

$$f(x) = (x+1)^2 + (x-1)^2 + mx^2 + nx + m$$

$$\rightarrow x^2 + 2x + 1 + x^2 - 2x + 1 + mx^2 + nx + m \rightarrow (1+m)x^2 + (-2+2n)x + 2+m \rightarrow f(x) = -x$$

$$f(x) = -x \rightarrow x = 0 \rightarrow x = 0$$

$$g(x) = \{ (f, m) (n, p+1) (p+1, -1) (-9, p+1) \} \rightarrow -1 + 1 - 1 + 1 = 0$$

$$\rightarrow (f, -1) (1, -1) (-9, -1) (-9, -1 + 1) \rightarrow x = 1$$

$$a) \sqrt{\frac{x-r}{x^2-rx-1}}$$

$$\frac{-r}{x^2-rx-1}$$

$$D_f = (-r, +\infty) - \{r\}$$

$$x^2 = t \quad t^2 - rt - 1$$

$$(t-r)(t+1)$$

$$x^2 = \varepsilon \quad x^2 = -r \varepsilon \varepsilon$$

$$x = \pm r$$

$$b) \frac{x^2+1}{x-r[-x]} \rightarrow x-r[-x] \neq 0 \rightarrow x \neq r[-x] \rightarrow x \neq -x \rightarrow x \neq [-r, -1]$$

$$a) f(x) = \sqrt{x(x^2-1)} \rightarrow \frac{-1}{-1+1-1} \rightarrow [-1, 0] \cup [1, +\infty)$$

$$\sqrt{|x|+x} \rightarrow |x|+x > 0 \rightarrow x > 0 \rightarrow 2x > 0 \Rightarrow x > 0$$

$$x < 0 \rightarrow -x+x = 0 \quad x$$

$$b) f(x) = \frac{\sqrt{|x-r|-x^2}}{|x|-1} \rightarrow |x-r|-x^2 \geq 0 \rightarrow x-r-x^2 \geq 0 \rightarrow x^2+x-r \geq 0 \rightarrow x^2+x-r \geq 0$$

$$D_f = [-r, 1] - \{-1, 1\}$$

$$\frac{-r}{-1+1} = \frac{-r}{0} \rightarrow [-r, 1]$$

$$||x-r|-1|-k \rightarrow ||x-r|-1|-k = 0 \rightarrow |x-r|-1 = k \rightarrow |x-r|-1 = -k$$

$$|x-r| = k+1 \rightarrow x-r = k+1 \rightarrow x = k+r$$

$$|x-r| = -k+1 \rightarrow x-r = -k+1 \rightarrow x = -k+1$$

$$K = -1 \rightarrow x = \{0, r, \varepsilon\}$$

$$K = 1 \rightarrow x = \{0, r, x\}$$

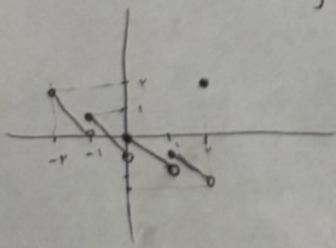
$$|x-r| = -k+1$$

$$x-r = -k+1 \rightarrow x = -k+r$$

$$x-r = k-1 \rightarrow x = k+1$$

$$-k+r = k+1$$

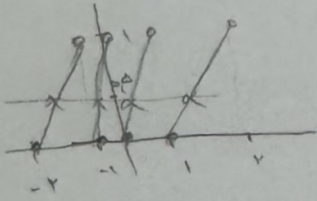
$$K = 1$$



$(-r, -1)$	$(-r, r)$	$(-1, 0)$
$(-1, 0)$	$(-1, 1)$	$(0, -1)$
$(0, 1)$	$(0, 0)$	$(1, -2)$
$(1, r)$	$(1, -1)$	$(r, -r)$

$$y = (-1)^n (x - [x]) = \frac{1}{4} \quad \leadsto \quad (x - [x]) = \frac{1}{4} \quad \rightarrow \quad x - [x] = \frac{1}{4}$$

$$x = \left\{ -1.25, -0.75, -0.25, 0.25, 0.75, 1.25 \right\}$$



$$W + \partial A = 0$$

$$L \rightarrow ba = -\mu$$

$$\hookrightarrow \alpha = -\frac{2}{5}$$

$$(-k+b)x = -\frac{k}{b}x$$

$$\hookrightarrow -\varepsilon + b = -\frac{r}{b} \rightarrow +\varepsilon b - b^2 = r$$

$$b'' - \varepsilon b + \mu = 0$$

$$(b-1)(b-4) = 0$$

$$a = -\frac{1^2}{1} = (-1^2)$$

$$b = 1$$

$$a = \frac{-r}{r} = (-1)$$

$$b = 12$$

$$-3-1 = -8$$

$$\mu - (-1) = \Sigma$$

$$f(n) = n + 1$$

$$x=1 \rightarrow \frac{-a+r}{b-1} = 1 \rightarrow a+b=r$$

$$g(-1) = -1 + 2 = 1$$

$$b+c = 0, a+r = r, w$$

$$\hookrightarrow r \in \mathbb{Z}b \rightarrow b = \frac{1}{r}$$

$$a = r - \frac{1}{r} = r/a$$

$$\frac{(n+r)(n^r-1)}{n^r-1}$$

$$\left(\frac{x^4 + 2x^2 - x - 2}{x^2 - 1} \right) \rightarrow x \neq \pm 1$$

$$f_{\text{row}} = \left\{ \frac{ax+r}{x+b} \rightarrow x = \frac{-r}{a} \right\}$$

$$x=1 \quad \frac{a+x}{1+b} = p \rightarrow a-1 = pb$$

$$g(n) = 1 + r \leq n$$

$$\sqrt{F_{X-1}a + K-1} \rightarrow \xi_{1-1}a; \rightarrow n_3 \frac{ca}{s}$$

$$\sqrt{b - \sum x} + 14K$$

بامنه $[\frac{a}{2}, \frac{b}{2}]$

$[1, k]$

$$\frac{\mu_a}{\mu} = 1 \rightarrow a = \frac{\mu}{\mu}$$

$$\frac{b}{2} = k \rightarrow b = 2k$$

$$ra - \frac{b}{v} - k = \psi\left(\frac{r}{v}\right) - \frac{\Sigma R}{v} \quad -k \leq 2 - vk - k = 2 - vk$$

$$Dg(x) \Rightarrow x_n + x_j \rightarrow x_j - x \rightarrow x_{j-1}$$

$$D_{f \circ g} = [-1, v] \leadsto Df = (-\alpha, v)$$

$$m - x \geq 1 \rightarrow x \leq m \rightarrow m = \checkmark$$

$$g(r) = \sqrt{r} = r \sqrt{r}$$

$$f(x) - g(x) = \sqrt{1-x} + 1 - \sqrt{x(x)+x} = 1 + 1 - \sqrt{1} = 1$$

$$n = 4\sqrt{r} + r\sqrt{r} - r = \sqrt{r} - r \rightarrow m+n = v + \sqrt{r} - r = \omega + \sqrt{r}$$