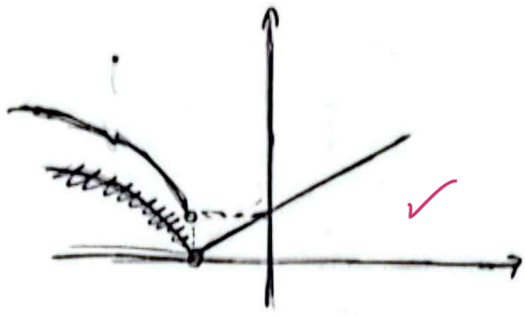




۱۸، ۵
تابع هست!

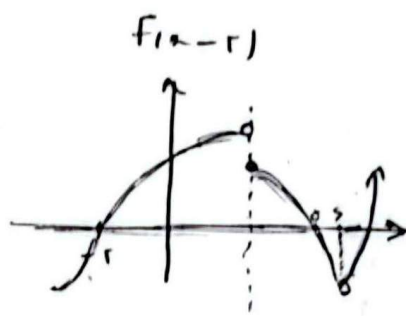
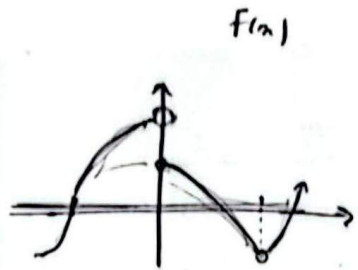
کتاب اعطای در از معر ۳

$$a = \begin{cases} y-1 & y \geq 0 \\ -y^2 & y < 0 \end{cases}$$
 (۱، ۷۵)

$y = \frac{x+1}{r} \rightarrow y \geq 0 \quad x \geq -1$

$x = -y^2$

$\sqrt{-x} = y$



(۲)



فقط خطوط باشد که $x=4$ در دامنه $f(x-r)$ و $x=4$ در دامنه $f(x)$ نیست که در بازه است آفده نیستند

$(-1, -r] \cup [0, r) \cup [r, +\infty) \checkmark = D_f$

$f(x) = \frac{r^2 x^2 - r^2 x + r}{x(x^2 - 4)}$
 صورت کسری
 $\sim \frac{x(x-r)(x+r)}{x(x^2 - 4)}$

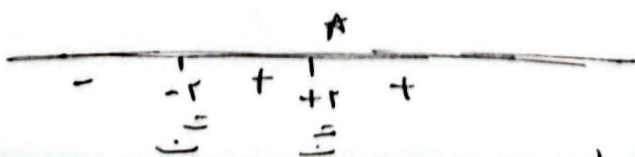


(۳)

$\mathbb{R} - \{-r, \dots, r\} \checkmark$

$(-r, 0) \cup (r, +\infty) \checkmark$

$y = \sqrt{\frac{x-r}{x^2 - r^2 - 1}} \sim \frac{(x-r)(x^2 + r)}{(x^2 - 4)(x^2 + r)} = \frac{(x-r)(x+r)}{(x^2 - 4)(x^2 + r)}$



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

$$y = \frac{r^2 + 1}{r - r[-2]}, \quad r \neq r[-2]$$

$$r \neq [-2]$$

$$r, -n < r$$

$$\boxed{-2 \geq n > -\infty} \rightarrow D_f = \mathbb{R} - (-2, -1]$$

$$f(n) = \frac{\sqrt{n(n^2-1)}}{\sqrt{|n|+n}} \Rightarrow n(n-1)(n+1)$$

$$n \leq 0 = 0$$

$$n > 0 = r_2$$

$$\boxed{\rho_f: [1, +\infty)}$$

$$f(n) = \frac{\sqrt{|n-2| - n^2}}{|n| - 1}$$

$$|n| \neq 1 \rightarrow n = \pm 1$$

$$n \geq 2: n - 2 - n^2 = -(n^2 - n + 2) \Delta < 0!$$

$$n \leq 2: 2 - n - n^2 = -(n^2 + n - 2)$$

صفحة آفر...

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

$$y = \sqrt{|n-2| [n-2]}$$

$$\boxed{\rho_f = \mathbb{R}}$$

$$y = \sqrt{|n-1| [n-3]}$$

$$\Rightarrow \rho_f = [3, +\infty)$$

مربوطه نیست

$$f(n) = \frac{\frac{n^2 + 3n + 2}{n^2 + 2n + 2}}{\frac{n+1}{n-1}} = \frac{(n+1)(n+2)}{(n+1)(n+2)} = 1$$

$$-19 - 2, 1 \rightarrow n = 3$$

$$n^2 - 4n + 9 = 0 \Rightarrow (n-3)^2 = 0$$

بلی ایستد دارد

$$y = \log_{n+1} \left(\log_{\frac{1}{n}} \right) > 0$$

$$n+1 > 0 \checkmark$$

$$n > 0 \checkmark$$

$$\log_{\frac{1}{n}} > 0 \rightarrow \left(\frac{1}{n} \right)^x > 1$$

صفحه آفر...

$$f(r) \Rightarrow \rho_{f(r)} = [-\omega, r]$$

(r) 1.

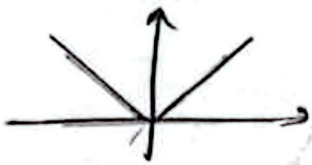
$$-\omega < r < 1$$

$$-r < r < r$$

$$r < r < r$$

~~scribbles~~

$$y = |x|$$



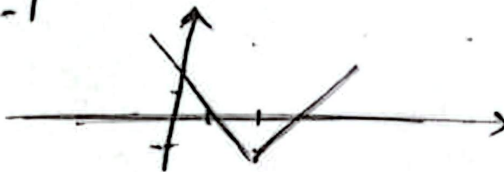
$$y = |x - r|$$



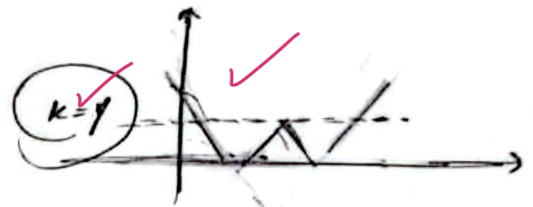
$$x = \left[-\frac{r}{\sqrt{r}}, \frac{r}{\sqrt{r}}\right]$$

(r) 2

$$y = |x - r| - 1$$



$$y = |x - r| - 1$$



$$1) |u| - 1 \neq 0 \rightarrow |u| \neq 1 \rightarrow u \neq \pm 1$$

1. 2

$$2) |u-1| - u^r \geq 0 \rightarrow$$

$-u^r - u + 1 \geq 0$ $\frac{-r}{-} \quad \frac{1}{+}$ $- \quad + \quad -$	$-u^r + u - 1 \geq 0$ $\Delta < 0 \quad \times$
--	--

$$D_f = [-1, 1) - \{-1\}$$

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

-9

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

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

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