

سوال = مقرر

نسا (مدرس)

Page: جواب = مشق

15/28

SUBJECT

Year: Month: Day:

-1

جدول تعیین علامت؟ ^{کامل بنویس}

الف) $y = \sqrt{\frac{x^2 - 4x}{x^2 - x}} = D_f = (-1, 0) \cup (0, 1) \cup [4, +\infty)$

ب) $y = \sqrt{\frac{x^2 - x}{x^2 - x}} = D_f = R - [-1, 0, 1]$

-2

الف) $y = \frac{x+1}{\sqrt{x+1}} D_f = (0, +\infty)$

ب) $y = \frac{1}{\sqrt{x|x|}} D_f = (0, +\infty)$

-3

الف) $y = \sqrt{2 - [x]} D_f = (-\infty, 2)$

ب) $y = \frac{1}{\sqrt{2 - [x]}} D_f = (-\infty, 2)$

-4

الف) $y = \sqrt{[x - \frac{1}{3}] + [x + \frac{2}{3}]} D_f = [\frac{1}{3}, +\infty)$

ب) $y = \sqrt{[x - \frac{1}{3}] + [-x + \frac{1}{3}]} D_f = [x | x = \frac{1}{3} + k, k \in \mathbb{Z}]$

$[x - \frac{1}{3}] + [x + \frac{2}{3}] \geq 0 \rightarrow [x - \frac{1}{3}] + [x - \frac{1}{3}] \geq -1 \rightarrow 2[x - \frac{1}{3}] \geq -1$

$[x - \frac{1}{3}] \geq -\frac{1}{2} \rightarrow x - \frac{1}{3} \geq 0 \rightarrow x \geq \frac{1}{3}$

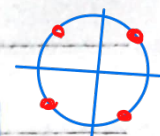
Senobar



کمال نبیست جواب آفریقہ نیست

الف) $y = \frac{r}{\sin x - 1}$ $D_f = \mathbb{R} - \left[\frac{x}{r} + k\pi \mid k \in \mathbb{Z} \right]$ -A

ب) $y = \frac{r}{r \sin x - 1}$ $D_f = \mathbb{R} - \left[\frac{k\pi}{r} + \frac{\pi}{r} \mid k \in \mathbb{Z} \right]$ $D_g = \{k\pi \pm \frac{\pi}{r}\}$



الف) $y = \sqrt{r \sin x - 1}$ $D_f = \left[\frac{\pi}{r} + 2k\pi, \frac{5\pi}{r} + 2k\pi \right]$ $\sin x \geq \frac{1}{r} \rightarrow$



ب) $y = \sqrt{\cos x - 1}$ $D_f = [2k\pi \mid k \in \mathbb{Z}]$

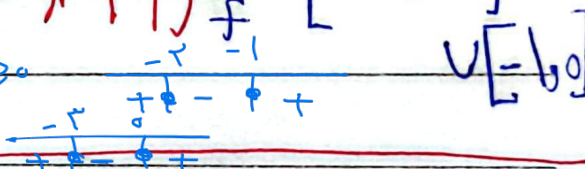
الف) $\cos y = |x| - r$ $D_f = [-r, -2] \cup [2, r]$ ✓

$-1 \leq |x| - r \leq 1 \rightarrow r \leq |x| \leq r+1 \rightarrow -r \leq x \leq r$

ب) $y = \arcsin \sin(x^2 + 2x + 1)$ $D_f = [-r, -2]$

$x^2 + 2x + 1 \geq 0 \rightarrow (x+1)(x+1) \geq 0$

$x^2 + 2x \leq 0 \rightarrow (x)(x+2) \leq 0$

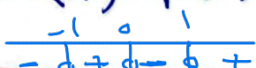


الف) $y = \sqrt{r - \log_r(x - r)}$ $D_f = (r, 11]$ -A

$\log_r^{x-r} \leq r \rightarrow x - r \leq r \rightarrow x \leq 11$

ب) $y = \log(x^2 - x)$ $D_f = (-1, 0) \cup (1, +\infty)$

$x^2 - x > 0 \rightarrow x(x-1) > 0 \rightarrow$



الف) $y = \frac{r}{r^x + 1}$ $D_f = \mathbb{R}$ | ب) $y = \frac{r}{r^x - 1}$ $D_f = \mathbb{R} - [0]$ -A

ج) $y = \frac{r}{r^x - r}$ $D_f = \mathbb{R} - \left[\frac{1}{r} \right]$ | د) $y = \frac{r}{r^x - r}$

$D_f = \mathbb{R} - \{ \log_r r \}$



ا) $y = (rx + 1)!$ $D_f = \left\{ \frac{k-1}{1} \mid k \in \mathbb{N} \right\}$ 1a

ب) $y = \left(\frac{rx - Y}{rx - \omega} \right)!$ $D_f = \left\{ \frac{r - \omega k}{r - Yk} \mid k \in \mathbb{N} \right\}$