

$$\sqrt{}_{}^{}=\left[\sqrt{}_1\sqrt{}_i\sqrt{}_n\right]$$

$$\sqrt{}_{}^{}{}^n\mathbb{Z}=\frac{\sqrt{}_i^i\!\!\!\downarrow}{\!\!\!\downarrow_i\in\mathbb{Z}}$$

$${}^n\mathbb{R}\lrcorner \underbrace{\sqrt{}_{}^{}{}^n\mathbb{Z}}\xleftarrow[\text{cpt}]{J}{}^n\mathbb{R}\xleftarrow[\text{dis}]{\sqrt{}_{}^{}}{}^n\mathbb{Z}$$

$$\sqrt{}_{}^{}{}^n\mathbb{I}=\frac{\sqrt{}_i^i\lambda}{\!\!\!\downarrow_i\in 0|1}$$

$$\sqrt{}_{}^{\ast}\sqrt{}_{}^{}=\left[\begin{array}{c}\sqrt{}_1^{\ast}\\ \sqrt{}_i^{\ast}\\ \sqrt{}_n^{\ast}\end{array}\right]\left[\sqrt{}_1\sqrt{}_j\sqrt{}_n\right]=\left[\begin{array}{ccc}\sqrt{}_1^{\ast}\sqrt{}_1&\sqrt{}_1^{\ast}\sqrt{}_j&\sqrt{}_1^{\ast}\sqrt{}_n\\ \sqrt{}_i^{\ast}\sqrt{}_1&\sqrt{}_i^{\ast}\sqrt{}_j&\sqrt{}_i^{\ast}\sqrt{}_n\\ \sqrt{}_n^{\ast}\sqrt{}_1&\sqrt{}_n^{\ast}\sqrt{}_j&\sqrt{}_n^{\ast}\sqrt{}_n\end{array}\right]$$

$$\overline{{}^n\mathbb{R}\lrcorner \underbrace{\sqrt{}_{}^{}{}^n\mathbb{Z}}^{\text{vol}}}=\overline{\sqrt{}_{}^{}{}^n\mathbb{I}}=\overline{\sqrt{}_{}^{}}=\overline{\sqrt{}_{}^{\ast}\sqrt{}_{}^{}}}^{1/2}$$

$$\mathfrak{F}_{}^{}{}^n\mathbb{Z}\sqsubset \sqrt{}_{}^{}{}^n\mathbb{Z}\Rightarrow \underbrace{\sqrt{}_{}^{}{}^n\mathbb{Z}}_{\text{Card}}\lrcorner \underbrace{\mathfrak{F}_{}^{}{}^n\mathbb{Z}}<\infty$$

$$\sqrt{}_{}^{}{}^n\mathbb{Z}\sqsubset \sqrt{}_{}^{}{}^n\mathbb{Z}\Rightarrow \frac{{}^n\mathbb{R}\lrcorner_{\text{vol}}\underbrace{\mathfrak{F}_{}^{}{}^n\mathbb{Z}}}{{}^n\mathbb{R}\lrcorner_{\text{vol}}\underbrace{\sqrt{}_{}^{}{}^n\mathbb{Z}}}=\underbrace{\sqrt{}_{}^{}{}^n\mathbb{Z}}_{\text{Card}}\lrcorner \underbrace{\mathfrak{F}_{}^{}{}^n\mathbb{Z}}$$