

Subject:

Date:

$$x=1 \rightarrow f(x) = 1 + f(x) \rightarrow f(x) = 1$$

-1

$$f(x+1) + f(x+2) = 1 \rightarrow x+1 \rightarrow \text{بعضی}$$

$$R = \begin{bmatrix} 1 & 1 & 1 \\ 1 & 1 & 1 \end{bmatrix}$$

$$y = \sqrt{f(x) - x^2} = \sqrt{x - x^2} \rightarrow x - x^2 \rightarrow R = (-\infty, \frac{1}{4}]$$

$$f(x) = \frac{(x-1)(x+2)}{(x+2)} = x(x-1) \Rightarrow x \neq -2$$

-2

$$x^2 - 1 \neq 1 \rightarrow x^2 - 2 \neq 0 \rightarrow \begin{cases} x \neq -2 \\ x \neq 2 \end{cases} \rightarrow a, b$$

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$$R_{x(x-1)} \Rightarrow [-1, +\infty) - \{1\} \Rightarrow f\left(\frac{x-1}{x}\right) = +1$$

$$y = \sqrt{(x-1)^3} = \sqrt{x^3 - 3x^2 + 3x - 1} \rightarrow \begin{cases} a = -3 \\ b = 1 \end{cases}$$

-3

$$y = x-1 \text{ of } [-3, 1] \rightarrow R = [-1, 1]$$

10

$$\frac{x+1}{1-x} \gg \frac{-1}{-1} + \frac{+1}{1} \rightarrow D = [-1, 1]$$

-5

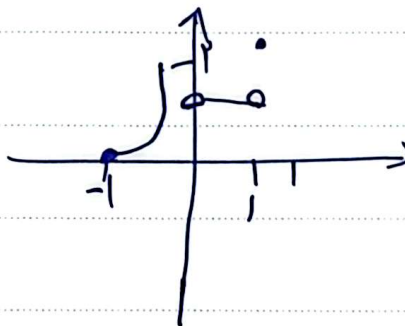
$$y = \frac{ax^2-1}{x^2+b} \sim x^2 \rightarrow +\infty \rightarrow y = a = 1 \rightarrow a+b = 1+1 = 2$$

$$-1 \leq x \leq 0 \rightarrow y = -\frac{1}{x} - 1$$

-15

$$0 \leq x \leq 1 \rightarrow y = 1$$

$$x=1 \rightarrow y=2$$



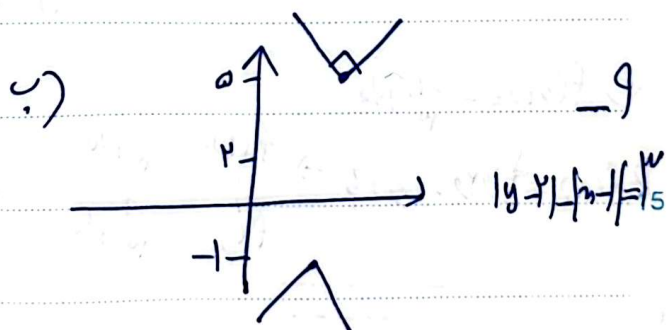
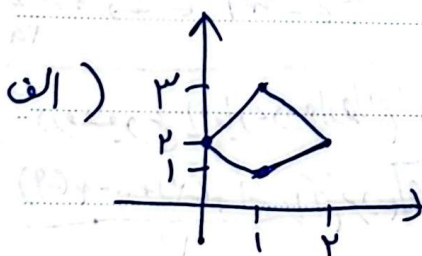
$\therefore \text{sum} = \frac{1}{6}, \frac{1}{9}, \frac{1}{18}$

$a = +1$   
 $b = -\gamma \Rightarrow a - b = \gamma$

$$n = 4$$

A hand-drawn graph of a diamond-shaped region on a Cartesian coordinate system. The vertices are at  $(0, 3)$ ,  $(3, 0)$ ,  $(0, -3)$ , and  $(-3, 0)$ . The x and y axes are labeled with tick marks from -3 to 3.

- 10



$y = w_n + a_n + b \rightarrow |w| > |a| \rightarrow w > |a|$  -  $\frac{w}{a} < w$  - b  
↑ (مقدار کمتر)