

Miscellaneous Trivialities

Mark Andrew Gerads <Nazgand@Gmail.Com>

2026-01-21 04:46:07-08:00

$$\mathbb{R} = \{x_0 - x_1 \mid k \in \mathbb{Z} \Rightarrow x_k \in \mathbb{R}^+\} \quad (0.1)$$

$$[k \in \mathbb{Z}_{>0} \Rightarrow v_k - 1 \in \mathbb{Z}_{>0}] \Rightarrow \{x \mid x \in \mathbb{R}, 0 \leq x, x \leq 1\} = \left\{ \sum_{k \in \mathbb{Z}_{>0}} d_k \prod_{m=1}^k v_k^{-1} \mid [k \in \mathbb{Z}_{>0} \Rightarrow d_k + 1 \in \mathbb{Z}_{>0}], d_k < v_k \right\} \quad (0.2)$$

$$\mathbb{C} = \left\{ x_0 \exp(ix_1) + x_2 \exp(ix_3) \mid [k \in \mathbb{Z} \Rightarrow x_k \in \mathbb{R}], \frac{x_1 - x_3}{\pi} \notin \mathbb{Z} \right\} \quad (0.3)$$

$$\left\{ m_0 + m_2 \exp\left(\frac{i\pi}{3}\right) \mid [k \in \mathbb{Z} \Rightarrow m_k \in \mathbb{Z}] \right\} = \left\{ m_0 + m_2 \exp\left(\frac{i2\pi}{3}\right) \mid [k \in \mathbb{Z} \Rightarrow m_k \in \mathbb{Z}] \right\} \quad (0.4)$$