

Date:

Sub:

14 آفرین

$$g = x + p$$

$$\frac{x^2 + px - 1}{(x-1)(x+p)(x-1)} = \frac{x+p}{(x-1)(x+p)(x-1)} \quad D_f = \{1R - \{ -p, 1, \frac{1}{p} \}$$

$$\frac{x^2 + px - 1}{(x-1)(x+p)(x-1)} = \frac{x+p}{(x-1)(x+p)(x-1)}$$

$$g = \frac{x+p}{(x-1)(x+p)(x-1)} = \frac{x+p}{(x-1)(x+p)(x-1)} \quad D_f = \{1R - \{ -p, -\frac{1}{p}, -1 \}$$

$$\frac{x^2 + px + 1}{(x-1)(x+p)(x-1)} = \frac{x+p}{(x-1)(x+p)(x-1)}$$

$$g = \frac{x+p}{(x-1)(x+p)(x-1)} = \frac{x+p}{(x-1)(x+p)(x-1)} \quad D_f = \{1R - \{ 1 \}$$

$$\frac{x^2 - px + x - 1}{(x-1)(x+p)(x-1)} = \frac{x+p}{(x-1)(x+p)(x-1)}$$

$$g = \frac{x+p}{(x-1)(x+p)(x-1)} = \frac{x+p}{(x-1)(x+p)(x-1)} \quad D_f = (-\infty, -p] \cup (1, +\infty)$$

$$\frac{x^2 - px + x - 1}{(x-1)(x+p)(x-1)} = \frac{x+p}{(x-1)(x+p)(x-1)}$$

$$g = \frac{x}{x^2 - \omega(x-1) - p(x-1)} = \frac{x}{x^2 - \omega(x-1) - p(x-1)} \quad D_f = \{1R - \{ -p, 0, p, \omega \}$$

$$g = \sqrt{x^2 - p} \quad [-p, -p] \geq 0 \quad [-p] \geq p \quad -x \geq p \quad x \leq -p \quad D_f = (-\infty, -p]$$

$$g = \frac{\omega x^2 + 4}{[x]^2 - 2[x] - 3} \quad ([x] + 1)([x] - 3) \quad [x] = -1 \quad [x] = 3$$

$$g = \sqrt{[x - \frac{1}{p}] + [x + \frac{p}{p}]} \quad [x + \frac{p}{p} - 1] + [x + \frac{p}{p}] \geq 0 \quad [x + \frac{p}{p} - 1] + [x + \frac{p}{p}] \geq 0$$

$$g = \sqrt{[x - \frac{1}{p}] + [x - 2]} \quad [x - \frac{1}{p}] + [-x + \frac{p}{p}] \geq 0 \quad a \in \mathbb{Z} = 0 \quad a \notin \mathbb{Z} = -1$$

کتاب قلم

PITICO

Date:

since
cos
sin
2/3

Sub:

9, 9, 5

$$\text{Q1) } y = \frac{\cos x + 1}{2 \sin x + 1} \quad \begin{array}{l} 2 \sin x + 1 \neq 0 \quad 2 \sin x = -1 \neq k\pi - \frac{\pi}{2} \\ \sin x \neq 0 \neq k\pi \\ \cos x \neq 0 \quad x \neq k\pi \end{array}$$

$$Df = \mathbb{R} - \left(\left\{ k\pi - \frac{\pi}{2} \right\} \cup \{ k\pi \} \right)$$

$$\text{Q2) } y = \sqrt{1 - \sin x} \quad \begin{array}{l} 1 - \sin x \geq 0 \quad -\sin x \geq -1 \quad \sin x \leq 1 \quad \sin x \leq 1 \quad \sin x \leq 1 \end{array}$$

$$Df = \left[k\pi - \frac{\pi}{4}, k\pi + \frac{\pi}{4} \right]$$

پایین صنفه



1.5

$$\text{Q3) } \sqrt{x \sin x - 1} \geq 0 \quad x \sin x \geq 1 \quad \sin x \geq \frac{1}{x} \quad Df = \left[k\pi + \frac{\pi}{4}, k\pi + \frac{5\pi}{4} \right]$$

$$\text{Q4) } \sqrt{1 - x \cos x} \geq 0 \quad 1 - x \cos x \geq 0 \quad \cos x \leq \frac{1}{x} \quad Df = \left[k\pi + \frac{\pi}{4}, k\pi + \frac{5\pi}{4} \right]$$

$$\text{Q5) } y = \arcsin(x^2 + 4x + 1) \quad \begin{array}{l} -1 \leq x^2 + 4x + 1 \leq 1 \\ -1 \leq x^2 + 4x \leq 0 \\ x^2 + 4x \leq 0 \quad (x+1)(x+3) \geq 0 \end{array}$$

$$Df = [-3, -1] \cup [0, 1]$$

$$\text{Q6) } y = \sqrt{\omega - x} \geq 0 \quad -1 \leq \sqrt{\omega - x} \leq 1 \quad \omega - x \leq 1 \quad \omega - x \geq 0 \quad \omega \leq x \leq \omega$$

$$Df = [1, 10]$$

$$\text{Q7) } y = \log x \quad \begin{array}{l} (1 - 10^x) > 0 \\ 1 - 10^x > 0 \quad -10^x > -1 \quad 10^x < 1 \quad x < 0 \end{array} \quad Df = (0, 1)$$

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$$\text{Q8) } y = \log_4(1 - 10^{\frac{x}{2}}) \quad \begin{array}{l} (1 - 10^{\frac{x}{2}}) > 0 \\ 1 - 10^{\frac{x}{2}} > 0 \quad -10^{\frac{x}{2}} > -1 \quad 10^{\frac{x}{2}} < 1 \quad x < 0 \end{array} \quad Df = (0, 1)$$

جواب منفرد
منابع 0.1 است

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$$y = \sqrt{x^2 - 2x - 1} \geq 0 \quad x^2 - 2x - 1 \geq 0 \quad x^2 - 2x \geq 1 \quad x^2 - 2x + 1 \leq 0 \quad (x-1)^2 \leq 0$$

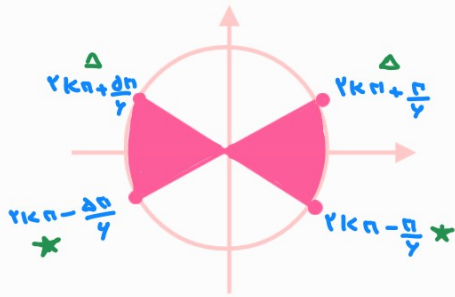
$$Df = [1, 1]$$

$$y = \left(\frac{x^2 + \omega}{x^2 + \varepsilon} \right) \quad \begin{array}{l} \frac{x^2 + \omega}{x^2 + \varepsilon} \in \mathbb{R} \quad x^2 + \omega = x^2 + \varepsilon \quad x^2 - \varepsilon x + \omega = 0 \end{array}$$

$$Df = \{ x \mid x = \frac{\omega - \varepsilon}{\varepsilon - \omega} \}$$

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4- ب) $1 - r \sin^n n \geq 0 \rightarrow r \sin^n n \leq 1 \rightarrow \sin^n n \leq \frac{1}{r} \rightarrow -\frac{1}{r} \leq \sin n \leq \frac{1}{r}$



$\rightarrow Df = [kr_1^* - \frac{\pi}{y}, kr_1^* + \frac{\pi}{y}]$

4- ب) $y = \log_r (1 - \log^{\frac{n}{r}} \frac{1}{r}) \rightarrow \log^{\frac{n}{r}} \frac{1}{r} \rightarrow n > .$

$\hookrightarrow 1 - \log^{\frac{n}{r}} \frac{1}{r} > 0 \rightarrow \log^{\frac{n}{r}} \frac{1}{r} < 1 \xrightarrow{\text{منابع (1,0)}} n > \frac{1}{r}$

$Df = (\frac{1}{r}, +\infty)$