

$$2x^3 + 3x^2 - 2x + 3 = 0 \Rightarrow (x-1)(2x^2 + 5x + 3) = 0$$

$$D = \mathbb{R} - \left\{ \frac{1}{2}, 1, -3 \right\}$$

$$\Rightarrow (x-1)(2x^2 + 5x + 3) = 0$$

$$D = \mathbb{R} - \left\{ -1, -\frac{1}{2}, -3 \right\}$$

$$7x^3 - 2x^2 + 2x - 1 = 0 \Rightarrow (x^3 - 1) - 2x(x-1) = 0$$

$$(x-1)(x^2 + x + 1) - 2x(x-1) = 0 \Rightarrow (x-1)(x^2 - x + 1) = 0$$

$$D = \mathbb{R} - \left\{ 1 \right\}$$

$$D = \mathbb{R} - \left\{ 0, 3 \right\} \cup \left\{ 1, 4 \right\}$$

$$(x^2 - 2x + 1) + 2(1-5)|x-1| = 0$$

$$(x-1)^2 - 5|x-1| + 4 = 0 \Rightarrow t^2 - 5t + 4 = 0$$

$$|x-1| = 1 \Rightarrow x = 2, x = 0$$

$$|x-1| = 4 \Rightarrow x = 5, x = -3$$

$$D = \mathbb{R} - \left\{ -3, 0, 2, 5 \right\}$$

$$[-x] - 2 \geq 0 \Rightarrow [-x] \geq 2$$

$$\Rightarrow D = (-\infty, -2]$$

$$\Rightarrow -x \geq 2 \Rightarrow x \leq -2$$

$$\Rightarrow (x)^2 - 2[x] - 3 = 0 \Rightarrow ([x] - 3)([x] + 1) = 0$$

$$D = \mathbb{R} - \left\{ -1, 0 \right\} \cup \left\{ 3, 4 \right\}$$

$$[x - \frac{1}{3}] + [x - \frac{1}{3}] + 1 \geq 0 \Rightarrow 2[x - \frac{1}{3}] + 1 \geq 0$$

$$\Rightarrow [x - \frac{1}{3}] \geq -\frac{1}{2} \Rightarrow x - \frac{1}{3} \geq -\frac{1}{2}$$

$$\Rightarrow D = \left[\frac{1}{6}, \infty \right)$$

$$[t] + [-t] \geq 0$$

$$t \in \mathbb{Z} \Rightarrow [t] = t, [-t] = -t \Rightarrow t - t = 0$$

$$w) \pi \text{ dan } 2\pi \text{ ke } 3\pi \rightarrow \frac{\pi}{2}$$

$$\Rightarrow \pi = \frac{\pi}{2}$$

$$D = \left[\frac{\pi}{2}, \frac{3\pi}{4} \right] \cup \left[\frac{5\pi}{4}, \frac{3\pi}{2} \right]$$

$$\sin^2 x \leq \frac{1}{4} \Rightarrow -\frac{1}{2} \leq \sin x \leq \frac{1}{2}$$

$$w) \sin x \geq \frac{1}{2} \Rightarrow D = \left[2k\pi + \frac{\pi}{6}, 2k\pi + \frac{5\pi}{6} \right]$$

$$\therefore \cos x \leq \frac{1}{2}$$

$$D = \left[2k\pi + \frac{\pi}{3}, 2k\pi + \frac{5\pi}{3} \right]$$

$$D = \{x \mid -1 \leq x^2 - 3x + 1 \leq 1\} \Rightarrow \left[\frac{3}{2}, 2 \right] \cup \left[-1, 0 \right]$$

$$D = \left[\frac{1}{2}, \frac{5}{2} \right] \Rightarrow x \leq \frac{5}{2}$$

$$w) 0 < x < 3 \quad 1 - \log_3 x > 0 \Rightarrow \log_3 x < 1 \Rightarrow x < 3$$

$$D = (0, 3)$$

$$\Rightarrow x > \left(\frac{1}{3} \right) \Rightarrow x > \frac{1}{3}$$

$$w) 4x - x^2 \geq 0 \Rightarrow x^2 - 4x \leq 0 \Rightarrow x(x - 4) \leq 0$$

$$D = [0, 4]$$

$$\Rightarrow 2x + 4 \geq 0 \Rightarrow x \geq -2$$

$$x = \frac{4k-5}{3-2N} \Rightarrow D = \{x \in \mathbb{R} \mid x = \frac{4k-5}{3-2N}, k \in \mathbb{Z}, N \in \mathbb{Z}\}$$