

8b $df = [r, +\infty)$ $f(n) = \sqrt{(a-r)n^2 + an + b}$ (۱)

دامنه عبارت تابع می باشد پس $a-r=0$ $a=r$

$f(n) = \sqrt{rn + b}$ $rn + b \geq 0$ $-b \leq rn$ $+\frac{b}{r} \geq -n$

$n \geq -\frac{b}{r}$ $-\frac{b}{r} = r$ $b = -r^2$

$|max - min| m?$ $df(n) = R$ $f(n) = \sqrt{n^2 + rn + r - m^2}$ (۲)

(I) برای آنکه دامنه R باشد $a > 0$ و $\Delta \leq 0$

$\Delta \leq 0 \rightarrow f - f(r - m^2) = f - 1 + fm^2 \leq 0$ $fm^2 - f \leq 0$

$f(m^2 - 1) \leq 0$ $\frac{-1}{+1} \frac{+1}{-1} + 1 - (-1) = +2$

اختلاف ۲ (۳)

8c $f(n) = \frac{\sqrt{f-n^2}}{[n] + [-n] + 1}$ $\frac{f-n^2}{[n] + [-n] + 1}$ $\frac{f-n^2}{[n] + [-n] + 1}$

I $f - n^2 \geq 0$ $n^2 \leq f$ $-r \leq n \leq r$ $-r \leq n \leq r$ (۴)

II $[n] + [-n] = 0$ $\frac{f-n^2}{[n] + [-n] + 1} = 0$ $\frac{f-n^2}{[n] + [-n] + 1} = 0$ $\frac{f-n^2}{[n] + [-n] + 1} = 0$

$0 = \frac{f-n^2}{[n] + [-n] + 1}$

(۴) $\frac{f-n^2}{[n] + [-n] + 1}$ $\frac{f-n^2}{[n] + [-n] + 1}$

الف $y = \sqrt{n^2 + rn^2}$ $n^2 + rn^2 \geq 0$ $n^2(n+r) \geq 0$ $df = [-r, +\infty)$

$\frac{-r}{-1} \frac{+1}{+1} + 1 + 1 = 2$

$\frac{-1}{+1} \frac{+1}{-1} + 1 - 1 = 0$

$\frac{(n-1)(n+1)n^2(n-3)}{(n^3-1)}$ $(-\infty, -1] \cup \frac{1}{2} \cup [3, +\infty)$

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الف) $y = \sqrt{|x-2| - 3}$ $|x-2| \geq 3$ د. ایستاد

$|x-2| - 3 \geq 0$ I) $x-2 \geq 3$ $x \geq 5$

II) $2-x \geq 3$ $x \leq -1$

$[5, +\infty) \cup (-\infty, -1]$

ب) $y = \sqrt{4 - |2-x|}$ $4 - |2-x| \geq 0$ $|2-x| \leq 4$

I) $2-x \leq 4$ $x \geq -2$ $df = -2 \leq x \leq 4$

II) $x-2 \leq 4$ $x \leq 6$

الف) $y = \sqrt{1 - |x|}$ $1 - |x| \geq 0$ $+|x| \leq 1$ د. ایستاد

I) $x \geq 0$ $x^2 \leq 1$ $-1 \leq x \leq 1$ $df = x \leq 1$

II) $x < 0$ $-x^2 \leq 1$ $x^2 \geq -1$ $x \geq -1$

ب) $y = \sqrt{3 - |x-5|} - 1$ I) $3 - |x-5| \geq 0$

$3 - x + 5 \geq 0$ $x \leq 8$

$x - 2 \geq 0$ $x \geq 2$ $2 \leq x \leq 8$

II) $\sqrt{3 - |x-5|} \neq 1$ $3 - |x-5| \neq 1$

$|x-5| \neq 2$

$x-5 \neq 2$

$x \neq 7$

$5-x \neq 2$

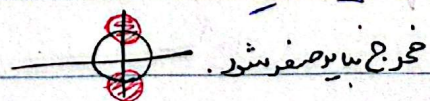
$x \neq 3$

$2 \leq x \leq 8$ $\{3, 7\}$

$[2, 8] - \{3, 7\}$

الف) $y = \sin x - 1$

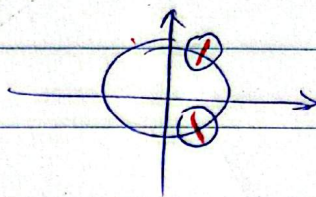
$df = R - \{ \frac{\pi}{2} + 2k\pi \}$



مخرج تابع صفر نشود.



ب) $y = \frac{C \cdot S_n}{r \cdot S_{n-1}}$ $r \cdot S_n \neq 1$ $C \cdot S_n \neq \frac{1}{r}$



خرج $\neq 0$

$D = R - \left\{ r \mid \pi \pm \frac{\pi}{r} \right\}$ ب

الف) $y = \frac{n+r}{|r_{n+1}| - |n+r|}$

أ- لا يمكن إيجاد الحد
خرج $\neq 0$

$r_{n+1} \neq n+r$
 $n \neq r$

$-r_{n-1} \neq n+r$
 $n \neq \frac{r}{r}$

$D = R - \left\{ r, -\frac{r}{r} \right\}$

ب) $y = \sqrt{|r_{n+1}| - |n+r|}$
 $(|r_{n+1}|)^r \geq (|n+r|)^r$

$r_{n+1} + r_n \geq n^2 + 4n + 9$ $r_{n+1} - r_n - 1 \geq 0$

$n^2 - r_n - r_f \geq 0$ $(n-4)(n+r) \geq 0$ ب

$D = [r, +\infty) \cup (-\infty, -\frac{r}{r}]$

I) $r_{n-1} > 0$ $n > \frac{1}{r}$

$f(n) = \sqrt{\log_a r_{n-1}}$

$\log \log r_{n-1}$

$r_{n-1} > 1$

$r_{n-1} > 1 \Rightarrow r_n > r_{n-1} \Rightarrow n > 1$

II) $\log_{0.1} r_{n-1} \geq 0$

$\log r_{n-1} \leq 1$

$r_{n-1} \leq 1$

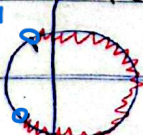
$n \leq 3$

$D = [1, 3]$

$r \cdot S_{n+1} > 0$

$C \cdot S > -\frac{1}{r}$

الف) $y = \log(r \cdot S_{n+1})$



$D = \left[\left(r \mid \pi - \frac{r\pi}{r}, r \mid \pi + \frac{r\pi}{r} \right) \right] - 1$

ب) $\log \frac{n-1}{n+1}$ $\frac{n-1}{n+1} > 0 + \frac{-1}{-1+1}$

$D = (-\infty, -1)$ ب



$\log \frac{n-1}{n+1} \geq 0$ $\frac{n-1}{n+1} \geq 1$

$\frac{n-1 - n+1}{n+1} \geq 0$