

۲۰۔ افریقہ کی نوٹہ

$$D_f = \begin{pmatrix} 1 & 0 \\ 0 & +\infty \end{pmatrix}$$

→ $d = 14$ د
عمر میں شود

$$(a-1)^2 + 1a + b = 0$$

$$9a - 11 + 12a + 6 = 0$$

$$b = 1A - 12Q - 2P$$

$$b = -4$$

~~$\rightarrow a - y \leq 0$~~

$$a - r > 0 \rightarrow a > r$$

$$1 - m^k \geq 0$$

$$x^p + px + 1 - m^p \geq 0 \Rightarrow x^p + px + 1 + 1 - m^p \geq 0$$

$$-1 < m \leq 1$$

$(x+1)^2 + 1 - m^2 \geq 0$
 سے ہمیں ہمارے مسئلے میں صفر تو ہمارے مساوات

$$1 - (-1) = 2$$

$$15. x_1^2 \geq 0$$

$$[x] + [-x] + 1 \neq 0$$

$$-4 \leq x \leq 4 \rightarrow [-4, 4]$$

عدد ۲ و ۱ و ۰ و ۱ و ۲ → عدد های صحیح این بازه

$\boxed{2, 1, 0, 2} \rightarrow [2] + [-2] + 1 = 1$

$$[Y] + [-Y] + 1 \rightarrow Y - Y + 1 = 0$$

$$\vec{a} \cdot \vec{b} = 1 \cdot 1 + (-1) \cdot 1 = 1 - 1 = 0$$

ii) $y = \sqrt{x^4 + 1} x^4$

$$x^y(x+y) \geq 0$$

$$\begin{array}{r} -p \quad 0 \\ \hline -1 \quad + \quad 1 \quad + \end{array}$$

$$D_f = [-1, +\infty)$$

$$\therefore y = \sqrt{\frac{(x^r - 1)(x^{r-1})}{x^r - 1}}$$

$$(x+1)^{-1} (x-1)^{+1} x^0 (x-1)^{+4}$$

$$\begin{array}{ccccccc} & & * & & * & & \\ -1 & 0 & +1 & +2 & & & \\ \hline + & - & - & - & - & - & + \end{array}$$

$$(x-1)(x^2+x+1)$$

$$D_f = (-2, -1) \cup \{0\} \cup [3, +\infty)$$

الف) $\sqrt{|x-2|}-2$

$$|x - \mu| - \mu \geq 0$$

$$|x - y| \geq \frac{1}{2}$$

$$\left\{ \begin{array}{l} x - y \geq 10 \rightarrow x \geq 10 \end{array} \right.$$

$$\underline{D} = (-\infty, -1] \cup [\omega, +\infty)$$

ب) $y = \sqrt{x - |x - 2|}$

$$\nabla |y - x| > 0$$

$$|y - \varphi| < \kappa$$

5-11-2

$$-4 \leq -x \leq 4$$

$$-4/8 < 4$$



$$\text{الف) } y = \sqrt{1-x|x|}$$

$$1-x|x| \geq 0$$

$$x|x| \leq 1$$

$$D = (-\infty, 1]$$

$$\text{ب) } y = \frac{1}{\sqrt{1-x|x|-1}}$$

$$1-x|x|-1 \geq 0$$

$$\sqrt{1-x|x|-1} \neq 0$$

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

$$\sqrt{1-x|x|} \neq 1$$

$$D = [1, 1] \cup (-1, 1) \cup (1, 1]$$

$$-1 \leq x \leq 1$$

$$x \neq 1, x \neq -1$$

$$\text{الف) } y = \frac{\sin x - 1}{\cos x}$$

$$\cos x \neq 0$$



$$D = \mathbb{R} - \left\{ k\pi + \frac{\pi}{2} \right\}$$

$$\text{ب) } y = \frac{\cos x}{1 - \cos x}$$

$$1 - \cos x \neq 0$$

$$\cos x \neq 1$$



$$D = \mathbb{R} - \left\{ k\pi + \frac{\pi}{1} \right\}$$

$$\text{الف) } y = \frac{x+1}{|x+1| - |x+1|}$$

$$|x+1| - |x+1| \neq 0$$

$$|x+1| \neq |x+1|$$

$$D = \mathbb{R} - \left\{ -\frac{1}{1} \right\}$$

$$x^2 - 2x = 2 \neq 0$$

$$(x-4)(x+1) \geq 0$$

$$(x+1)^2 \neq (x+1)^2$$

$$x^2 + 2x + 1 \neq x^2 + 2x + 1$$

$$2x^2 - 2x - 1 \neq 0$$

$$\text{ب) } y = \sqrt{|x+1| - |x+1|}$$

$$|x+1| - |x+1| \geq 0$$

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

$$D = (-\infty, -\frac{1}{1}] \cup [1, +\infty)$$

$$-\frac{1}{1} \leq x \leq 1$$

$$(x-4)(x+1) \geq 0$$

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

$$\log_a (x-1) > 0$$

$$\log_a \log_a (x-1) \geq 0$$

$$x-1 > 1$$

$$\log_a (x-1) \leq 1$$

$$x-1 \leq a$$

$$\frac{1}{a} \leq x \leq a$$

$$D_f = \left(\frac{1}{a}, a \right]$$

$$\text{الف) } y = \log (1 + \cos x)$$

$$1 + \cos x > 0$$

$$\cos x > -1$$



$$D = \left(k\pi - \frac{\pi}{1}, k\pi + \frac{\pi}{1} \right)$$

$$\text{ب) } y = \sqrt{\log \frac{x-1}{x+1}}$$

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

$$\frac{x-1}{x+1} \geq 1$$

$$\frac{x-1}{x+1} \geq 1$$

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

$$(-\infty, -1)$$