

$$f(n) = \begin{cases} r_{n-1} & [n] > \varepsilon \rightarrow n > \Delta \\ r_{n+1} & [n] < \varepsilon \rightarrow n < \Delta \end{cases}$$

$$y = \sqrt{f(n) - n + 1} \rightarrow f(n) - n + 1 > 0$$

$$n > \Delta \quad r_{n-1} - n + 1 = n > 0 \rightarrow n > \Delta$$

$$n < \Delta \quad \varepsilon n + 1 - n + 1 = \varepsilon n + 2 > 0 \rightarrow n > -\frac{2}{\varepsilon} \rightarrow \frac{\varepsilon}{2} n < \Delta$$

$$D = [-\frac{\varepsilon}{2}, \Delta) \cup [\Delta + \infty) = [-\frac{\varepsilon}{2}, +\infty)$$

$$y = \frac{r_{\varepsilon n}^r + r_{\varepsilon n}^r + 1}{(\varepsilon n^r + \varepsilon n + 1)^r} = \frac{r(1n^r + 1r_{\varepsilon n}^r + 1)}{(r_{n+1})^r} = \frac{(r_{n+1})(\varepsilon n^r + r_{n+1})}{(r_{n+1})^r} = \frac{r_{n+1} - 1}{(r_{n+1})^r}$$

$$r((r_{n+1})(\varepsilon n^r - r_{n+1} + r_{n+1})) = \frac{r(r_{n+1})}{(r_{n+1})^r} = \frac{r}{r_{n+1}}$$

$$r_{n+1} \neq -1 \rightarrow n \neq -\frac{1}{r}$$

$$b + a = r$$

$$R_F = \{P - \frac{1}{r}\}$$

$$f(n) = \begin{cases} \frac{n^r + r_{n+1}^r - n - r}{n^r - 1} & n \neq \pm 1 \rightarrow \frac{n^r + r_{n+1}^r - n - r}{-n^r + n} \mid \frac{n^r - 1}{n + r} \\ \frac{an + r}{n + b} & n = \pm 1 \end{cases}$$

$$n = \pm 1$$

$$\begin{cases} n = 1 \rightarrow \frac{a+r}{1+b} = r \rightarrow a+r = r+rb \\ n = -1 \rightarrow \frac{-a+r}{-1+b} = 1 \rightarrow -1+b = -a+r \end{cases}$$

$$g(n) = n + C \rightarrow n + C = n + r$$

$$C = r$$

$$f(1) = r, g(-1) = 1$$

$$b + C = r + \frac{1}{r} = r, \omega$$

$$f(n) = \frac{n+1}{n-C}$$

جدول این مسئله را در زیر
برای آنکه دانش ما برابر شود
مهمترین مسئله را در

$$g(n) = \frac{n^r - 1}{n^r + an + b} = \frac{(n-1)(n+1)}{(n-1)^r} = \frac{n+1}{n-1}$$

$$(n-1)^r = n^r - rn + b$$

$$a = -r, b = 1, C = 1$$

$$a + b + C = -r + 1 + 1 = 0$$

$$f(n) = (n-C)^r (n-1)$$

$$g(n) = f(n+1) + f(1-n) = (n+1-r)^r (n) + \frac{(-n-r)^r}{(n+r)^r} (-n)$$

$$g(n) = (n-r)^r (n) + (n+r)^r (-n) =$$

$$n \left(\frac{r}{r} - \varepsilon n + \frac{r}{r} - \frac{r}{r} - \varepsilon n - \frac{r}{r} \right) = -1n^r$$

$$f(1-x) = \begin{cases} x\sqrt{x} + x & x \geq 0 \\ x\sqrt{x} & x < 0 \end{cases}$$

$$f(-1) + f(2) = ?$$

$$\boxed{\Sigma + 1 = 2}$$

-4

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

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

$$f(x+\sqrt{x}) = x^{\Sigma} + x^{\Sigma}$$

$$f(4) = ?$$

-V

$$x+\sqrt{x} = 4 \rightarrow t^2+t-4=0 \rightarrow (t+5)(t-1)=0$$

$$f(4) = \Sigma^2 + 2\Sigma = 16 + 4 = \boxed{20}$$

$$\frac{\sqrt{25}-1}{-5} \quad \sqrt{25}=5 \rightarrow \Sigma=5$$

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

-A

$$f(\frac{x-1}{a}) + f(\frac{1-x}{-a}) \rightarrow a(a^r+1) + -a(a^r+1)$$

$$a^r+a - a^r-a = \underline{0}$$

$$f(x) = \sqrt{\Sigma x - x} + k - 1$$

$$g(x) = \sqrt{b - \Sigma x} + k$$

-4

$$f-g = \{(1, k)\} \rightarrow D_f \cap D_g = \{1\}$$

$$\begin{cases} D_f \rightarrow \Sigma x - x = 1 \rightarrow x = 1, \frac{x}{\Sigma} = 1 \rightarrow x = \Sigma \rightarrow a = \frac{\Sigma}{r} \\ D_g \rightarrow b - \Sigma x = 1 \rightarrow x = \frac{b-1}{\Sigma} = 1 \rightarrow \underline{b = \Sigma} \end{cases}$$

$$f(x) = \sqrt{\Sigma x - x} + k - 1$$

$$g(x) = \sqrt{\Sigma - \Sigma x} + k$$

$$f-g = \{(1, k-r-k)\}$$

$$-k-r=k \rightarrow \underline{k = -1}$$

$$ra - \frac{b}{r} - k = \underline{\Sigma - r + 1 = r}$$

$$f(x) = \sqrt{m - x} + n \rightarrow m-x \geq 0 \rightarrow x \leq m \rightarrow m \leq V$$

= 1.

$$g(x) = \sqrt{r x + r} \rightarrow r x + r \geq 0 \rightarrow x \geq -1$$

$$D_{f \cap g} = [-1, V]$$

$$f-g(x) = \sqrt{V-r} + n - \sqrt{1} = 9\sqrt{r}$$

$$r + n - \sqrt{r} = 9\sqrt{r} \rightarrow n = 8\sqrt{r} - r$$

$$m+n = V + 8\sqrt{r} - r = \underline{2 + 8\sqrt{r}}$$