

ایہذا کیسا ہے

$$n^r - n = 0 \rightarrow n = 1, 0$$

		$\frac{1}{2}$	$\frac{1}{2}$
صورت	+	+	-
منهج	+	-	-
كل	+	-	+

الف

$$\rightarrow (-\infty, 0) \cup \left[\frac{1}{r}, 1\right) = D_f$$

$Df = IR - \left\{ -1, 0, 1, -2, -\frac{\Delta}{\Sigma} \right\}$
 $x \neq -1, 0, 1, -2, -\frac{\Delta}{\Sigma} \Rightarrow \frac{x+1}{x-1} \rightarrow \frac{x+n+1}{x+n-1} \rightarrow \frac{f_{n+1}}{x+n-1} \rightarrow f_n = -\frac{\Delta}{\Sigma}$

	-2	$\frac{\Delta}{r}$
1 $\bar{C}_{\text{عاب}}$	+0	-
2 $\bar{C}_{\text{عاب}}$	+	+0-
3	+0	-0+

~ دابل راج.

الف

$$\rightarrow (-\infty, 1] \cup [\frac{5}{4}, +\infty) = D_f$$

$$\psi = \phi^x \rightarrow \psi^a = \phi^x \rightarrow x = \frac{a}{r}$$

$$\sqrt{y+1} = 3 - \sqrt{x-1} \rightarrow 3 - \sqrt{x-1} \geq 0 \rightarrow 3 \geq \sqrt{x-1} \rightarrow \wedge 1 \geq x-1 \rightarrow \wedge 2 \geq x$$

$$x-1 \geq 0 \rightarrow x \geq 1$$

$$D_f = [1, \wedge 2]$$

$$\therefore D_f = (-\infty, \wedge 2]$$

$$n^r - 1 \geq 0 \rightarrow n^r \geq 1 \rightarrow \underline{n \geq 1 \vee n \leq -1}$$

جاسع رادکال هبع $\rightarrow \sqrt{x^2 - 1} + 1 \neq 0$ کاه منفرک غر.

$$U \rightarrow (-\infty, -1] \cup [r, +\infty) = D_f$$

$$n^r - n - r \geq 0$$

$$(n-2)(n+1)$$

$$n = k_2 - 1$$

$$\begin{array}{c} -1 \quad 2 \\ + \quad - \quad + \end{array}$$

$$r^2 - r a - r = 0 \rightarrow r a = -1 \rightarrow a = \underline{-\frac{1}{r}}$$

$$\rightarrow -n^r - \frac{1}{r}n + r \geq 0 \rightarrow n^r + \frac{1}{r}n - r \leq 0 \rightarrow (n + \frac{r}{r})(n - \frac{r}{r}) \Rightarrow n_{1,r} = \underline{-r/2}$$

$$a+b = -\frac{1}{r} + \frac{r}{r} = 1$$

$$[-2, 1, 2]$$

$$b = 1, 2$$

$$n \geq 1 \rightarrow \forall n - 1 - n \Rightarrow \forall n - 1 \geq 0 \rightarrow \forall n \geq 1 \rightarrow n \geq 1 \Rightarrow \bigcap_{n \geq 1} \{ \underbrace{n \geq 1} \}$$

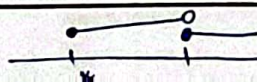
$$n < 1 \rightarrow \gamma_n + \gamma - n \Rightarrow \gamma + \gamma > 0$$

$$n \geq 4$$

$$x < 1$$

$$x \geq -4$$

$$[-1, +\infty) = D_f$$



$$\begin{aligned}
 2f(\omega) &\rightarrow (a+1)(\omega+2) \rightarrow 15a+15 = 2f(\omega) \\
 f(-2) &\rightarrow 3a-4 \\
 \left. \begin{aligned} 2f(\omega) &= f(-2) + a \\ \Rightarrow 15a+15 &= 3a-4+a \\ 15a+15 &= 4a-4 \\ 10a &= -19 \\ \boxed{a} &= -1,9 \end{aligned} \right\}
 \end{aligned}$$

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$$\begin{aligned}
 2-\sqrt{3} &= \frac{1}{2+\sqrt{3}}, \quad f\left(\frac{1}{2+\sqrt{3}}\right) + f(2+\sqrt{3}) \rightarrow \frac{1}{\sqrt{2+\sqrt{3}}} + \sqrt{2+\sqrt{3}} + 2 + \frac{1}{\sqrt{2+\sqrt{3}}} + \sqrt{2+\sqrt{3}} + 2 \\
 \Rightarrow 2\sqrt{2+\sqrt{3}} + \frac{2}{\sqrt{2+\sqrt{3}}} + 4 &\Rightarrow 2\left(\sqrt{2+\sqrt{3}} + \frac{1}{\sqrt{2+\sqrt{3}}}\right) + 4 \rightarrow \text{برای به دست آوردن حاصل در} \\
 &\quad \text{عبارت را ابتدا عبارت را به توان} \\
 \left(\sqrt{2+\sqrt{3}} + \frac{1}{\sqrt{2+\sqrt{3}}}\right)^2 &\Rightarrow 2+\sqrt{3} + \frac{1}{2+\sqrt{3}} + 2 = 2+\sqrt{3} + \frac{2-\sqrt{3}}{2-\sqrt{3}} + 2 = 4 \\
 2(\sqrt{4}) + 4 &= \boxed{2\sqrt{4} + 4} \quad \text{دومی رسانیم سپس را یکبار می گیریم} \\
 &\quad \text{نویسده می عبارت دوم} \quad \text{عبارت را به توان} \quad \sqrt{4}
 \end{aligned}$$

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$$\begin{aligned}
 \left. \begin{aligned} 2f(n) - 3f(-n) &= 4n^2 - n \\ 2f(-n) - 3f(n) &= 4n^2 + 3n \end{aligned} \right\} \begin{aligned} 4f(n) - 4f(-n) &= 8n^2 - 4n \\ 4f(-n) - 4f(n) &= 8n^2 + 6n \end{aligned} \\
 -8f(n) &= 12n^2 + 4n \rightarrow \boxed{f(n) = -\frac{3}{2}n^2 - \frac{n}{2}}
 \end{aligned}$$

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$$\begin{aligned}
 n=0 &\rightarrow 2f(0) = 3m-1 \xrightarrow{x^3} 4f(0) = 9m-3 \\
 n=-2 &\rightarrow 4f(0) = \frac{14+2m+3m-1}{15+5m} \rightarrow 4f(0) = 15+5m \\
 \left. \begin{aligned} 9m-3 &= 15+5m \\ 4m &= 18 \rightarrow m = \frac{9}{2} \end{aligned} \right\} \\
 2f(0) &= 3 \times \frac{9}{2} - 1 \Rightarrow 2f(0) = \frac{27}{2} - \frac{2}{2} \Rightarrow 2f(0) = \frac{25}{2} \rightarrow \boxed{f(0) = \frac{25}{4}}
 \end{aligned}$$

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$$n=-1 \rightarrow f(-1) + f(-1) = \frac{3+12+3}{-1} \Rightarrow 2f(-1) = -18 \rightarrow f(-1) = -9$$

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