

ii) $x_{n+1} \in W \Rightarrow x_n \in W-1 \Rightarrow x_n \in \frac{W-1}{r} \Rightarrow x_n \in \left\{ \frac{W-1}{r}, \frac{W-1}{r} + 1, \dots, \frac{W-1}{r} + r-1 \right\}$

6- $\{0\}^c = R = \emptyset \Rightarrow R = \emptyset \Rightarrow 1 \neq 0$ (i)

$$0 < (1 - \gamma_k) w_k = 0 < w_k - \gamma_k w_k$$

$$[11^6 \lambda] = \frac{1}{2} \left(\begin{array}{c} 11 \geq n \\ 6 \geq 1-n \end{array} \right) \rho_{01} = \frac{1}{2} \left(\begin{array}{c} 1 \geq (1-n)^2 \\ 1 \geq 1-n \end{array} \right) \rho_{01} - \frac{1}{2} (10^6) \rho_{01}$$

$$(-\infty, 1] \cap [1, 2] \cap [2, \infty) = \{1, 2\} \Leftarrow$$

$$(-\infty, -1] \cap [1, \infty) = \emptyset \quad (1+1)(1+1)$$

$$v_1 + v_2 \leq 0$$

$$1 \geq 1 + v_2 + v_1$$

$$\begin{array}{c} + \quad | \quad - \quad | \quad + \\ \hline \quad \quad \quad \quad \quad \quad \end{array}$$

$$0 \leq 1 + x_n + x \leq 1 + x_n + x \leq 1 -$$

$$1 \geq 1 + x_n + x \geq 1 \quad (c)$$

$$[x, y] \cap [x, z] = \emptyset$$

$$1-\bar{x} > 1-\bar{x}$$

25 25 25

$$\angle = 152 - |u| \approx 11^\circ$$

$$\therefore \{-\lambda\lambda\} = \pm 1 \Rightarrow \cos \theta = 0 \Rightarrow \theta = 90^\circ$$

$$\Rightarrow \sin \alpha > \frac{1}{r} \Rightarrow D_F = \left[r k_T + \frac{1}{r}, r k_T + \frac{w}{r} \right]$$

ii) $r \sin \alpha - 1 \geq 0 \Rightarrow r \sin \alpha \geq 1$

$$D_F = R - \left\{ r_K + \frac{r}{K} \right\}$$

$$\{z \in \mathbb{Z} \mid z \equiv k \pmod{n} \text{ for some } k \in \mathbb{Z}\} = \mathbb{Z}$$

$$2 \ni \frac{1}{1} - v = \left. \begin{aligned} 1 - &= [v^-] + [v] & 2 \not\in v \\ &= [v^-] + [v] & 2 \in v \end{aligned} \right\} \quad \leq 0 \leq \left[\frac{v^-}{1} + v^- \right] + \left[\frac{v}{1} - v \right] \quad (1)$$

$$\begin{aligned} \text{b) } \left[\frac{n}{1} \right] + \frac{1}{2} &\leftarrow \frac{n}{1} \leq n \leftarrow 1 \leq \frac{n}{1} + n \xrightarrow{\text{induction}} 1 \leq \left[\frac{n}{1} + n \right] \Rightarrow 1 \leq \left[\frac{n}{1} + n \right] \\ \text{c) } \left[\frac{n}{1} + n \right] + 1 - \left[\frac{n}{1} + n \right] &\leq 0 \leq \left[\frac{n}{1} + n \right] + \left[1 - \frac{n}{1} + n \right] \Rightarrow 0 \leq \left[\frac{n}{1} + n \right] + \left[\frac{n}{1} - n \right] \quad \text{induction} \end{aligned}$$

$$(1, \infty) = \bigcup_{\lambda > 1} [x]_{\lambda} = \bigcup_{\lambda > 1} [x]_{\lambda} \quad (i)$$

$$(n, \infty) = \mathbb{Z} \quad \text{and} \quad \lambda \leq [x] \Rightarrow \lambda \leq [x]_{-1} \quad (\text{ind})$$

(ب) $|x| > 0$

$$\left\{ \begin{array}{l} x > 0 \\ x < 0 \end{array} \right\}$$

(ج) $|x| > 0$

$$\left\{ \begin{array}{l} x > 0 \\ x < 0 \end{array} \right\}$$

$$\begin{array}{r} \begin{array}{c} \nearrow \\ \nearrow \\ \nearrow \end{array} \begin{array}{c} 1 \\ 1 \\ 1 \end{array} \\ \hline 11 \end{array} \quad \begin{array}{c} 1 \\ 1 \\ 1 \end{array} \begin{array}{c} \nwarrow \\ \nwarrow \\ \nwarrow \end{array}$$

$$P_2 = \frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4} = 1$$