

Sub:

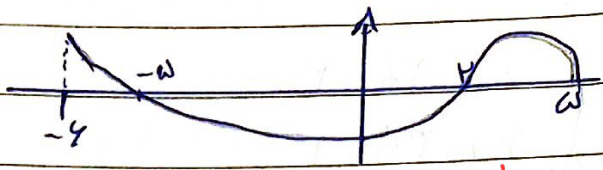
19, 28

1405/7/7

الأسئلة تيراني

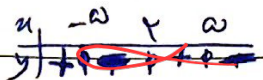
هم دختر A جمع 14:30 الى 11:30

تکلیف سحر 7



$$y = \sqrt{x f(x)}$$

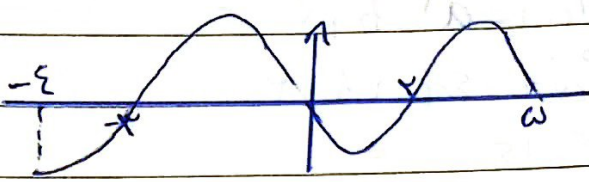
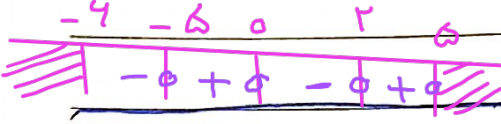
$$x f(x) \geq 0$$



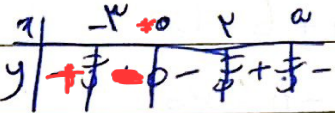
1, 6

با توجه به نمودار $f(x)$ و $f(x)$ و $f(x)$ می بینیم

$$D_f = [-4, 0] \cup [2, 4]$$



$$y = \sqrt{\frac{-x}{f(x)}}$$



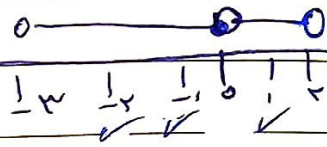
$$f(x) \neq 0$$

$$\frac{-x}{f(x)} \geq 0$$

با توجه به نمودار $f(x)$ و $f(x)$ و $f(x)$ می بینیم

1, 6

$$D_f = (-4, 0) \cup (0, 4)$$



رای $f(x)$ و $f(x)$ و $f(x)$

$$\text{if } f(x) - 2f(x) = x^2 - 2x + \varepsilon$$

$$x = 2$$

2 ✓

$$x = -2$$

$$f(-2) = 10$$

$$f(x) - 2f(x) = 2 \quad f(x) = -2 \quad f(-2) + \varepsilon = 1\varepsilon$$

$$-f(x) = 2$$

$$f(-2) = 10$$

$$f(x) = \begin{cases} x - \sqrt{x+2} & x > 2 \\ 2x + 2 & x \leq 2 \end{cases}$$

$$f(f(x)) + f(f(x)) =$$

$$2 + 2 = 4$$

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

$$f(x) = 2$$

$$f(x) = 2$$

2 ✓

sub:

$a-b = -1$

$n_0 = R$
 $f(n-1) - f(n) = 4n+1$
 $n=R$

$f(n) = an^r - bn + r$ -w

$f(x) - f(x) = 10$ $f(x) = 5a - 2b + r$

$f(x) = 9a - 3b + r$

$5a - 2b + r - 9a + 3b + r = 10$

$-4a + b = 10$

$n=R$

$f(n) - f(n) = 15$ $f(n) = a - b + r$

$f(x) = 5a - 2b + r$

$a - b + r - 5a + 2b + r = 15$

$-4a + b = 15$

$-4a + b = 15$

$-4a + b = 10$

$5a - b = 10$

$1a = -4(a - 10)$

$-1a - b = -10$

$b = 10$

(P) ✓

$\frac{r f(r) + f(-1)}{f(r)}$ (V)

$\frac{r+1}{1}$ (V)

$f(n) = n^r - r n + 1$ -4

$f(r) = 9 - 9 + 1 = 1$ $f(-1) = 1 + r + 1 = 1$

$f(r) = 5 - 4 + 1 = (-1)^r = 1$

(P) ✓

$f(n) \begin{cases} r n + 1 & n \geq r \\ n^r & n < r \end{cases}$

$\frac{r f(r) - r f(-r)}{f(r)} = \frac{r f(r) - r f(-r)}{r} = \boxed{\frac{r}{r}}$ -v

$f(r) = 15$ $f(-r) = 5$

$f(r) = 15$

(P) ✓

$$f = \{(1, 4), (3, 2), (5, 1), (1, 4)\}$$

$$\frac{f(1) - f(3)}{1 - 3} = \frac{4 - 2}{2} = 1 \quad \textcircled{P} \checkmark$$

$$f(n) = \frac{n^2 + \varepsilon n + 9}{n^2 + \varepsilon n + \omega}$$

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

$$f(\sqrt{n}) = \frac{(\sqrt{n})^2 + \varepsilon(\sqrt{n}) + 9}{\sqrt{n} + \varepsilon(\sqrt{n}) + \omega}$$

$$f(\sqrt{n}) = \frac{1}{\varepsilon} = 1$$

$$f(x) = \frac{x^2 + \varepsilon(x) + 9}{x^2 + \varepsilon(x) + \omega} = \frac{1}{1}$$

② ✓

$$f(n) = n^2 + \frac{1}{n^2}$$

10

$$(f(\sqrt{n}))^2 - f(n) = n^2 + \frac{1}{n^2} + 1 - n^2 - \frac{1}{n^2} = 1 \quad \textcircled{P}$$

$$(f(\sqrt{n}))^2 = (\sqrt{n})^2 + \frac{1}{(\sqrt{n})^2} = (n + \frac{1}{n})^2 = n^2 + \frac{1}{n^2} + 1 \quad \textcircled{P} \checkmark$$