

زهرامری - دوازدهم دختره A ۱۷,۵

$$-۲,۲ \frac{۳x+۲}{۵} \leq ۴ \rightarrow -۱۰,۲(۳x+۲) \leq ۲۰ \rightarrow \boxed{-۴x \leq ۶}$$

① ②

$$\left. \begin{array}{l} ۳x(-۲) - ۲ = -۸ \\ ۳x۳ - ۲ = ۷ \end{array} \right\} \rightarrow \boxed{D_f = [-۸, ۷]}$$

② ③

$$D_f = \frac{-۳+۱}{۲} = -۱ \text{ و } \frac{۳ \times ۳+۱}{۲} = ۵$$

$$[-۱, ۵] \rightarrow -۱,۲ - ۵x + ۲ \leq ۵ \rightarrow -۳,۲ - ۵x \leq ۳ \rightarrow \boxed{-\frac{۳}{۵} \leq x \leq \frac{۳}{۵}}$$

③ ④

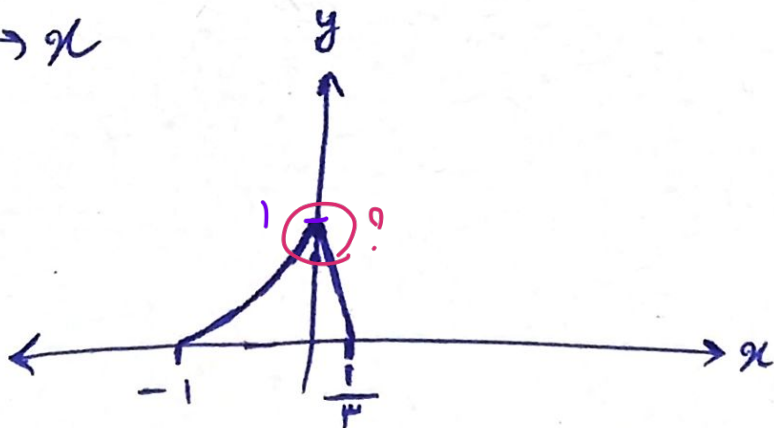
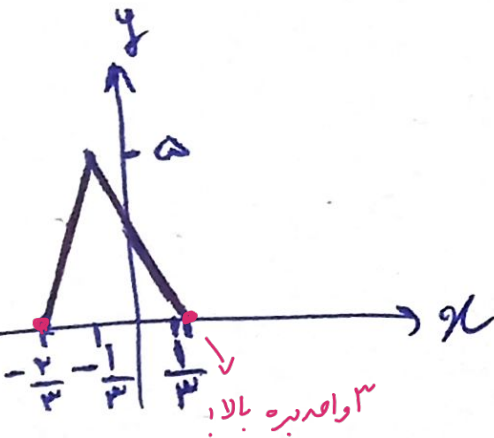
$$۲f(۳x+۱) + ۳$$

④ ⑤

صفحه آف

⑤ ⑥

صفحه آف



$$\frac{-\frac{1}{a}}{-\frac{1}{a}} = +\frac{1}{a} \rightarrow -\frac{1}{a} \times \frac{1}{a} + \frac{1}{a} + 1 = \frac{1}{a} \rightarrow \left(\frac{1}{a}, \frac{1}{a}\right)$$

$$2a \times \underbrace{f\left(\frac{1}{a}x - \frac{1}{a}\right)}_{f\left(\frac{1}{a}x - \frac{1}{a}\right)} - 2a = 0 \rightarrow f\left(\frac{1}{a}x - \frac{1}{a}\right)$$

$$\hookrightarrow f(t) = 1 \rightarrow t = 0 \rightarrow \boxed{x=0}$$

صفر آفر

$$f(n) \xrightarrow{\text{مستقیم}} (1, 2) \rightarrow \left(-\frac{1}{3}, 1\right) \rightarrow \boxed{-\frac{1}{3}x - 1 = +\frac{1}{3}}$$

(2) (7)

$$f(n) \xrightarrow{\text{سویز انتقال}} (a+1, d) \text{ (I)}, \quad g(n) \xrightarrow{\text{سویز انتقال}} [-2, b-1] \text{ (II)}$$

$$\hookrightarrow \text{I} \cap \text{II} = (-2, 0) \rightarrow a+1 = -2 \rightarrow \boxed{a=-3} \rightarrow b-1 = d \rightarrow \boxed{b=4}$$

$$-3-4 = \boxed{-9}$$

(2) (1)

$$R_{f\left(\frac{n}{r}+1\right)} = R_{f(n)} = [-1, 2] \rightarrow \sqrt{|f(n) - 3|} \rightarrow R_{y_r} = [0, \sqrt{a}]$$

$$D_{y_r} = \left[\underbrace{-\frac{1}{r}+1}_{-\frac{1}{r}}, \frac{2}{r}+1\right] \rightarrow D_{y_r} = \left[-\frac{1}{r}, \frac{2}{r}\right]$$

(2) (9)

$$\left| \frac{x-1}{x^2-3} \right|$$

$$+1+x < 0 \rightarrow$$

$$\left| \frac{x-1}{x^2-3} \right| + 1 < -x \rightarrow$$

$$\frac{x^2 - x^2 + x^2 - 1}{x^2 - 3} < 0$$

②

①

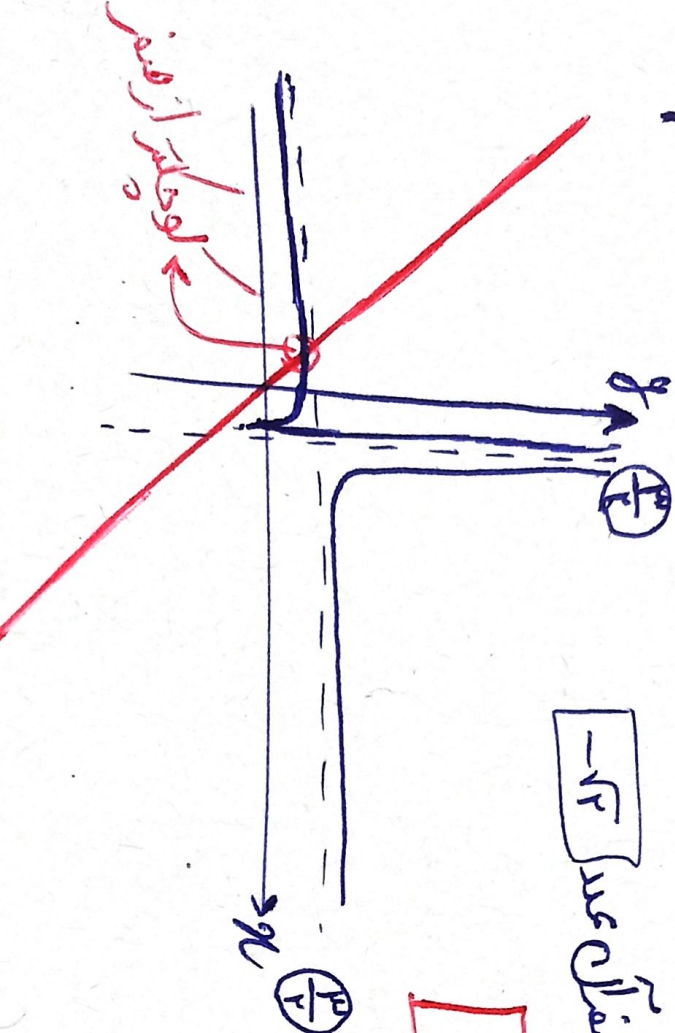
$$[-\sqrt{2}]$$

تفاوتی کوچک و منفی عدد

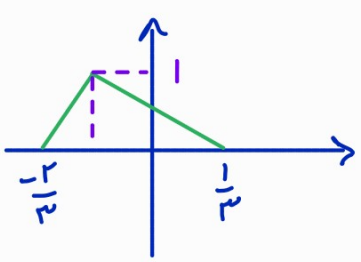
$$\frac{x^2 - 1}{x^2 - 3} < 0$$

$$x \in (-\infty, -\sqrt{2})$$

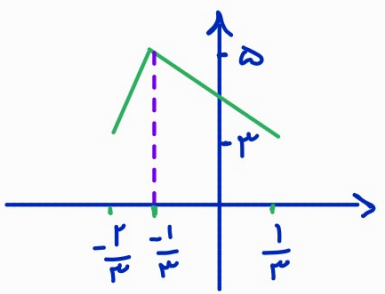
است.



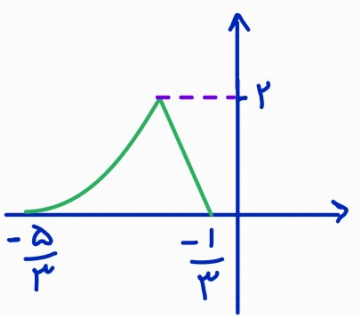
-۴



$$y = f(r_n + 1)$$

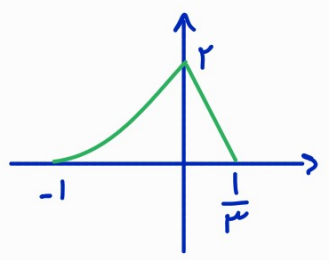


$$y = 2f(r_n + 1) + r$$



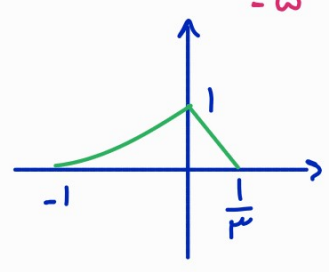
$$y = f(-r_n)$$

واحد به راست $\frac{2}{3}$



$$y = f(-r(n - \frac{2}{3}))$$

$$y = f(r - r_n)$$



$$y = \frac{1}{2}f(r - r_n)$$

-۵

رأس: (h, K) $\xrightarrow{\text{معادله خط}}$ $y = a(n-h)^r + K = -\frac{1}{3}n^r + \frac{2}{5}n + 1 \rightarrow a = -\frac{1}{3}$

-۶

رأس: $(4, 3) \rightarrow y = -\frac{1}{3}(n-4)^r + 3 \xrightarrow{y=0} -\frac{1}{3}(n-4)^r = -3 \rightarrow \begin{cases} n=7 \\ n=1 \end{cases}$