

شماره تلفن:

$$\frac{1}{s} \left( \frac{1}{s} + \frac{1}{s} \right) = \frac{2}{s^2}$$

$$\therefore f(n) = \sqrt{\frac{n-1}{n} - \frac{n}{n-1}} = \sqrt{\frac{x^p - 2x + 1 - x^p}{x(n-1)}} = \sqrt{\frac{-2x+1}{x(n-1)}}$$

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$$\text{الف) } f(x) = \sqrt{\left(\left(\frac{1}{x}\right)^n - 9\right)(x^2 - x)}$$

$$\Rightarrow D_f = (-\infty, -r] \cup [r, \infty)$$

$$f(n) = \frac{\log_r (x^r - n - r)}{\sqrt{n^r - 1} + 1} \rightarrow x^r - n - r > 0 \rightarrow (n - r)(n + 1) > 0$$

$$(n - 1)(n + 1) \geq 0 \quad \begin{array}{c|cc} & -1 & 1 \\ \hline & + & - & + \end{array} \rightarrow (-\infty, -1] \cup [1, +\infty)$$

$$\frac{-1}{+1} \frac{y}{-1} \rightarrow (-\infty, -1) \cup (y, +\infty) \quad (\text{جواب})$$

$$\Rightarrow D_f = (-\infty, -1) \cup (y, +\infty)$$

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

$$\frac{-b \pm \sqrt{\Delta}}{2a} = \frac{\frac{1}{\gamma} \pm \sqrt{\frac{1}{\gamma^2} + 1}}{-\gamma} = \frac{\frac{1}{\gamma} \pm \frac{\gamma}{\gamma}}{-\gamma} \Rightarrow -\gamma, \frac{\gamma}{\gamma} \rightarrow b = \frac{\gamma}{\gamma}$$

مرزا (۵)

سوال (۶)

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a + 1(-2)

$$\frac{*}{\sqrt{p} + \sqrt{q}} = \frac{1}{\sqrt{p} - \sqrt{q}}$$

$\frac{1}{2} \left( \frac{1}{2} + \frac{1}{2} \right) = \frac{1}{2}$

$$\frac{r - \sqrt{r}}{\sqrt{r} - \sqrt{r}} = (r - \sqrt{r})(\sqrt{r} + \sqrt{r}) \rightarrow \frac{r(r - \sqrt{r})}{(r - \sqrt{r})(r + \sqrt{r})} = 4\sqrt{r} \rightarrow \sqrt{4}$$

$$2f(x) - 3f(-x) = 5x^2 - x$$

$f(x) = ?$  (سوال ۸)

$$\times 2 \rightarrow 4f(x) - 6f(-x) = 10x^2 - 2x$$

$$2f(x) - 3f(-x) = 5x^2 - x \xrightarrow{x \rightarrow -x} 2f(-x) - 3f(x) = 5x^2 + x \xrightarrow{\times 2} 4f(-x) - 6f(x) = 10x^2 + 2x$$

$$\begin{cases} 4f(x) - 6f(-x) = 10x^2 - 2x \\ 4f(-x) - 6f(x) = 10x^2 + 2x \end{cases}$$

$$-2f(x) = 2x^2 + x \rightarrow f(x) = -x^2 - \frac{x}{2}$$

$$(2+x)f(x) - 3xf(x+x) = 5x^2 - mx + 3m - 1$$

$f(0) = ?$  (سوال ۹)

$$x=0 \rightarrow 2f(0) = 3m - 1$$

$$x=-2 \rightarrow 4f(0) = 14 + 2m + 3m - 1 \rightarrow 4f(0) = 13 + 5m \rightarrow f(0) = \frac{13 + 5m}{4}$$

$$\Rightarrow m = \frac{4}{5}$$

$$2f(0) = \frac{13 + 5 \cdot \frac{4}{5}}{2} = \frac{13 + 4}{2} = \frac{17}{2}$$

$$\Rightarrow f(0) = \frac{17}{4}$$

$$f(x) + f\left(\frac{1}{x}\right) = \frac{5x^2 - 12x + 3}{x}$$

$f(-1) = ?$  (سوال ۱۰)

$$2f(-1) = \frac{5(-1)^2 - 12(-1) + 3}{-1} = \frac{5 + 12 + 3}{-1} = -20 \rightarrow f(-1) = -10$$