

$$nf(n) \gg 0$$

$$-a, 2, a$$

n	-2	$-a$	0	2	a
	x	-0	$+0$	-0	$+0$

سوال اول

تالیف تمایز مناسب به همراه نت نژاد

$$Df = [-a, 2] \cup [2, a]$$

بعد از هفته آینده ضروری نمی‌باشد (P)

$$\frac{-n \rightarrow 0}{f(n)} \gg 0 \quad \frac{n}{f(n)} \leq 0$$

$$0, -2, 2, a$$

1, 18

n	$-a$	-2	0	2	a
	x	-0	-0	-0	$+0$

سوال دوم

$$Df = [-a, 2] \cup [2, a] \quad Dg = (-2, 2) - \{0\}$$

سوال سوم

$$f(n) - 2f(2) = n^2 - 4n + \epsilon$$

$$f(-2) = ?$$

$$f(2) - 2f(2) = \epsilon - 4 + \epsilon$$

$$f(2) - 2f(2) = 2$$

$$-f(2) = 2$$

$$f(2) = -2$$

$$\Rightarrow f(n) - 2(-2) = n^2 - 4n + \epsilon$$

$$f(n) + \epsilon = n^2 - 4n + \epsilon$$

$$f(n) = n^2 - 4n$$

$$f(-2) = (-2)^2 - 4(-2)$$

$$f(-2) = 4 + 8$$

$$f(-2) = 12$$

(P) ✓

سوال چهارم

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

$$\rightarrow f(a) = a - \sqrt{a} = 2$$

$$f(2) = 2 - \sqrt{2} + 3 = 5$$

$$= 9$$

$$f(1) = 1 + 3 = 4$$

(P) ✓

did not

Genobar



سوال پنجم ←

$$f(2) = 5a - 2b + 2 \quad f(1) = a - b + 2$$

$$f(1) - f(2) = 15$$

$$a - b + 2 - (5a - 2b + 2) = 15$$

$$f(2) = 9a - 2b + 2$$

$$f(2) - f(3) = 20$$

$$5a - 2b + 2 - (9a - 2b + 2) = 20$$

$$\begin{cases} -4a + b = 15 \\ -4a + b = 20 \end{cases}$$

$$-4a + b = 20$$

$$4a = -4$$

Ⓟ ✓

$$a = -1$$

$$b \leq 20$$

$$a - b = -1 - (20) = -21$$

سوال ششم ←

$$f(x) = x^2 - 2x + 1$$

$$f(3) = 9 - 6 + 1 = 4$$

$$f(2) + f(1)$$

$$f(-1) = 1 + 2 + 1 = 4$$

$$f(2)$$

$$f(2) = 4 - 4 + 1 = 1$$

Ⓟ ✓ (اول هست و دوم هم سوال هست و سوم هم هست)

سوال هفتم ←

$$F = \{(2, 4), (3, 2), (4, 1), (1, 4)\}$$

$$F(f(1)) - F(f(2))$$

$$\frac{0}{4} = 0$$

$$f(2) - 2$$

Ⓟ ✓



$$\frac{\mu f(\epsilon) - \gamma f(1-\gamma)}{f(\gamma)}$$

$$\rightarrow f(\epsilon) = 1/\mu$$

$$f(1-\gamma) = \epsilon$$

$$f(\gamma) = \gamma$$

$$= \left(\frac{\mu}{\gamma} \right)$$

(2) ✓

← find the

$$\frac{f(n) = n^r + \epsilon n + 9}{n^r + \epsilon n + 9} \Rightarrow \frac{(\sqrt{n} - \gamma)^r + \epsilon(\sqrt{n} - \gamma) + 9}{(\sqrt{n} - \gamma)^r + \epsilon(\sqrt{n} - \gamma) + 9}$$

$$\Rightarrow \frac{\mu + \epsilon - \epsilon\sqrt{\mu} + \epsilon\sqrt{\mu} - 1 + 9}{\mu + \epsilon - \epsilon\sqrt{\mu} + \epsilon\sqrt{\mu} - 1 + 9} = \frac{1}{\mu} = (2)$$

$$\mu + \epsilon - \epsilon\sqrt{\mu} + \epsilon\sqrt{\mu} - 1 + 9$$

(1)

$$f(\sqrt{n} - \gamma) = \frac{(\sqrt{n} - \gamma + \gamma)^r + 9}{(\sqrt{n} - \gamma + \gamma)^r + 1} = \frac{\mu + 9}{\mu + 1} = \mu$$

$$f(\sqrt{n} - \gamma) = f(\gamma) = \frac{(\gamma + \gamma)^r + 9}{(\gamma + \gamma)^r + 1} = \frac{\mu}{1/\mu}$$

← find the

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

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

$$\left(n + \frac{1}{n}\right)^r - n^r - \frac{1}{n^r} = n^r + \frac{1}{n} + r - n^r - \frac{1}{n^r} = (2)$$

Senobar

