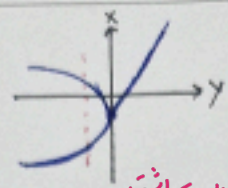


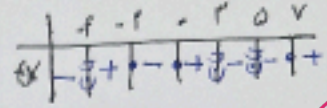
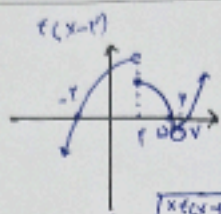
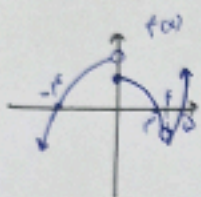
۱۲,۵



پارابول
دارای
است
تابع

معادلات اشتباهه:

صفحه آخر...

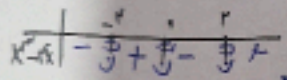


$D = (-\infty, -2] \cup [0, 2] \cup [2, +\infty)$

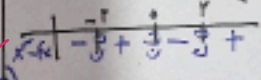
فقط حواصت باشد که $x=2$ و $x=-2$ و $x=0$ در بازه است آفده نیست

$$\frac{x^3 - 2x^2 + 2}{x^3 - 2x} = \frac{x^2(x-2) + 2}{x^2(x-2)}$$

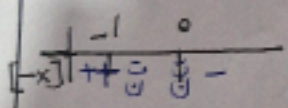
$$\frac{x^3 - 2x^2 + 2}{x^3 - 2x} = \frac{x^2(x-2) + 2}{x^2(x-2)}$$



$D = (-2, 0) \cup (2, +\infty)$

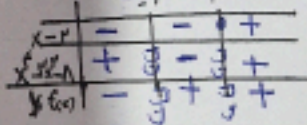


$D = \mathbb{R} - \{-2, 0, 2\}$



$D = \mathbb{R} - (-1, 0]$

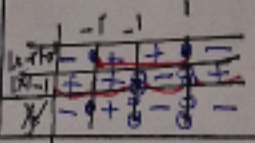
$$\frac{\sqrt{x-2}}{\sqrt{x^3-2x^2-8}} = \frac{\sqrt{x-2}}{\sqrt{(x-2)(x^2+2)}}$$



$D = (2, 2) \cup (2, +\infty)$

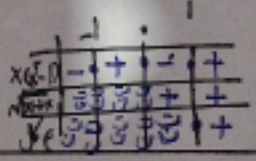
$$y = \frac{\sqrt{|x-2|-x^2}}{|x|-1} \rightarrow |x-2|-x^2 \geq 0$$

$|x|-1 \neq 0 \rightarrow x \neq 1$



$D = [-2, 1] - \{1\}$

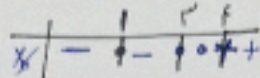
$$\frac{\sqrt{x(x^2-1)}}{\sqrt{|x|+x}} = \frac{\sqrt{x(x-1)(x+1)}}{\sqrt{x(x+1)}}$$



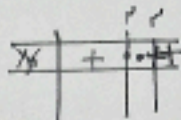
$D = [1, +\infty)$

$$y = -\sqrt{(x-1) \cdot [x-2]}$$

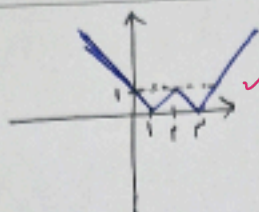
همیشه مثبت



$$D = [2, +\infty) \cup \{1\}$$



$$D = \mathbb{R}$$



پس باید
اول و پایتین
بیا

$$-k = -1 \rightarrow k = 1$$

$$x^2 + 2x + 2 \geq 0 \rightarrow (x+1)(x+2) > 0 \rightarrow D = (-\infty, -2) \cup (-1, +\infty)$$

$$x-1 > 0 \rightarrow x > 1 \rightarrow D = (1, +\infty)$$

$$\frac{x+1}{x-1} > 0 \rightarrow D = (-\infty, -1) \cup (1, +\infty)$$

صورت سوال رو به بارش بکون

$$y = L \cdot \frac{1}{x+1} \rightarrow x > 0, x \neq 1 \rightarrow D = (0, +\infty) - \{1\}$$

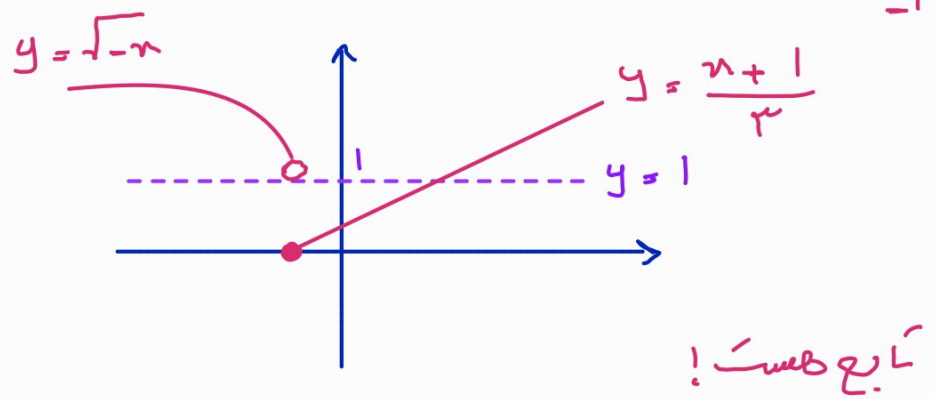
$$\left. \begin{array}{l} x+1 > 0, x+1 \neq 1 \\ x > -1, x \neq 0 \end{array} \right\} \rightarrow D = (-1, +\infty) - \{0\}$$

$$D_{f(b)} = [-5, 3]$$

راه حل بنویس!

$$D_{f(g(x))} = [0, \frac{2}{3}]$$

$$y = \begin{cases} \frac{n+1}{3} & y \geq 0 \\ \sqrt{-n} & y > 1 \end{cases}$$



$$f(-2) \neq 0 \rightarrow [-2] \neq 1 \rightarrow D_f = \mathbb{R} - (-2, -1] \quad (ب)$$

۸- بانه ریشه تمام خارج هارا درياوريم!

$$f(n) = \frac{(n+2)(n+1)}{\frac{n+1}{n-1}} \Rightarrow n \neq \{-2, -1, 1\} \rightarrow n = 3$$

$$n^2 - 4n + 4 = 0 \rightarrow n^2 - 4n + 4 = 0 \rightarrow n = 2 \quad \text{ریشه!}$$

$$1) n+1 > 0 \rightarrow n > -1, n+1 \neq 1 \rightarrow n \neq 0 \quad 9$$

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

$$\Rightarrow D_f = (0, 1)$$

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

۱۰- دقت كنيم دامنه $f(n)$ يعني مقاييرى كه تابع f ميگيرد پس $1 - 3n^2$ بانه در بازه $[-5, 4]$ قرار ميگيرد:

$$-5 \leq 1 - 3n^2 \leq 4 \rightarrow -4 \leq 3n^2 \leq 4 \rightarrow 3n^2 \leq 4 \rightarrow -\frac{4}{\sqrt{3}} \leq n \leq \frac{4}{\sqrt{3}}$$

$$\rightarrow -\frac{2\sqrt{3}}{3} \leq n \leq \frac{2\sqrt{3}}{3} \rightarrow D_{f(1-3n^2)} = \left[-\frac{2\sqrt{3}}{3}, \frac{2\sqrt{3}}{3}\right]$$