

Viana

subject :

Year :

Month :

Date :

$$\text{و) } \left[\alpha - \frac{1}{\mu} \right] + \left[\alpha + \frac{1}{\mu} \right] \geq 0$$

$$\left[\alpha - \frac{1}{\mu} \right] + \left[\alpha + \frac{1}{\mu} \right] + 1 \geq 1 \rightarrow \left[\alpha + \frac{1}{\mu} \right] + \left[\alpha + \frac{1}{\mu} \right] \geq 1$$

$$2 \left[\alpha + \frac{1}{\mu} \right] \geq 1 \rightarrow \left[\alpha + \frac{1}{\mu} \right] \geq \frac{1}{2}$$

$$\left[\alpha + \frac{1}{\mu} \right] \geq \frac{1}{2} \rightarrow \alpha + \frac{1}{\mu} \geq \frac{1}{2} \rightarrow \boxed{\alpha \geq \frac{1}{\mu}} \quad D_f = \alpha \geq \frac{1}{\mu}$$

$$\text{ب) } \left[\alpha - \frac{1}{\mu} \right] + \left[-\alpha + \frac{1}{\mu} \right] \geq 0 \rightarrow -2 \left[\alpha - \frac{1}{\mu} \right] \geq 0$$

$$\text{و) } 2 \sin^2 \alpha - 1 \neq 0 \rightarrow 2 \sin^2 \alpha - 1 > 0$$

$$2 \sin^2 \alpha > 1 \rightarrow 2 \sin^2 \alpha = 1 \rightarrow \sin^2 \alpha = \frac{1}{2} \rightarrow \sin \alpha = \pm \frac{1}{\sqrt{2}} \rightarrow D_f = \left\{ \alpha \mid \alpha = \frac{\pi}{4} + k\pi \text{ or } \frac{3\pi}{4} + k\pi \right\}$$

$$\text{ب) } \tan \alpha + 1 \neq 0 \rightarrow \tan \alpha + 1 = 0 \rightarrow \tan \alpha = -1 \rightarrow$$

$$D_f = \mathbb{R} - \left\{ \alpha \mid \alpha = \frac{3\pi}{4} + k\pi \right\}$$

V

$$\text{ب) } \sqrt{r \sin \alpha} = 1 \rightarrow r \sin \alpha = 1 \rightarrow r \sin \alpha \geq 1 \quad -10$$

$$\sin \alpha \geq \frac{1}{r} \quad D_f = \left[\frac{\pi}{4} + 2k\pi, \frac{3\pi}{4} + 2k\pi \right]$$

$$\text{ج) } -1 \leq \cos \alpha \leq 0 \rightarrow -r \cos \alpha \geq -1 \rightarrow \cos \alpha \leq \frac{1}{r}$$

$$D_g = \left[2k\pi + \frac{3\pi}{4}, 2k\pi + \frac{5\pi}{4} \right]$$

ا) $2 - |a| > 0 \rightarrow 2 > |a| \rightarrow D_f = [2, 2]$ -K
 $|a| + 2$ هو، اذن، اذن، اذن، اذن

ب) $\sqrt{a+|a|} \rightarrow a+|a| > 0 \rightarrow a > -|a|$ -A

$$D_f = \{1\}$$

~~ا) $2 - |a| > 0$~~ $\rightarrow D_f = \{1\}$

ا) $2 - [a] > 0 \rightarrow 2 > [a] \rightarrow D_f = a > 2$ -9

ب) $2 - [a] > 0 \rightarrow 2 > [a] \rightarrow D_f = a > 2$

الف) $\frac{1}{a[a]} \rightarrow a[a] \neq 0 \rightarrow D_f = 1 \quad R = \{0\}$ -V

ب) $-a[a] > 0 \rightarrow D_f = \{1, 2\} - \{1\}$

$[a - \frac{1}{\mu}] + [a + \frac{1}{\mu}] > 0 \rightarrow [a - \frac{1}{\mu}] + [a + \frac{1}{\mu}] + 1 \rightarrow [a + \frac{1}{\mu}] + [a + \frac{1}{\mu}] > 1$ -A

$2[a + \frac{1}{\mu}] > 1 \rightarrow [a + \frac{1}{\mu}] \quad [2a + \frac{2}{\mu}] > 1 \rightarrow [2a + \frac{1}{\mu}] + 1 > 1$

$[2a + \frac{1}{\mu}] > 0 \rightarrow 2a + \frac{1}{\mu} > 0 \rightarrow a > -\frac{1}{2\mu} \rightarrow D_f = (-\frac{1}{2\mu}, +\infty)$

بیان معادلی

$$y = \sqrt{x} \sqrt{x-a}$$

$$x-a \geq 0 \quad x \geq a$$

(الف) -

$$x - \sqrt{x-a} \geq 0 \quad x \geq \sqrt{x-a} \rightarrow 16 \geq x-a \rightarrow 16 \geq -a$$

$$a \geq -16$$

$$D_f = -16 \leq a \leq 2$$

$$\sqrt{x} - \sqrt{x-a}$$

$$x-a \geq 0 \rightarrow a \geq x$$

(ب)

$$x - \sqrt{x-a} \geq 0 \rightarrow x \geq \sqrt{x-a} \rightarrow a \geq x-a \rightarrow 0 \leq 11 \geq a$$

$$D_f = x \leq a \leq 11$$

$$\text{جی) } x - 2a^2 \geq 0 \quad x(1-a^2) \geq 0 \rightarrow x \geq 2a^2 \quad x \geq a^2 \quad x$$

$$\sqrt{x} \geq a \quad x - 2a^2 \geq 0 \quad x \geq a^2 \rightarrow \sqrt{x} \geq a \rightarrow D_f = \sqrt{x} \geq a$$

$$\text{د) } x|a| - a \geq 0 \quad x|a| \geq a \rightarrow |a| \geq x \rightarrow D_f = (-\infty, -x) \cup (x, +\infty)$$

$$\text{ه) } |a| - x \geq 0 \quad |a| \geq x \quad D_f = [-\infty, x] \cup [x, +\infty) \quad \textcircled{u}$$

$$\text{و) } \sqrt{a-x} \geq 0 \quad \sqrt{a-x} \geq x \rightarrow a \geq x \rightarrow D_f = x \geq a$$

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