

B - دایره دایره

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$$y = -\frac{1}{4}(x-4)^2 + 3$$

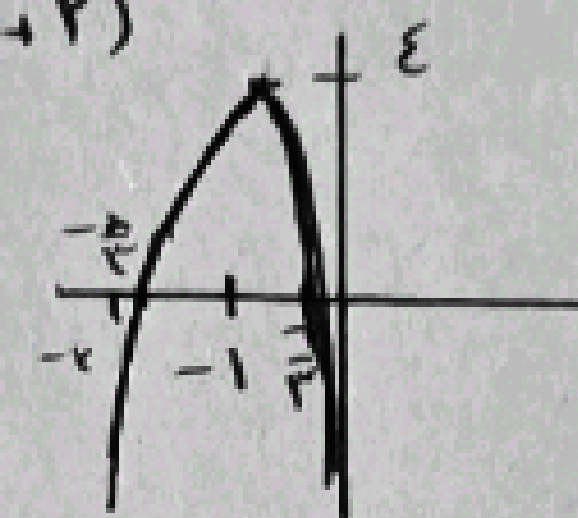
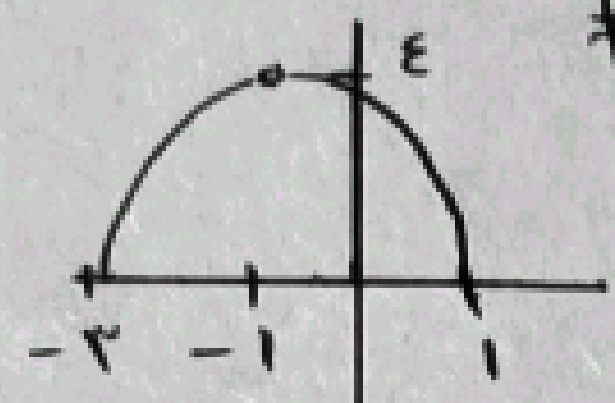
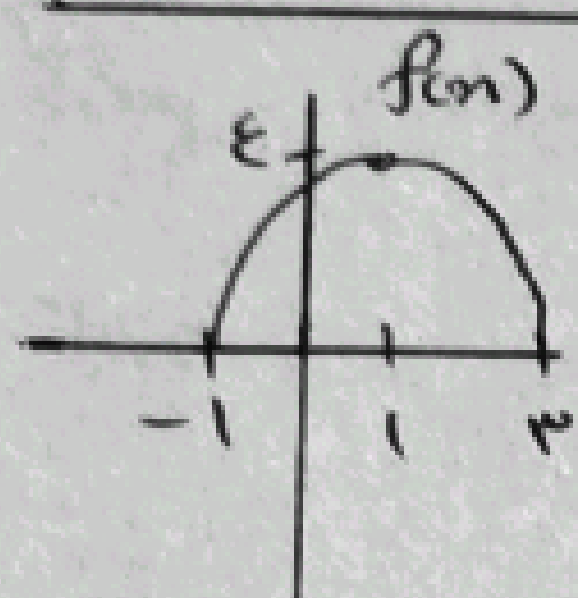
مقادیر سه‌گانه بر حسب رأس آن در فضا

1

$$y < 0 \rightarrow (x-4)^2 = 9 \rightarrow x < 7$$

$$x > 1$$

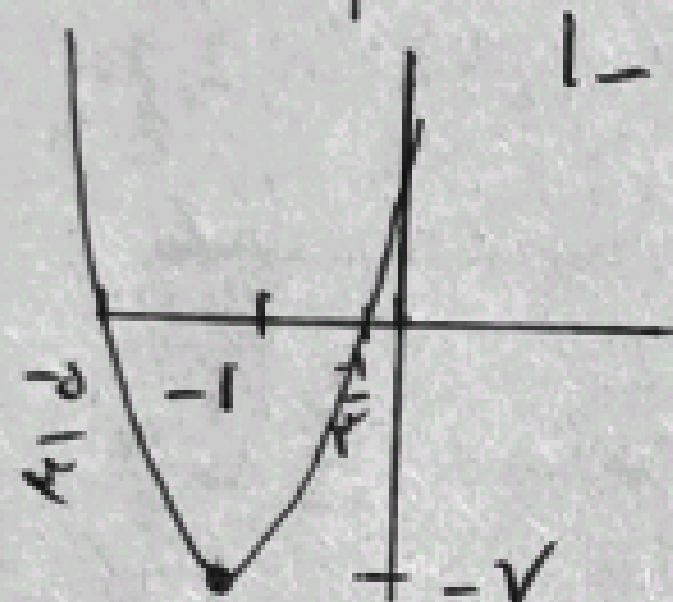
1



f(x+2)

2

1



1 - 2 f(x+2)

$$x_{n+2} < 1 \rightarrow x < -\frac{1}{2}$$

$$\alpha \beta = \frac{1}{10}$$

$$\rightarrow \text{اول } \left| \frac{-1}{-2} \right| = \left| \frac{\alpha}{\beta} \right| \text{ و } \boxed{\alpha \beta = 1}$$

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

3

$$-x + \sqrt{x^2 + x} \rightarrow -x + \delta + \sqrt{x^2 + x} = x + \sqrt{x^2 + x}$$

$$f(x) = \frac{1}{x} = x + \sqrt{x^2 + x} \Rightarrow \frac{1}{x} = x + \sqrt{x^2 + x} \Rightarrow \boxed{x = \frac{1}{2}}$$

$$y = f(x-1) + g(x+1), \quad D_{f(x-1)} = (a+1, \delta)$$

4

$$D = (-2, \delta)$$

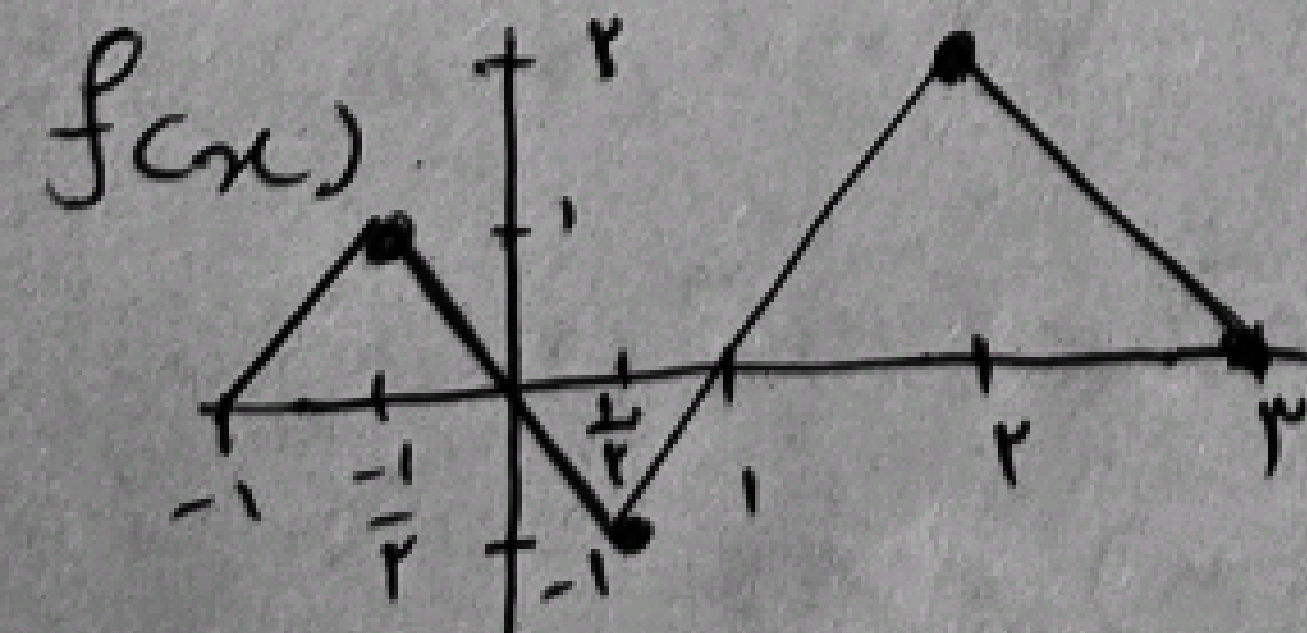
$$D_{g(x+1)} = [-2, b-1]$$

5

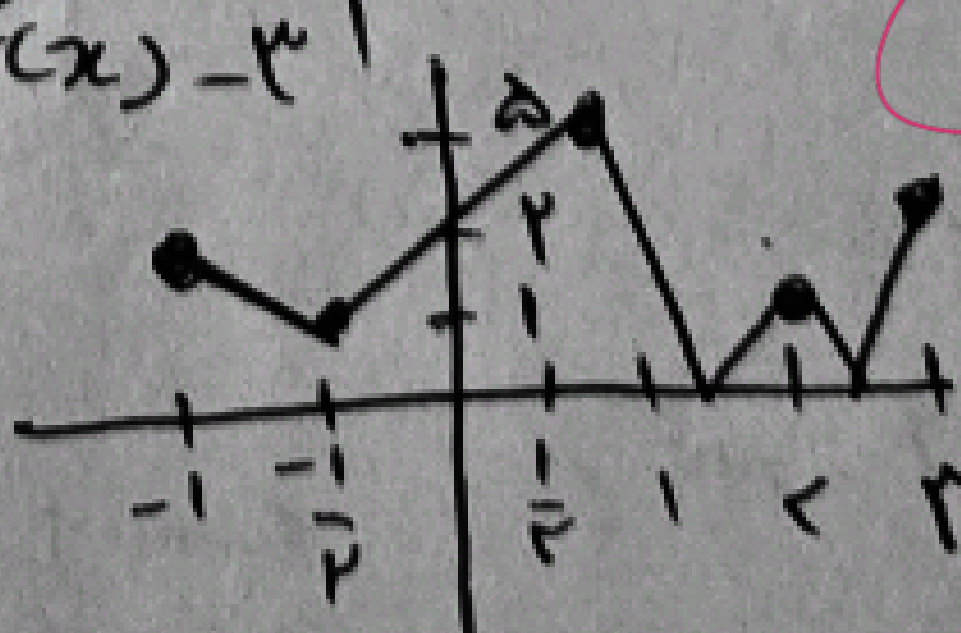
$$D = D_{f(x-1)} \cap D_{g(x+1)} \Rightarrow a+1 = -2 \Rightarrow a = -3$$

$$b-1 = \delta \Rightarrow b = 9$$

$$\Rightarrow a - b = -3 - 9 = \boxed{-12}$$



$$|f(x) - 1|$$



6

$$D_f = [1, 2]$$

$$D_g = [0, 5]$$

$$-3 \leq x \leq 5 \rightarrow -\frac{3}{2} \leq \frac{x}{2} \leq \frac{5}{2} \rightarrow -\frac{1}{2} \leq \frac{x}{2} + 1 \leq \frac{3}{2}$$

۴- خطای توابع و تویضی بر مبنای حالت کار می کنند $a < 0$

$$f(-\frac{1}{a}) = -\frac{1}{a^2} [-1] = \frac{1}{2} \rightarrow a^2 = 2 \rightarrow a = -2$$

$$b < 1 \rightarrow b - a < 0$$

$$\log_2^2 \rightarrow \log_2^{x-2} \rightarrow -\log_2^{x-2} + 3 \Rightarrow$$

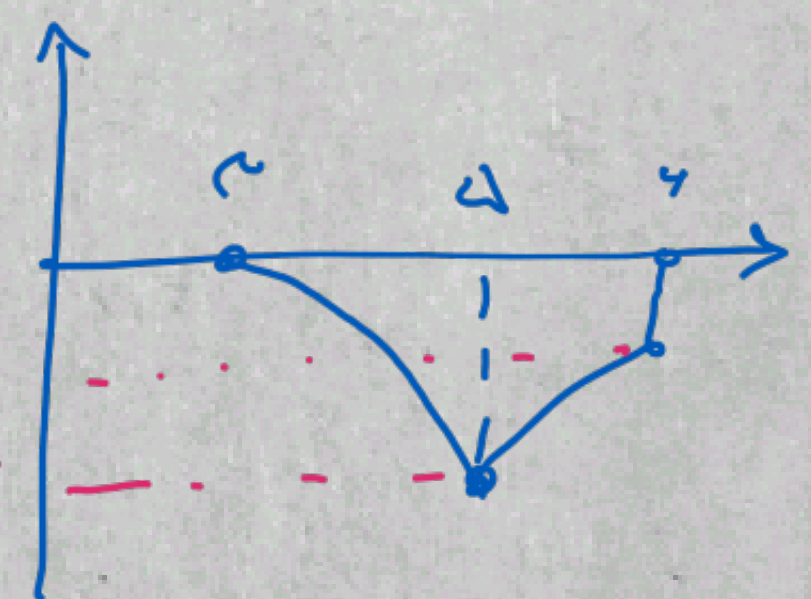
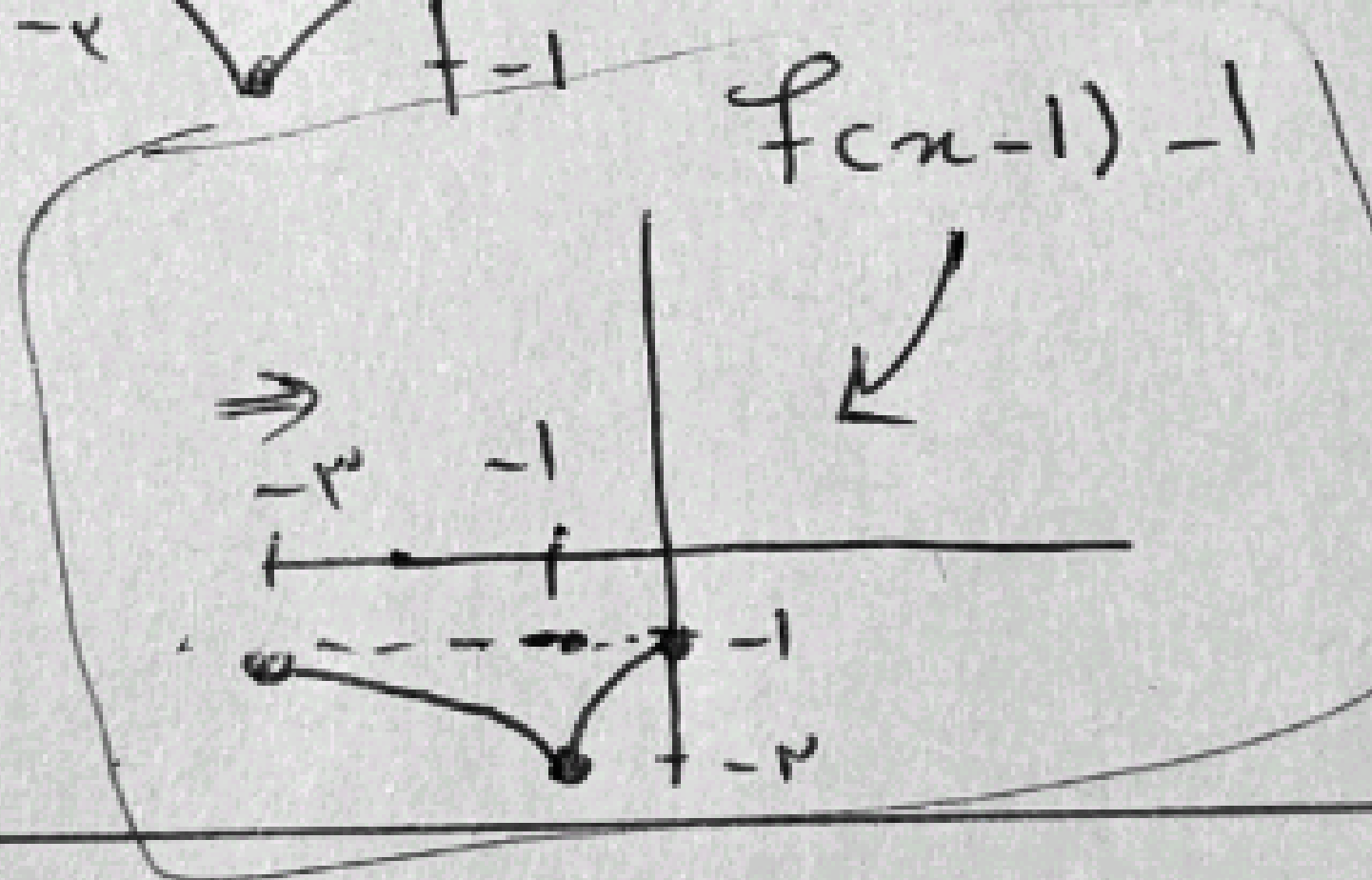
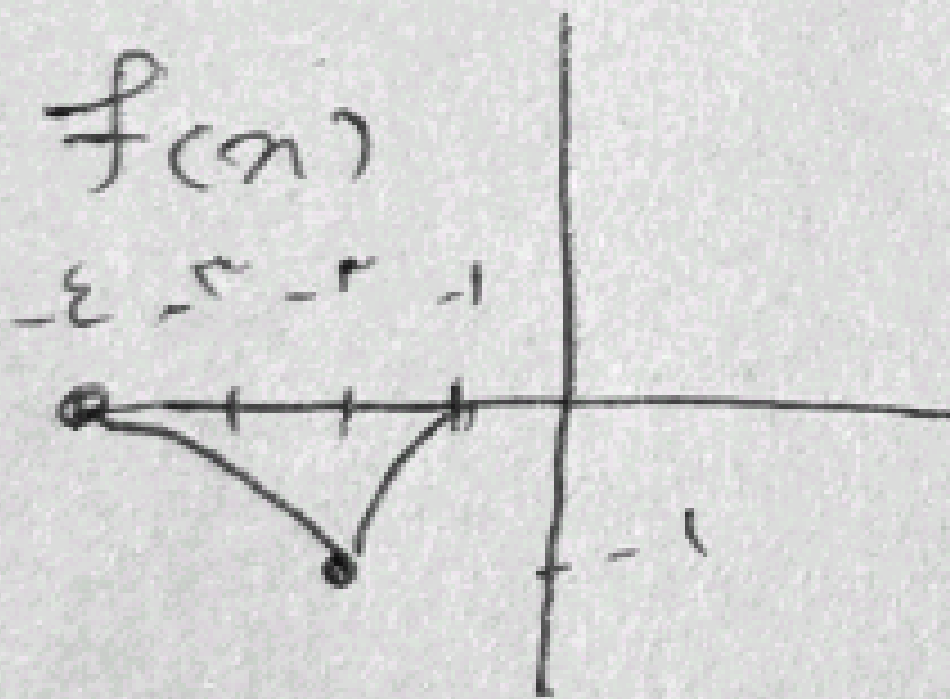
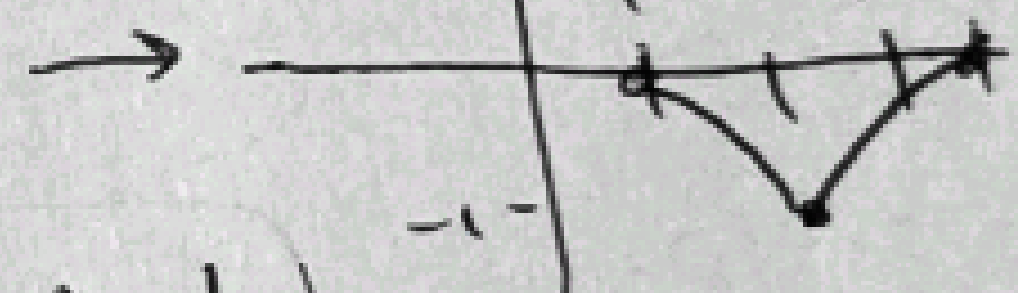
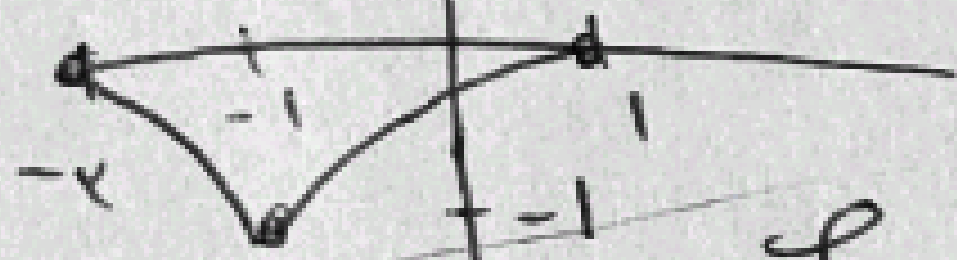
$$g(x) = -\log_2^{x-2} + 3$$

$$g(-16) + g(-42) = \frac{-1}{-1} + \frac{-2}{-2} = \boxed{14}$$

$$x - f(x-x) \rightarrow$$

$$f(x-x)$$

$$f(x)$$



$$\left| \frac{x-1}{2x-2} \right| + 1 \rightarrow x+1 + \left| \frac{x-1}{2x-2} \right| < 0$$

$$\frac{x-1}{2x-2} < -1-x \rightarrow \frac{x^2-1}{2x-2} < -1-x$$

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

$$y' = (x-2)^2 + 2V \leq f(x) \leq 1 \rightarrow f(x) = 1 \rightarrow x = 0 \rightarrow \frac{1}{2} \leq x \leq \frac{3}{2}$$