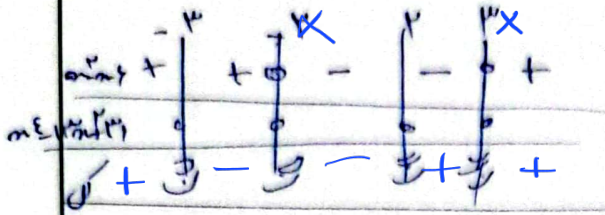


$\frac{n^2 - 9}{n^2 - 14n + 49} > 0$ $\frac{(n+3)(n-3)}{(n^2-9)(n^2-49)} = \frac{(n+3)(n-3)}{(n+3)(n-3)(n+7)(n-7)} > 0$ $-7, 7, -3, 3$



$D = (-\infty, -7) \cup (3, 7) \cup (7, \infty)$

$[-96] - 2 > 0$ $[-9] > 2$ $[2, +\infty)$ $\sim 25 - 9 \rightarrow 2 > 9$

$\frac{a^2 + 4}{[a]^2 - 1[a] - 2} > 0$ $[a]^2 - 2[a] - 2 \neq 0 \sim ([a] - 3)([a] + 1) \neq 0 \rightarrow [a] \neq 3$
 $\sim [a] \neq -1$
 $R = [3, \infty) \cup [-1, 0)$

$\frac{\cot(x+1)}{\tan(x+1)} \sim \frac{\cos(x+1)}{\sin(x+1)} \cdot \frac{\sin(x+1)}{\cos(x+1)} \sim \tan(x+1)$
 $\sim \tan(x+1) \neq -1$
 $A = \{k\pi, k\pi + \frac{\pi}{4}, k\pi + \frac{3\pi}{4}\}$

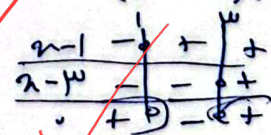
$1 - \varepsilon \sin^2 x > 0$ $1 > \varepsilon \sin^2 x \rightarrow \sin^2 x \leq \frac{1}{\varepsilon} \rightarrow \sin^2 x \leq \pm \frac{1}{\sqrt{\varepsilon}}$
 $(k\pi + \frac{\pi}{4}, k\pi + \frac{3\pi}{4})$

$1 - \log \frac{n-1}{p} > 0$ $1 \rightarrow n-1 > 0 \rightarrow n > 1$
 $2 \rightarrow \log \frac{n-1}{p} \leq 1$ $\frac{1}{p} \leq n-1 \rightarrow n \geq 1 + \frac{1}{p}$

$\frac{\sqrt{n^2 - n}}{1 - \log \frac{n^2 - n}{\varepsilon}} > 0$ $\rightarrow n^2 - n > 0 \rightarrow n(n-1) > 0 \rightarrow n > 1$
 $\log \frac{n^2 - n}{\varepsilon} \neq 1$

$\frac{\varepsilon n - n^2}{-1} > 0$ $\frac{\varepsilon n - n^2}{1} \geq 1$ $\varepsilon n - n^2 > 1$ $n^2 - \varepsilon n + 1 \leq 0$
 $(-\infty, 0] \cup [1, +\infty)$ $(n-1)(n-1) \leq 0$

$\frac{1}{n+1} \leq \omega \sim \frac{1}{n+1} \leq \omega$
 $\frac{1}{n+1} \leq \omega \sim \frac{1}{n+1} \leq \omega$



۱

۵

۲

$$a^2 + \varepsilon a = 3a + 2 \rightarrow a^2 + a - 2 = 0 \rightarrow (a-1)(a+2)$$

$a = 2$
 $\neg a = -1$

$m + \varepsilon m \quad m \geq 2$
 $2m + a + 2 \quad m \leq 2 \rightarrow 2 + 2 + 2 = 6$

$\rightarrow a = 1$

$f(1) = 5$

۵

۳

$$n+1 \leq -2 \rightarrow n \leq -3$$

$$1n - b = a + -4 \rightarrow a + b = 24$$

۵

۴

$$4a^2 - a \geq 0 \rightarrow 4a \geq 0 \quad a \leq 12$$

$$b - 4m \geq 0 \quad b - 4 \geq 0 \quad b \geq 4$$

۵

$\frac{2}{12} = \frac{1}{6}$

	$x+1$	$\frac{x+1}{12-x}$	$\frac{4-m}{m^2+m+2}$	$\frac{4-m}{(m+1)^2}$
$x+1$	+	+	+	+
$\frac{x+1}{12-x}$	+	+	+	+
$\frac{4-m}{m^2+m+2}$	+	+	+	+
$\frac{4-m}{(m+1)^2}$	+	+	+	+

$[-1, 4] \cup (4, +\infty)$

$[-1, 4] \cup (4, 4]$

$a \in [-1, 4] - \{4\}$

۵