

$$D_f = \mathbb{R} - \left\{ -1, -\frac{1}{f}, -1^+ \right\}$$

[illegible]

$$f = \frac{r}{x^2 - 0|x-1| - rx + a} \quad \left. \begin{array}{l} x^2 - a|x-1| - rx + a \neq 0 \\ x > 1 \Rightarrow x^2 - 0x + 0 - rx + a \neq 0 \neq x^2 - rx + a \\ x \neq 1 \Rightarrow x^2 - rx + a \neq 0 \neq x \\ x < 1 \Rightarrow x^2 - 0 + 0x - rx + a \neq 0 \neq x^2 - rx + a \end{array} \right\}$$

$x \in Vx + b \neq \emptyset$ $\hookrightarrow$ $\begin{matrix} \text{مفروضه } X \\ \text{مفروضه } X \end{matrix}$
 $x \in Vx \neq \emptyset$ $\hookrightarrow$ $\begin{matrix} \text{مفروضه } X \\ \text{مفروضه } X \end{matrix}$

$$D_f = \mathbb{R} - \{1, -2, 5\}$$

ج) $\sqrt{[-x]^{-1}}$ $[-x]^{-1} \geq 0 \Rightarrow [-x] \geq 0 \Rightarrow -x \geq 0 \Rightarrow x \leq 0$ $D_f = (-\infty, 0]$

$D_f = (-\infty, -1) \cup [0, 1) \cup [2, \infty)$

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

$$\{x + \frac{1}{x}\} - 1 \geq 0 \quad \{x + \frac{1}{x}\} \geq 1 \quad x \geq \frac{1}{x} \quad \boxed{x \geq \frac{1}{x}} \quad \boxed{D_f = [\frac{1}{x}, \infty)}$$

$$D_f = \{x \mid x = k + \frac{1}{f}, k \in \mathbb{Z}\}$$

$$\hookrightarrow \sqrt{\lfloor x - \frac{1}{r} \rfloor + \lfloor \frac{1}{r} - x \rfloor} \quad \lfloor x - \frac{1}{r} \rfloor + \lfloor \frac{1}{r} - x \rfloor \geq \cdot \xrightarrow{x - \frac{1}{r} = \frac{1}{r} - x} \lfloor + \rfloor + \lfloor - + \rfloor \geq \cdot \Rightarrow t \in \mathbb{Z}$$

$$x - \frac{1}{r} \in \mathbb{Z}$$

$$x \in \mathbb{Z} + \frac{1}{r}$$

ب-۷) $1 - 2c \sin \gamma \geq 0 \rightarrow c \sin \gamma \leq \frac{1}{2}$

$$\rightarrow D_f = [rk\pi + \frac{n}{r}, rk\pi + \frac{an}{r}]$$

$$D_f = [k\pi - \frac{\pi}{4}, k\pi + \frac{\pi}{4}]$$

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$$r \sin x \geq 1 \quad \sin x \geq \frac{1}{r}$$

$$Df = [rka + \frac{p}{r}, rka + \frac{q}{r}]$$

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$$1 \geq \cos x \quad \cos x \leq \frac{1}{x}$$

$$\sin x = x + \frac{x^3}{6} \Rightarrow -1 \leq x + \frac{x^3}{6} \leq 1 \Rightarrow \underbrace{-1 \leq x + \frac{x^3}{6} \leq 1}$$

$a+c=b \Rightarrow$

$\begin{cases} x \leq r \\ x \geq r \end{cases} \Rightarrow r$

$$\} \underline{\underline{\Rightarrow}} \cdot x < 5$$

$$x < r \Rightarrow x < r \Rightarrow \boxed{\cancel{D_f} = (0, r]}$$

$\log x \geq x - 1$ $\Rightarrow x \geq \frac{1}{x}$ $\Rightarrow x^2 \geq 1$ $\Rightarrow x \geq 1$

$$\Rightarrow \frac{1}{f} = \frac{1}{v} + \frac{1}{u} \quad \boxed{\frac{1}{f} = \frac{1}{v} + \frac{1}{u}}$$

$$\gamma \Rightarrow \Gamma \Rightarrow \exists x. x \in \Gamma \Rightarrow x \in \text{Ext } H$$

$\frac{1}{f} = \frac{1}{u} + \frac{1}{v}$ ✓

$$\text{rck} \rightarrow x \in - \frac{cm-a}{r_k - r} \Rightarrow \left| \frac{0}{f} \right| |x| \leq r_k$$

$$\rightarrow f(x+c) \in f(x) + \epsilon_{n_1} \Rightarrow \bigwedge \epsilon_{n_1} \in f(x) - \epsilon_{n_1} \Rightarrow$$

$$n \approx \frac{\epsilon \omega_0^2}{4\pi \omega^2} \ll 1$$