

$$n^2 + 2n + 1 + 9n^2 - 7n + 1 + mn^2 + nn + mn$$

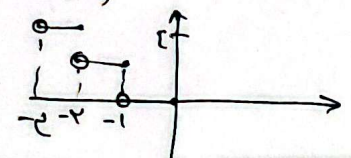
$$\Rightarrow nn^2 + \dots \Rightarrow n, \xi \quad m = -10 \quad mn^2 + 2 = -20 + 21 - 28 = f(n)$$

$$\rightarrow p + 15 - 10 \Rightarrow p = -11 \quad p + k_1 - 1 \Rightarrow k_1 = 10$$

$$m + n + k + p = 10 - 10 + 2 - 11 = -7 \quad \checkmark$$

(الف)  $\frac{n-2}{n^2-2n^2-1} \Rightarrow n^2 = 2 \Rightarrow n = \pm 2$   $\frac{-2}{-1} + \frac{2}{1} +$

(ب)  $n \in (-2, +\infty) - \{2\} \quad \checkmark$

$2[-n] \neq 2$  

اصل دوم تر بنویس!  $n \in (-2, -2] \quad \checkmark$

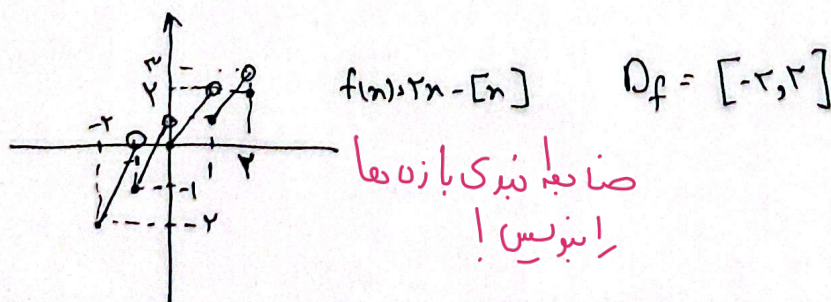
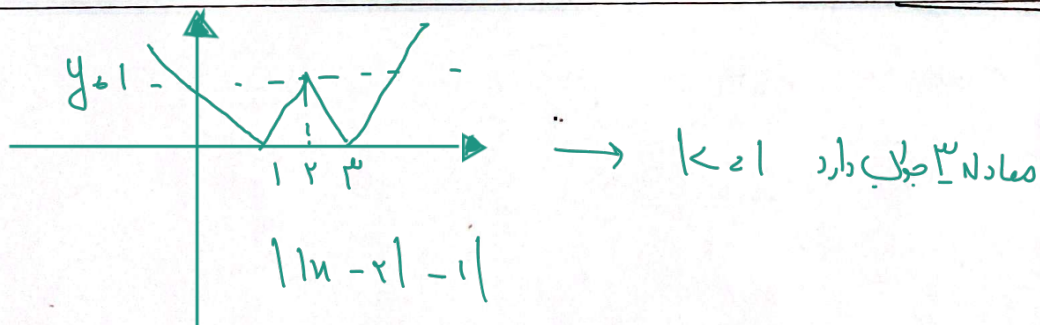
(الف)  $|n| + n > 0 \Rightarrow n < 0 \Rightarrow -n + n > 0$   $\checkmark$   $n > 0 \Rightarrow n + n > 0$

$n(n^2 - 1) \geq 0 \Rightarrow n^3 - n \geq 0$   $\frac{-1}{-1} + \frac{0}{0} + \frac{1}{1} +$   $\Rightarrow n \geq 1$   $D_f = [1, +\infty)$

(ب)  $|n| \neq 1 \Rightarrow n \neq \pm 1$ ,  $|n-2| - n^2 \geq 0$

$\begin{cases} n \geq 2 \Rightarrow -n^2 + n - 2 \leq 0 \\ n < 2 \Rightarrow -n^2 - n + 2 \leq 0 \end{cases}$

$\Rightarrow \boxed{-2 \leq n < 1} - \{-1\}$



$$f(n) = n$$

$$\Rightarrow \frac{n^2 - \xi n + \zeta}{n+a} + b \cdot n = (n-b)(n+a) = n^2 - \xi n + \zeta = (n-1)(n-c)$$

$$\begin{cases} a = -1, b = \xi \Rightarrow a - b = -\xi \\ b = 1, a = -\zeta \Rightarrow a - b = -\xi \end{cases}$$

$$b = 1, a = -\zeta \Rightarrow a - b = -\xi$$

$$\frac{(n-1)(n+1)(n+2)}{n^2-1} = f(n) \Rightarrow f(n) = n+2 \Rightarrow f(-1) = 1 \quad f(1) = 3$$

$$\Rightarrow \frac{-a+\zeta}{b-1} = 1 \Rightarrow a+b\xi \quad , \quad \frac{a+\zeta}{b+1} = 3 \Rightarrow \zeta b - a = -1$$

$$\Rightarrow \xi b = \zeta \Rightarrow b = \frac{1}{\xi} \quad f(n) = n + \zeta \neq n + 2 \Rightarrow \zeta = 2 \quad (b = \zeta, \xi, d)$$

$$D_f = [\frac{\xi a}{\xi}, +\infty) \quad D_g = (-\infty, \frac{b}{\xi}] \rightarrow \frac{b}{\xi} = \frac{\xi a}{\xi} < 1$$

$$b < 2 \quad a = \frac{\xi}{\xi}$$

$$\forall f(n) - g(1) = k \rightarrow k < -1$$

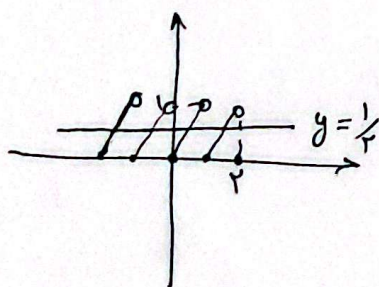
$$\psi(\frac{\xi}{\xi}) = \frac{\xi}{\xi} - (-1) = \psi$$

$$D_g \Rightarrow n \geq -1 \Rightarrow D_f \Rightarrow n \leq \xi \Rightarrow \text{N/A}$$

$$D_f \Rightarrow m - n \geq \xi \Rightarrow n \leq m \Rightarrow m = \xi$$

$$f - g(\xi) = 2\sqrt{\xi} \Rightarrow \sqrt{\xi - n} + n - \sqrt{\xi n + 2} \Rightarrow \sqrt{\xi - \xi} + \xi - \sqrt{\xi + 2} = 2\sqrt{\xi}$$

$$\Rightarrow n = \sqrt{\xi - \xi} \quad m + n = \sqrt{\xi + 2} + 0$$



⇒  $\xi$  نصف جزوار  
عبارت