

$$\left. \begin{array}{l} n < \omega \rightarrow \{n+2, n+1, \dots, 2n+1\} \rightarrow n \geq \frac{-\varepsilon}{2} \\ n \geq \omega \rightarrow \{n-1, n+1, \dots, 2n\} \rightarrow n \geq \omega \end{array} \right\}$$

$$\Rightarrow \frac{-\varepsilon}{2} \leq n < \omega \Rightarrow D_f = \left[\frac{-\varepsilon}{2}, +\infty \right)$$

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$$\frac{2(n^2 + 2n^2 + 4n + 1)}{(2n+1)^2} = \frac{2(2n+1)^2}{(2n+1)^2} = \frac{2}{2n+1} \rightarrow n = -\frac{1}{2}$$

$$\Rightarrow D_f = \mathbb{R} - \left\{ -\frac{1}{2} \right\}$$

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$$f(n) = \begin{cases} \frac{n^2 + 2n^2 - n - 2}{n^2 - 1} \rightarrow \frac{n^2(n+2) - (n+2)}{n^2 - 1} \rightarrow \frac{(n+2)(n^2 - 1)}{n^2 - 1} \rightarrow n+2 \\ \frac{an+b}{n+1} \end{cases} \quad \hookrightarrow C=2$$

$$\frac{a+2}{b+1} = 2, \quad \frac{-a-2}{b-1} = 1 \quad \Rightarrow \quad \begin{cases} 2b-a=1 \\ a+b=2 \end{cases} \Rightarrow \begin{cases} b=1 \\ a=1 \end{cases}$$

$$\rightarrow 2b-a=1 \rightarrow 2b+a \quad \Rightarrow \quad \frac{2b-a=1}{a+b=2} \Rightarrow b=1, a=1 \rightarrow b+c+2+\frac{1}{2} = \frac{5}{2}$$

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$$f(n) = \frac{n+1}{n-c} = \frac{n^2-1}{n^2+an+b} \rightarrow (n-1)(n-c)$$

$$C=1 \quad \leftarrow \text{دوینها برابر} \quad \leftarrow$$

$$n^2+an+b, (n-1)^2 = n^2-2n+1$$

$$\rightarrow a=-2, b=1, c=1 \rightarrow a+b+c = 0$$

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$$(n-2)^2(n) + (-n-2)^2(-n)$$

$$(n^2-4n+4)n + (n^2+4n+4)(-n)$$

$$= n^3 - 4n^2 + 4n - n^3 - 4n^2 - 4n = -8n^2$$

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$$\begin{array}{ll} 1 - \tan \alpha = -1 & 1 - \tan \alpha = 1 \\ \rightarrow \alpha = 1 & \rightarrow \alpha = -1 \end{array}$$

$$\rightarrow f(-1) + f(4) = \frac{\varepsilon \sqrt{1} + \sqrt{-1 + 4}}{1} = 0$$

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$$n + \sqrt{n} = 4 \Rightarrow n + \sqrt{n} - 4 = 0 \xrightarrow{n=x} x^2 + \sqrt{x} - 4 = 0 \quad \boxed{1 \leq x \leq 4}$$

$$\rightarrow (\overbrace{n+1}^{\leftarrow n \leq x})(\underbrace{\sqrt{n}-1}_r)$$

Y

$$(n-1)_+^{\mu} (n-1)_+^{\nu} (1-n)_+^{\mu} (1-n)_+^{\nu} = (n-1)_-^{\mu} (n-1)_-^{\nu}, \quad \square$$

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$$f(n) = \sqrt{\varepsilon n - \mu a} \rightarrow k-1 \quad g(n) = \sqrt{b - \varepsilon n} \rightarrow k$$

$\swarrow$ $\nwarrow$
 $n \geq \frac{\mu a}{\varepsilon}$ $\frac{b}{\varepsilon} \geq n$

$$\Rightarrow \frac{\mu_a}{\varepsilon} = \frac{b}{\varepsilon} = 1 \rightarrow \boxed{b = \varepsilon, a = \frac{\mu_a}{\varepsilon}}$$

$$\rightarrow \mu_a - \frac{b}{F} - k_s \quad \mu_x \frac{\varepsilon}{F} = \frac{\varepsilon}{F} + 15 \text{ (3)}$$

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$$r(\sqrt{\varepsilon - \varepsilon} + k - 1) - (\sqrt{\varepsilon - \varepsilon} + \nu(k)) \geq k \leadsto r k - r - \nu k \leq k \rightarrow \underline{k \leq 1}$$

$$f(x) = \sqrt{m-x} + n \quad g(x) = \sqrt{p-x+r} \quad D_{f \circ g} = [-1, 1] \quad f \circ g(x) = \sqrt{5}$$

$m \geq 9$

→ msV

$$\rightarrow \sqrt{V - 4r} + n - \frac{\sqrt{4r^2 + r}}{\sqrt{r}} = r + n - \sqrt{r} = 4\sqrt{r}$$

$$\rightarrow n = \underline{1\sqrt{r} - r}$$

$$\rightarrow m + ns?$$

$$v_+ \wedge \sqrt{\nu} - \nu_+ \wedge \sqrt{\nu}$$

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