

$$2x^2 - b$$

$$a + 2x$$

$$|x-1| \geq 2$$

$$0 \leq x \leq 3$$

← ۲

$$\Rightarrow x=3 \Rightarrow 2x^2 - b = a + 9 \Rightarrow a + b = 12$$

$$f(x) = \sqrt{a - bx - x^2} \Rightarrow a - bx - x^2 \geq 0$$

$$\Rightarrow x^2 + bx - a \leq 0$$

← ۳

$$x_1 + x_2 = -\frac{b}{1} \xrightarrow{[b, a]} b + a = -b \Rightarrow a = -2b \text{ (1)}$$

(مجموعه بازه ها، بازه ها، a, b)

$$x_1 x_2 = \frac{a}{1} \Rightarrow ab = -a \rightarrow b = -1 \xrightarrow{(2)} a = 2$$

$$a + b = 2 - 1 = 1$$

$$D_{\text{مستقیم}}(-\infty, 2) \text{ مستقیم و غیر مستقیم} \rightarrow a=0 \rightarrow bx + c > 0$$

← ۴

$$x=2 \rightarrow 2b + c = 0 \rightarrow c = -2b$$

$$bx - 2b > 0 \xrightarrow{\text{مستقیم}} bx - 2b > 0 \rightarrow |b| = -b$$

باید مستقیم باشد یا زوج باشد

$$3a + c - 3|b| = -2b - 3(-b) = b$$

$$y = \sqrt{\frac{3x+2}{x+b} + a} \rightarrow \frac{3x+2}{x+b} + a \geq 0 \rightarrow$$

$$\frac{3x+2+ax+ab}{x+b} \geq 0 \rightarrow \frac{x(3+a) + 2+ab}{x+b} \geq 0 \rightarrow$$

باقی عبارت را صفر
تایید می‌کنیم
صفر را به مخرج می‌دهیم

$$3+a=0 \rightarrow a=-3$$

$$\frac{2-3b}{x+b} \geq 0 \xrightarrow{x=2} x=2$$

مخرج صفر

$$2+b=0 \rightarrow b=-2$$

$$y = \sqrt{x^3 \cdot x} \rightarrow y = \sqrt{x(x^3-1)} \rightarrow$$

$$y = \sqrt{\frac{x(x-1)(x+1)}{x(x-1)(x+1)}} \rightarrow \frac{-1}{-} + \frac{0}{+} - \frac{1}{-} + \rightarrow D = [-1, 0] \cup [1, +\infty)$$

$$y = \frac{1}{\sqrt{|x|-1}} \rightarrow |x|-1 > 0 \rightarrow |x| > 1 \rightarrow x > 1 \vee x < -1$$

$$\rightarrow D = (-\infty, -1) \cup (1, +\infty)$$

$$y = \sqrt[3]{\frac{1}{|x| - [x]}} \rightarrow |x| - [x] \neq 0$$

$$|x| \neq [x] \rightarrow D = \mathbb{R} - \mathbb{N}$$

$$\sqrt{x} + \sqrt{y} = 9 \rightarrow \sqrt{y} = 9 - \sqrt{x} \rightarrow 9 - \sqrt{x} \geq 0 \rightarrow \sqrt{x} \leq 9$$

$$\rightarrow \begin{cases} x \leq 81 \\ x \geq 0 \end{cases} \rightarrow$$

$$D = [0, 81]$$

$$g = \frac{1}{\sqrt{\left[rx - \frac{1}{r}\right] + \left[rx + \frac{p}{r}\right]}} \leadsto \left[rx - \frac{1}{r}\right] + \left[rx + \frac{p}{r}\right] > 0 \leadsto$$

↔ 9

$$\left[rx - \frac{1}{r}\right] + \left[rx + \frac{p}{r}\right] + r - r > 0 \leadsto \left[rx + \frac{p}{r}\right] + \left[rx + \frac{p}{r}\right] - r > 0 \leadsto$$

$$r\left[rx + \frac{p}{r}\right] - r > 0 \xrightarrow{\div r} \left[rx + \frac{p}{r}\right] - 1 > 0 \leadsto \left[rx + \frac{p}{r}\right] > 1 \rightarrow$$

$$rx + \frac{p}{r} \geq 1 \leadsto rx \geq \frac{1}{r} \leadsto x \geq \frac{1}{r} \rightarrow D = \left[\frac{1}{r}, +\infty\right)$$

$$g = \sqrt{1 - \log(rx - a)}$$

$$D = (b, c]$$

$$c - b = ?$$

↔ 10

$$rx - a > 0 \leadsto rx > a \leadsto x > \frac{a}{r}$$

$$1 - \log(rx - a) \geq 0 \leadsto \log(rx - a) \leq 1 \leadsto rx - a \leq 10 \rightarrow rx \leq 10 + a$$

$$x \leq \frac{10 + a}{r}$$

$$b = \frac{a}{r}$$

$$c = \frac{10 + a}{r} \leadsto c - b = \frac{10 + a}{r} - \frac{a}{r} = \frac{10}{r} = \frac{1}{r}$$