

$a = \begin{cases} ay - 1 & y > 1 \\ -y^2 & y < 1 \end{cases} \rightarrow \frac{a+1}{e} = y \rightarrow \frac{a+1}{e} > 1 \rightarrow a > e-1$
 $\frac{a+1}{e} < 1 \rightarrow a < e-1$
 $y = \sqrt{-a} \rightarrow \sqrt{-a} > 1 \rightarrow a < -1$



$f(x) \leq 0 \rightarrow x \in (-\infty, -2] \cup [4, \infty)$

$f(x) = x^2 - 2x - 8$
 $x^2 - 2x - 8 = 0 \rightarrow x = -2, 4$
 $f(x) \leq 0 \rightarrow x \in (-\infty, -2] \cup [4, \infty)$
 $D_f = (-\infty, -2] \cup [4, \infty) - \{2, 4\}$

$f(x) = \frac{x^2 - 2x + 2}{x^2 - 2x}$

$\Delta = 4 - 4 = 0 \rightarrow x = 1$
 $f(x) \leq 0 \rightarrow x \in (-\infty, 1] \cup [2, \infty)$
 $D_f = \mathbb{R} - \{0, 2\}$

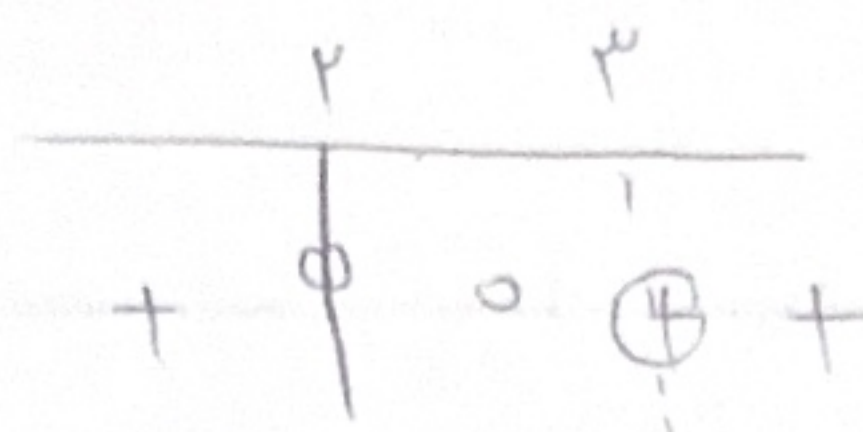
$y = \sqrt{\frac{x-2}{x^2-2x-1}}$
 $\Delta = 4 + 4 = 8 \rightarrow x = 1 \pm \sqrt{2}$
 $D_f = (-\infty, 1-\sqrt{2}) \cup (1+\sqrt{2}, \infty)$

$y = \frac{x^2+1}{x^2-2x}$
 $x^2-2x \neq 0 \rightarrow x \neq 0, 2$
 $D_f = \mathbb{R} - (-2, -1]$

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

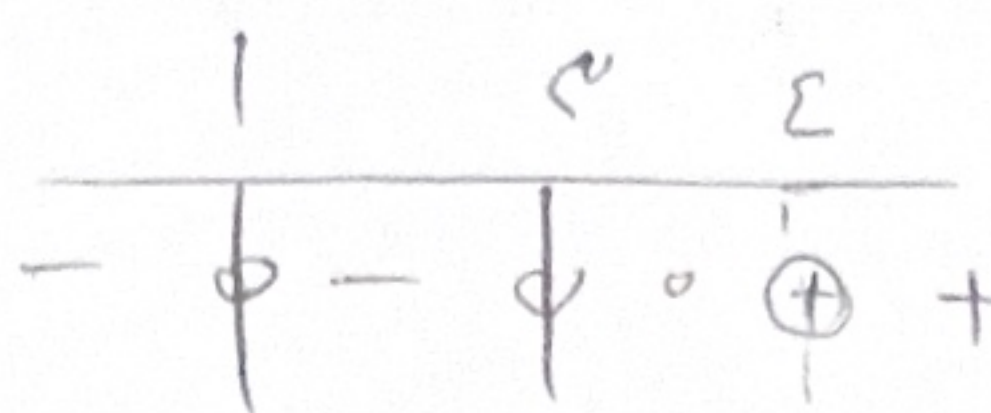
$f(x) = \frac{\sqrt{|x+1|-x^2}}{|x|-1}$
 $|x| \neq 1 \rightarrow x \neq \pm 1$
 $D_f = [-2, 1] - \{1, -1\}$
 $D_f = [-2, -1) \cup (-1, 1)$

$$y = \sqrt{(n-r)[n-r]} \geq \sqrt{(\lfloor n \rfloor - r)(\lfloor n \rfloor - r)}$$



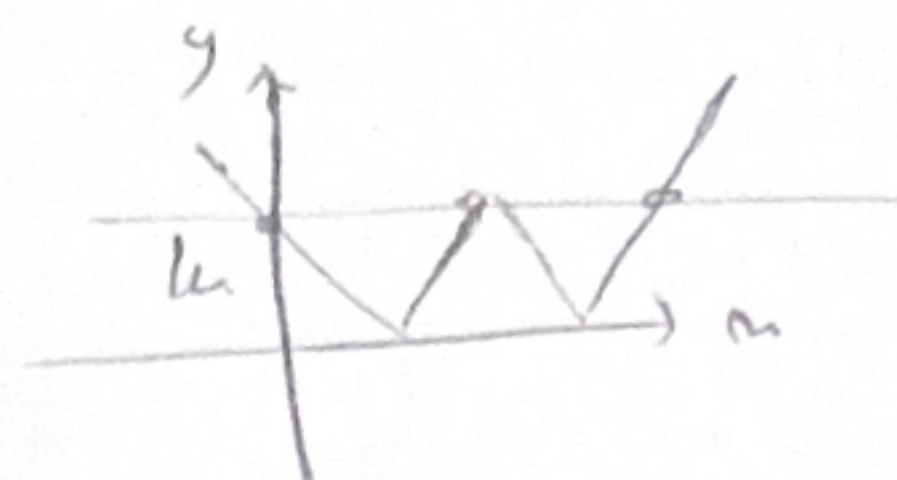
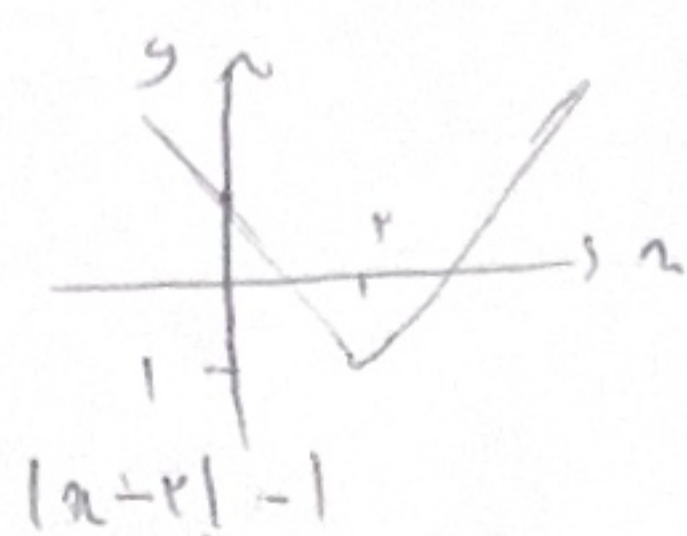
$$Df \subseteq IR$$

$$c) \quad y = \sqrt{\frac{|x-1|}{n+1} [x-c]} \geq \dots$$



$$\rightarrow P_L[(c+\infty) \cup \{1\}] =$$

$$\frac{1}{|n-r|-1-k} \neq \frac{1}{|n-r|-1-k}$$



$$| |x-y| - 1 | \neq h$$

$$|k| = 1$$

$$\text{Pans: } \frac{x^r + 1^{n+r}}{x^r + 1^{n+r}} \rightarrow (n+1)(n+r) \rightarrow n \neq -1, -1$$

$$\frac{n+1}{n-1} \rightarrow n \neq 1, -1$$

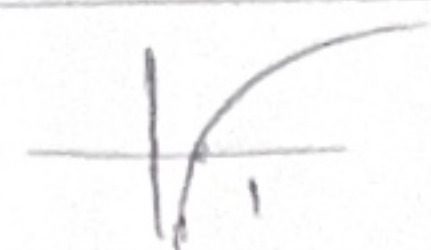
$$1R = \{-1, 1, i\} \rightarrow n_5^4 = 1$$

$$x^2 - 4x + 4 \rightarrow (x-2)^2 \rightarrow \text{کدورتی صاف}$$

$$\frac{y \cdot \log_{n+1} \log \frac{1}{y}}{n+1} - \frac{\log \frac{1}{y}}{n} = \frac{1}{n+1} \quad (1)$$

$$\lim_{r \rightarrow \infty} \frac{1}{r} > 0$$

$\rightarrow$ ans 1
 $\hookrightarrow \{a_n\}$



→ (c) $\sqrt{n} < 1$

④

$$\textcircled{1} \wedge \textcircled{4} \wedge \textcircled{5} \Rightarrow D_{\mathbb{F}_5}(-1)$$

$$D_f(u) = [-D, e]$$

$$P(e_n^r - 1) \rightarrow$$

$$- \partial_1 r \, r_2^r - 1 \, r^r$$

$$-\sum_{i,j} \alpha_{ij}^r \alpha_{ij}^s$$

$$n_3 \leq 2$$

$$2^r \geq \frac{2}{\epsilon} \rightarrow \frac{-r}{\sqrt{n}} \leq a \leq \frac{r}{\sqrt{n}}$$

$$D_F = \left[-\frac{r\sqrt{a}}{a}, \frac{r\sqrt{a}}{a} \right]$$