

$$\begin{array}{l} ? \\ \mathfrak{Z} \\ k \\ \cdot \\ \vdots \\ k \rightarrow \\ |\alpha| = \\ 0 \Longleftrightarrow \\ 0 \\ \cdot \\ \subset \\ |\alpha\beta| = \\ |\alpha||\beta| \\ |\alpha + \\ \beta| \leq \\ |\alpha + \\ \beta| \\ \text{nonar-} \\ \text{chimedean} \\ (1 + \\ i) \\ (i) \\ (3) \subset \end{array}$$

$$x3=x(3)=3^{-\nu_3(x)}$$

$$\begin{array}{l} 36\mathfrak{Z} = \\ \mathfrak{Z}^{-2} \\ ? \\ equiv- \\ q^2- \\ lence \\ \cdot \\ equiv- \\ q^2- \\ lent \\ \mathfrak{c} \in \\ (0,1) \\ |\cdot|_1 = |\cdot|_2^c \end{array}$$

$$\begin{array}{l} equiv- \\ q^2- \\ lent \\ \cdot \\ 1 \\ \cdot \\ \gamma^2 \\ \gamma \\ |\gamma|_1 < 1 and |\gamma|_2 > 1. \end{array}$$

$$\begin{array}{l} \cdot \\ \alpha^i \\ |\alpha|_1 > 1 and |\alpha|_{i>1} < 1. \end{array}$$

$$\begin{array}{l} \cdot \\ \epsilon^i > \\ 0 \\ \alpha \\ |\alpha-1|_1 \leq 1 and |\alpha|_{\nu>1} \leq 1. \end{array}$$

$$\begin{array}{l} (|\cdot \\ |_{i},\alpha_i) \\ \cdot \\ \epsilon^i > \\ 0 \\ \alpha \\ |\alpha-\alpha_i|_i < \epsilon. \end{array}$$

$$\begin{array}{l} \cdot \\ \prod_i |\alpha|_i^{\nu_i} = 1 \end{array}$$

$$\begin{array}{l} 0 \neq \\ \alpha \in \\ \mathbb{Z}_i \\ 0 \\ M \\ (,|\cdot \\ ) \\ 0 \neq \\ \alpha \in \\ k \\ 1 \end{array}$$

$$\prod = 1$$

$$\frac{1}{V(\alpha)}=V()$$

$$\overrightarrow{x}\in$$

$$x=1$$

$$c\leq$$

$$x$$

$$k_0\subset$$

$$k^s$$

$$q^s$$

$$q^s$$

$$k_0$$

$$q$$

$$q$$

$$1$$

$$M$$

$$M()$$

$$\theta\in$$

$$k$$

$$M(\theta)=$$

$$M()$$

$$\theta$$

$$\theta$$

$$\alpha\in$$

$$k$$

$$\alpha\leq$$

$$1$$

$$\alpha<$$

$$1$$

$$/$$

$$or-$$

$$qer$$

$$N$$

$$k_0\subseteq$$

$$k=$$

$$/$$

$$\infty$$

$$||\alpha||=\frac{1}{N^{\nu}}$$

$$\nu=($$

$$\alpha)$$

$$k=$$

$$\cdot$$

$$k=$$

$$\cdot$$

$$M$$

$$??$$

$$K/$$

$$k_1$$

$$K/k_1(z)$$

$$z$$

$$/k_1$$

$$??$$

$$??$$

$$??$$

$$C,D$$

$$CV()$$

$$M()\leq \max(1,DV())$$

$$U\in$$

$$k$$

$$U$$

$$||x||=1$$

$$k_0$$

$$U=$$

$$k_0$$

$$U$$

$$U$$

$$k$$

$$S$$

$$=$$

$$1$$

$$\notin$$

$$S$$

$$c\in k$$

$$S$$