

پہلا نمبر

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$$x f(x) \geq 0$$

$$P_f = [-4, 5]$$

$$\begin{array}{c|ccccccc} & -4 & -2 & 0 & 2 & 5 & & \\ \hline \text{تعلیل} & - & + & - & + & - & + & \end{array}$$

$$\rightarrow [-5, 0] \cup [2, 5]$$

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$$\frac{-x}{f(x)} \geq 0, f(x) \neq 0 \Rightarrow f(x) \neq -3, 2, 5$$

$$\begin{array}{c|ccccccc} & -5 & -3 & 0 & 2 & 5 & & \\ \hline \text{تعلیل} & - & + & - & + & - & + & \end{array}$$

$$(-3, 0) \cup (0, 2)$$

$$\begin{aligned} f(x) - x f(x) &= x + x \\ -f(x) &= x \\ f(x) &= -x \end{aligned}$$

$$\begin{aligned} f(-x) - x f(x) &= x + x \\ f(-x) &= 1-x \end{aligned}$$

$$f(f(x)) + f(f(1)) \Rightarrow x + 1 = 9$$

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

$$\begin{aligned} an^2 - 2an + a - bn + b + 1 - an^2 + bn - 1 &= -2an + a + b - 1 \\ a - b &= -4 - a = -1 \end{aligned}$$

$$f(x) \rightarrow 9 - 9 + 1 = 1$$

$$f(-1) \rightarrow \frac{1 - \cancel{(-1)} + 1}{-1} = 0$$

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

$$\frac{f(f(x)) + \omega}{1} = \boxed{V}$$

-4

$$f(x) \rightarrow 11 + 1 = 12$$

$$f(-x) \rightarrow x$$

$$f(x) \rightarrow V$$

$$\frac{\frac{f(f(x))}{f(x)} - \frac{f(f(x))}{f(x)}}{V} = \boxed{\frac{V}{V}}$$

-V

$$\frac{f(f(x)) - f(f(x))}{f(x) - x} = \frac{0}{x} \Rightarrow \text{undefined}$$

-1

$$f(x) = \frac{(x+r)^r + \omega}{(x+r)^r + 1}$$

$$\Rightarrow \frac{(\sqrt{x} - \cancel{f(x)})^r + \omega}{(\sqrt{x} - \cancel{f(x)})^r + 1}$$

$$= \frac{\Delta}{x} = \boxed{\frac{1}{x}}$$

$$f(x) = \frac{f(x) + \omega}{1 + \omega + \omega}$$

-9

$$\left(f(\sqrt{x}) \right)^r - f(x)$$

$$\left(x + \frac{1}{x} \right)^r - x^r + \frac{1}{x^r}$$

$$\cancel{x^r + 1} + \frac{1}{\cancel{x^r}} - \cancel{x^r} - \frac{1}{\cancel{x^r}} = \boxed{2}$$

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