

$$a - 2 \leq \dots \leq a \leq 2 \Rightarrow 2x + b \geq 0$$

آزمون شفاهی از درس ریاضیات

$$\Rightarrow 9 + b \leq 0 \Rightarrow b \leq -9$$

$$f - 1 + f^2 \leq 0 \Rightarrow f(m^2 - 1) \leq 0$$

$$\Rightarrow m^2 - 1 \leq 0 \Rightarrow (m-1)(m+1) \leq 0$$

$$\frac{-1}{+} \frac{1}{-}$$

$$\left. \begin{array}{l} m_{\max} = 1 \\ m_{\min} = -1 \end{array} \right\} \Rightarrow 1 - (-1) = 2$$

$$f - x^2 \geq 0 \Rightarrow \frac{-x}{-} \frac{x}{+} \Rightarrow -1 \leq x \leq 1$$

$$[x] + [-x] + 1 \neq 0 \Rightarrow [x] + [-x] \neq -1 \Rightarrow x \in \mathbb{Z} \setminus \{-1, 0, 1, 2\}$$

$$i) \sqrt{x^2(n+3)} \Rightarrow x^2(n+3) \geq 0$$

$$\frac{-x}{-} \frac{x}{+} \Rightarrow D_f = [-1, +\infty)$$

$$ii) \frac{(n-1)(n+1)x^2(n-3)}{(n-1)^2(n^2+n+1)} \Rightarrow \Delta < 0$$

$$\frac{-1 \neq 0 \neq 1}{+} \frac{x}{-} \Rightarrow D_f = (-\infty, -1] \cup [3, +\infty) \cup \{0\}$$

$$iii) \begin{cases} x - 2 - x^2 \leq x - 1 \geq 0 \Rightarrow x \geq 1 \\ 2 - x - x^2 - x - 1 \geq 0 \Rightarrow x \leq -1 \end{cases} \Rightarrow D_f = (-\infty, -1] \cup [1, +\infty)$$

$$iv) \begin{cases} f - 2 + x = x + 2 \geq 0 \Rightarrow x \geq -2 \\ f - x + 2 = 4 - x \geq 0 \Rightarrow x \leq 4 \end{cases} \Rightarrow D_f = [-2, 4]$$

$$v) \begin{cases} 1 - x^2 \geq 0 \Rightarrow -1 \leq x \leq 1 \\ 1 + x^2 \geq 0 \Rightarrow x \in \mathbb{R} \end{cases} \Rightarrow D_f = [-1, 1]$$

$$vi) \begin{cases} 2 - x + 4 - 1 = 5 - x \geq 0 \Rightarrow x \leq 5 \\ 2 - 4 + x - 1 = x - 3 \geq 0 \Rightarrow x \geq 3 \end{cases} \Rightarrow D_f = [3, 5] = \{3, 5\}$$

$$g, \frac{-\cos x}{\cos x} \dots D_f \xrightarrow{\quad} \mathbb{R} - \left\{ k\pi + \frac{\pi}{r} \right\}$$

$$\forall \cos x \cdot 1 \neq 0 \Rightarrow \forall \cos x \neq 1 \Rightarrow \cos x \neq \frac{1}{r} \Rightarrow D_f \cdot \mathbb{R} - \left\{ 2k\pi \pm \frac{\pi}{r} \right\}$$

$$\left\{ \begin{array}{l} \frac{n+r}{n-r} \Rightarrow \frac{-r}{+0 - \frac{r}{r} +} \\ \frac{n+r}{r_{n+r}} \Rightarrow \frac{-r}{+1 - \frac{r}{r} +} \end{array} \right\} \dots D_f \cdot \mathbb{R} - \left\{ \frac{r}{r} \right\}$$

$$\begin{aligned} & |r_{n+1}| \geq |n+r| \Rightarrow (r_n^r + r_{n+1}) \geq n^r + r_{n+1} \\ & \Rightarrow r_{n+1} - r_n - N > 0 \dots n^r - r_n - rf \left\{ \begin{array}{l} n = \frac{r}{r} = 1 \\ n = -\frac{r}{r} \end{array} \right\} \dots D_f \cdot \mathbb{R} - \left(-\frac{r}{r}, 1 \right) \end{aligned}$$

$$\begin{aligned} & r_{n-1} > 0 \Rightarrow r_n > 1 \Rightarrow n > \frac{1}{r} \\ & \log_{\log_{\omega}^{(r_{n-1})}} \log_{\omega}^{(r_{n-1})} > 0 \left\{ \begin{array}{l} \log_{\log_{\omega}^{(r_{n-1})}} \log_{\omega}^{(r_{n-1})} > 0 \Rightarrow \log_{\omega}^{r_{n-1}} < 1 \Rightarrow |r_{n-1}| < \omega \Rightarrow |r_n| < r \\ // // \leq 0 \Rightarrow \log_{\omega}^{r_{n-1}} = 1 \Rightarrow r_{n-1} = \omega \Rightarrow n \leq r \end{array} \right\} \dots D_f \cdot (1, r] \end{aligned}$$

$$\text{الف) } \forall \cos n + 1 > 0 \Rightarrow \forall \cos n > -1 \Rightarrow \cos n > -\frac{1}{r} \Rightarrow D_f = \left(2k\pi - \frac{r\pi}{r}, 2k\pi + \frac{r\pi}{r} \right)$$

$$\text{ب) } \log \frac{n-1}{n+1} \geq 0 \Rightarrow \frac{n-1}{n+1} \geq 1 \Rightarrow \frac{1-r}{n+1} \geq 0 \Rightarrow D_f = (-\infty, -1)$$