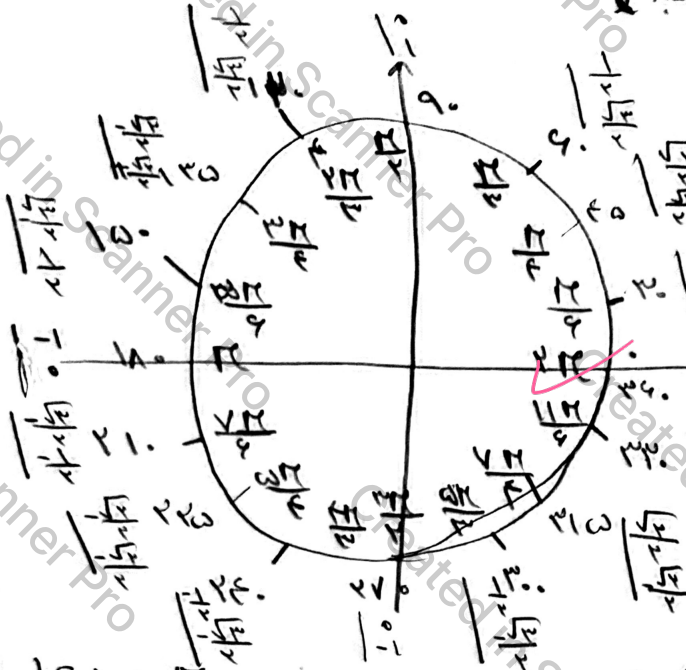


تکلیف
 یسنا تراخان
 بهاره از D استفاده کن
 D و D' ضمیمه ن

کلاس و بنجمله

۱۲ آفرین عالی نوشتی



$$\frac{1}{2} = \frac{1}{2} \times (-1) + (-1) \times \frac{1}{2} \Rightarrow \frac{1}{2} = -\frac{1}{2} + \frac{1}{2}$$

$$\frac{1}{2} = \frac{1}{2} \times (-1) + (-1) \times \frac{1}{2} \Rightarrow \frac{1}{2} = -\frac{1}{2} + \frac{1}{2}$$

$$\frac{1}{2} = \frac{1}{2} \times (-1) + (-1) \times \frac{1}{2} \Rightarrow \frac{1}{2} = -\frac{1}{2} + \frac{1}{2}$$

$$\cos(\sin \pi) + \sin(\pi \cos \frac{\pi}{2}) = 1 + 1 = 2$$

$$f(x) = \begin{cases} x^2 + f(x) & x < a \\ x + a + 2 & x \geq a \end{cases} \rightarrow a^2 + 2a = 2a + 2$$

$$a^2 + a - 2 \leq 0 \quad (a+2)(a-1) \leq 0 \quad -2 \leq a \leq 1$$

$$f(1) = 1 + 1 = 2 \Rightarrow 2 + 1 + 2 = 5$$

$$f(x) = \begin{cases} 2x^2 - b & 1x + 1 \leq 2 \\ a + 2x & -2 \leq x \leq 1 \end{cases} \rightarrow \begin{cases} 2x + 1 \leq 2 \\ x + 1 \leq 2 \end{cases} \rightarrow \begin{cases} x \leq 1 \\ x \leq 1 \end{cases}$$

$$x = -2 \rightarrow 1x - b \leq a - 2 \rightarrow a + b \leq 5$$

الف) $y = \frac{1}{x^2 - 4x}$ $x^2 - 4x \neq 0$ $1R - \{0, 4\}$
 $x^2(x-4) \neq 0$
 $x \neq 0$ $x \neq 4$

ب) $y = \frac{1}{x^3 + 4x^2 + 4x + 4}$ $x^3 + 4x^2 + 4x + 4 = (x+1)(x^2 + 3x + 4)$
 $x^2 + 3x + 4 = 0$ $\Delta = 9 - 16 = -7 < 0$
 $1R - \{ -1 \}$ $x \neq -1$

الف) $y = \sqrt{x^2 - 1} + \sqrt{x - 2}$ $(x-1)(x+1) \geq 0$
 $x \geq 1$ $x \leq -1$ $x - 2 \geq 0 \rightarrow x \geq 2$ $D = [2, +\infty)$

ب) $y = \frac{\sqrt{4-3x}}{\sqrt{4-x}}$ $4-3x \geq 0 \rightarrow x \leq \frac{4}{3}$
 $4-x \geq 0 \rightarrow x \leq 4$ $D = [\frac{1}{2}, \frac{4}{3}]$

$y = \sqrt{4x-a} + \sqrt{b-2x}$ $x \geq 0 \rightarrow 4x-a \geq 0 \rightarrow a \leq 4x$
 $x \geq 0 \rightarrow b-2x \geq 0 \rightarrow b \geq 2x$ $\frac{a}{4} \leq x \leq \frac{b}{2}$

الف) $y = \sqrt{\frac{x^2 - x - 6}{x^2 - 13x^2 + 44}}$ $\frac{(x-3)(x+2)}{(x^2-4)(x^2-9)}$
 $x \neq \pm 2$ $x \neq \pm 3$ $(-\infty, -3) \cup (-2, 2) \cup (2, 3) \cup (3, +\infty)$

ب) $y = \sqrt{\frac{x^3 - 3x^2 - 6x + 9}{x^3 + 2x^2 - 6x - 9}}$ $\frac{x^3 - 3x^2 - 6x + 9}{x^3 + 2x^2 - 6x - 9} = \frac{(x-3)(x^2 - 3x - 3)}{(x+3)(x^2 - 3x - 3)}$
 $x \neq -3$ $x \neq 3$ $(-\infty, -3) \cup (-1, 1) \cup (1, 3) \cup (3, +\infty)$

$$الف) y = \sqrt{4[x] - 4}$$

$$4[x] \geq 4$$

$$[x] \geq 1$$

$$D = [1, +\infty)$$

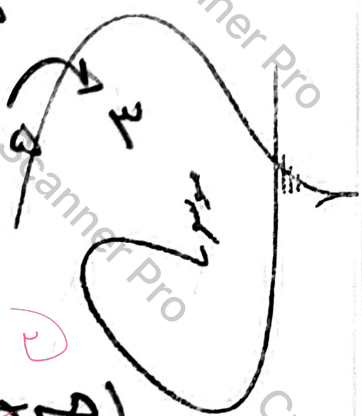
$$ب) y = \sqrt{4[x] \cdot 5}$$

$$4[x] \geq 5$$

$$[x] \geq 1.25$$

$$[x] \geq 2$$

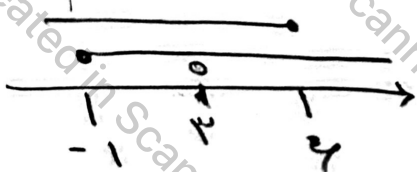
$$D = [2, +\infty)$$



$$الف) y = \sqrt{\frac{x+1}{|x-2|}} \quad x \leq -1 \quad x=4$$

$$9-x \geq 0 \quad x \leq 9$$

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



$$D = [-1, 4] \cup \{4\}$$

$$ب) \sqrt{[x-4]} + \sqrt{2-[x]}$$

$$[x]-4 \geq 0$$

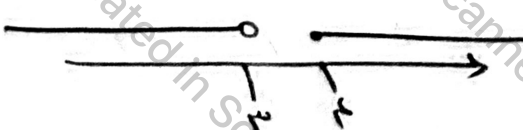
$$2-[x] \geq 0$$

$$[x] \geq 4$$

$$[x] \leq 2$$

$$[4, +\infty)$$

$$(-\infty, 2]$$



اشکست سالی عام
کارخانجات لوازم خانگی پارس