{\mathbb{H} \Rightarrow \mathbb{F}}$$

$$\dim_{\mathbb{H} \Rightarrow \mathbb{F}} \mathfrak{K} \Delta_{\mathbb{F}} = \dim_{\mathbb{H} \Rightarrow \mathbb{F}} \mathbb{H} \Rightarrow \mathfrak{K} \Delta_{\mathbb{F}} = \dim_{\mathbb{F}} \mathfrak{K} \Delta_{\mathbb{F}} = \# \mathfrak{K}$$