

$$\Delta \geq 0 \quad a^2 - 4(a-2)b \geq 0 \quad \begin{cases} a^2 - 4ab + 8b \geq 0 \\ 4a + b = 18 \end{cases}$$

$$a \geq -2 \quad (a-2)(-2)^2 + a(-2) + b \geq 0 \quad \begin{cases} 4a + b = 18 \\ a \geq \frac{18}{4} \quad b = \frac{18}{4} \end{cases}$$

(1)

$$\Delta < 0 \quad b^2 - 4ac < 0 \quad 1 - 4(1)(2-m^2) < 0$$

(2)

$$1 - 4 + 4m^2 < 0$$

$$m^2 - 3 < 0 \quad m^2 < 3 \quad -\sqrt{3} < m < \sqrt{3} \quad 1 - (-1) = 2$$

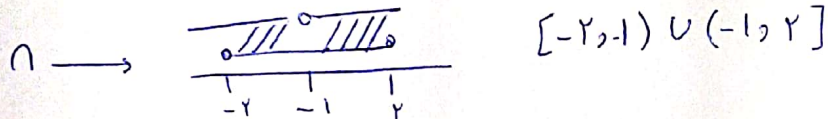
$$1 - x^2 \geq 0$$

$$-1 \leq x \leq 1$$

(3)

$$[x] + [-x] \neq -1 \rightarrow x \in \{-1\} \quad (22)$$

(I)



$$\text{الف) } x^3 + 3x^2 \geq 0 \quad x^2(x+3) \geq 0$$

(4)

$$x=0 \quad x \geq -3 \rightarrow [-3, +\infty)$$

$$\begin{cases} \text{صورت} & (m^2-1)(m^3-3m^2) \\ & \hookrightarrow x^2 > 1 \quad \hookrightarrow [-3, +\infty) \\ & x < -1 \quad x > 1 \\ \text{مخرج} & \hookrightarrow x^3 - 1 \neq 0 \quad x \neq +1 \end{cases}$$

$$\cap \rightarrow D_f = (-1, +\infty)$$

(5)

$$\text{الف) } |x-2| - 3 \geq 0$$

$$|x-2| \geq 3$$

$$\begin{cases} x-2 \geq 3 \\ x \geq 5 \end{cases} \quad \begin{cases} x-2 \leq -3 \\ x \leq -1 \end{cases}$$

$$D_f = [-1, 5]$$

$$\text{ب) } 4 - |2-x| \geq 0$$

$$|2-x| \leq 4$$

$$\rightarrow -4 \leq 2-x \leq 4$$

$$D_f = [-2, 2]$$

$$-4 \leq -x \leq 4$$

$$4 \geq x \geq -2$$

$$\text{الف) } 1 - x|x| \geq 0$$

(6)

$$x > 0 \rightarrow 1 - x^2 \geq 0$$

$$x^2 \leq 1 \quad -1 \leq x \leq 1$$

$$\cap \rightarrow D_f = [1, +\infty)$$

$$x < 0 \quad 1 + x^2 \geq 0$$

$$x^2 \geq -1 \quad x \geq -1$$

$$|x - \alpha| < -r \rightarrow -r < x - \alpha < r \rightarrow r < x < v \rightarrow D_{\mathcal{L}}^f[r, v]$$

$$\rightarrow Df, 1A = \left\{ \frac{1}{2}K\alpha + \frac{\alpha}{r}, \frac{1}{2}K\alpha + \frac{3\alpha}{r} \right\}$$

$$D_L^2 \mathbb{R} = \left\{ \mu a + \frac{a}{4}, \mu a - \frac{a}{4} \right\}$$

$$(r_{n+1})^r = (n+r)^r$$

$$\gamma_n^Y - \gamma_n - \lambda \leq 0$$

$$ms - \frac{K}{r} \quad n \text{ sy}$$

$$f(n^2) + 1 + f(n) \geq n^2 + 9 + 4n$$

$$\frac{-\frac{x}{r}}{+ \phi - \phi +} \quad \rho_s(-\infty, -\frac{x}{r}] \cup [r, +\infty)$$

$$r(n-1) > 0$$

$$n > \frac{1}{\epsilon}$$

$$\log_{\delta} \gamma_{n-1} > 0$$

$$r_{n-1} > 1 \quad \boxed{n > 1}$$

$$Df(-\infty, 1)$$

44X

$$\gamma_{\text{COSM-21}} > 0$$

$$\cos n > -\frac{1}{r}$$

$$DL = \left\{ r\mu a + \frac{2a}{y}, r\mu a + \frac{va}{y} \right\}$$

$$\therefore \frac{n-1}{n+1} > 0 \quad n \neq -1 \quad \{12-1-1\}$$