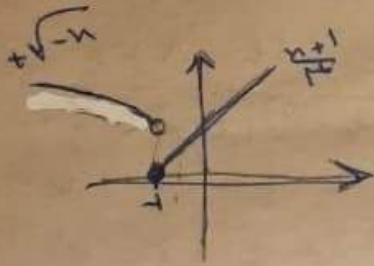


دینا سقایی

۱۸،۵



سوال ۱ - تابع $y = \frac{n+1}{x}$ هست ✓
 $\rightarrow \frac{n+1}{x} = y$
 $\rightarrow n = 1 \rightarrow D_f = [-1, +\infty)$ (۲)
 n های منفی جزء تابعه شنه
 $n^2 = -y^2 \rightarrow -n = y^2$
 $\rightarrow y^2 = \oplus \sqrt{-n} > 1$
 $\rightarrow -n > 1 \rightarrow n < -1 \quad D_f = (-\infty, -1)$

	-۴	-۲	۰	۲	۴	۶	۷
n	-	-	-	+	+	+	+
f(n-۲)	-	-	+	+	+	+	+
f(n)	-	+	+	+	-	+	+
	-	+	-	+	-	-	+

سوال ۲ - (۲)
 $\frac{n \cdot f(n-2)}{f(n)} \geq 0$

$D_g = (-4, -2] \cup (0, 2) \cup [7, +\infty)$ ✓

فقط خواست باشه که $n=4$ در دامنه f و $n=4$ در دامنه $f(n-2)$ هست نه بله به دست آمده نیست

سوال ۳ - (۲)
 $x(n^2-2) = 0$: بنابر $n=0$
 $n=\pm 2$
 $D_f = \mathbb{R} - \{0, \pm 2\}$ ✓

$\rightarrow f(n) \geq 0$
 $D_{f(n)} = (-2, 0) \cup (2, +\infty)$ ✓

	-2	2
$n-2$	-	-0+
$(n^2-2)(n^2+2)$	+	0-0+
	-	0+0+

$$D_f = (-2, 2) \cup (2, +\infty) \checkmark$$

(ر) الف ع
 $n^2 = 6$

$$t^2 - 2t - 1 = 0$$

$$(t-1)(t+1) = 0$$

$$t = -1 \quad \times$$

$$n = \pm \sqrt{6} \quad t = 1 = n^2$$

نبا : $f \circ f[-n] = 0$

$$f = f[-n] \Rightarrow [-n] = 2$$

نبا : $2 \leq -n < 2 \rightarrow -2 \leq n < -2$

$$D_f = \mathbb{R} - [-2, -2] \checkmark \quad (-2, -2) \text{ :}$$

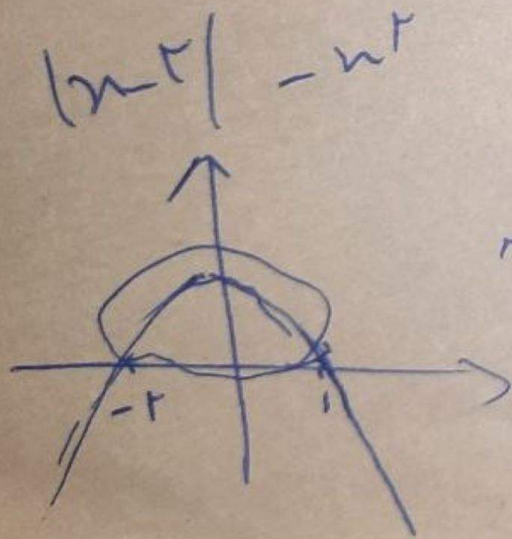
نبا : $n(n^2-1) \geq 0 \rightarrow$

	-1	0	1
$n(n^2-1)$	-	0	+

(ر) - د

نبا (الف) : $\sqrt{|n|+n} = 0 \rightarrow |n| = -n \rightarrow$
 x نبا ناقصه n^2
 يعني n نبا شت n^2

$$D_f : \begin{matrix} [-1, 0] \cup [1, +\infty) \\ (0, +\infty) \end{matrix} \xrightarrow{n} D_f : [1, +\infty) \checkmark$$



$$\rightarrow [-r, 1]$$

$r_{\min}$ or $|n|=1 \rightarrow n = \pm 1$

$$[-r, 1) - \{1\} \checkmark$$

(C) - d

$$\sqrt{(n-r)[n-r]} \geq 0$$

$$[n-r]$$

$$D_f = \mathbb{R} \checkmark$$

4-الف

	r	r
$n-r$	-	+
	+	+
	+	+

(2)

	r	r
$[n-r]$	+	+
	-	+
	-	+

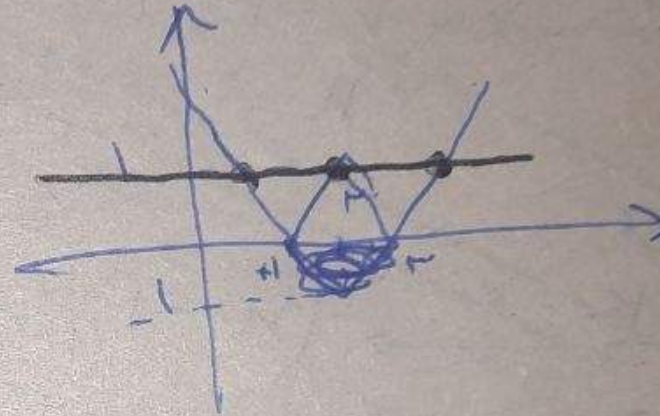
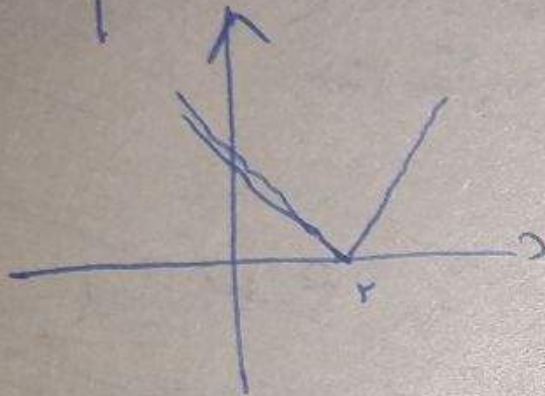
4-ب

$$D_f = \{1\} \cup [r, +\infty)$$

(3)

$$\phi_{\text{Li}} : \|x - \mu\| = K$$

(r)



$$K = 1 \checkmark$$

$$\underline{u_1} = (n+2)(n+1) = 0 \rightarrow n = -1$$

$$\rightarrow n = -2$$

$$\underline{u_2} \rightarrow n+1 = 0 \rightarrow n = -1$$

$$\underline{u_3} : n-1 = 0 \rightarrow n = 1$$

$$D_f = 18 - 5 - 4 - 1 - 1 \rightarrow n = 3$$

$$n^2 - 4n + 9 = 0$$

$$(n-3)^2 = 0 \rightarrow n = 3$$

is this $n=3$

$$\begin{cases} n+1 > 0 \\ n > 0 \end{cases} \rightarrow n > -1 \quad \} \xrightarrow{n} \emptyset$$

(Q)

~~Q~~ - 9

$$\mathcal{D}_f = (-1, +\infty)$$

$$\frac{-\omega \leq \sqrt{n^2 - 1} \leq \omega}{\omega \sqrt{n^2 + 1} \rightarrow n \in \mathbb{R}}$$

(r)

- 10

$$\sqrt{n^2 - 1} \leq \omega$$

$$\rightarrow \mathcal{D}_f = \left[-\frac{1}{\sqrt{n}}, \frac{1}{\sqrt{n}} \right]$$

$$1) \quad n+1 > 0 \rightarrow n > -1, \quad n+1 \neq 1 \rightarrow n \neq 0$$

-9

$$2) \quad n > 0, \quad n \neq 1$$

$$\xrightarrow{n} D_f = (0, 1)$$

$$3) \quad \lg \frac{1}{n} > 0 \rightarrow 0 < n < 1$$