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$$b+c = -1/a \text{ , } y = 1 - \log_c^{ax-b}$$

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$$r = 1 - \log_c^{-b} \Rightarrow \log_c^{-b} = -1 \Rightarrow \frac{1}{c} = -b$$

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$$0 = 1 - \log_c^{-1/5a-b} \Rightarrow \log_c^{-1/5a-b} = 1 \Rightarrow c = -1/5a-b$$

$$b+c = -1/5 \Rightarrow c^2 + 1/5c - 1 = 0$$
$$(c+2)(c-5/5) = 0 \Rightarrow \boxed{c = 0/5}$$

$$0/5 + b = -1/5 \Rightarrow \boxed{b = -2}$$

$$0/5 = -1/5a + 2 \Rightarrow 1/5a = 1/5 \Rightarrow \boxed{a = 1}$$

$$(a+c)b = (1/5) \times (-2) = -2/5$$

$$\text{طبق سودار: } \frac{r}{r} = 1 + c \times r^a \Rightarrow c \times r^a = \frac{-1}{r} \Rightarrow r^b = r \Rightarrow \boxed{b = 1}$$

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$$0 = 1 + c \times r^{a+b} \Rightarrow c \times r^{a+b} = -1$$
$$f(-1) = 1 + c \times r^{\frac{a-b}{r}} = 1 + \frac{c \times r^a}{r} = 1 + \frac{-1}{r} = \frac{1}{9}$$

$$\text{طبق سودار: } r = c + \log_{\frac{b}{a}} \Rightarrow c = r - \log_{\frac{b}{a}}$$
$$0 = c + \log_{\frac{b}{a}}^{r/5a+b} \Rightarrow c = -\log_{\frac{b}{a}}^{r/5a+b}$$

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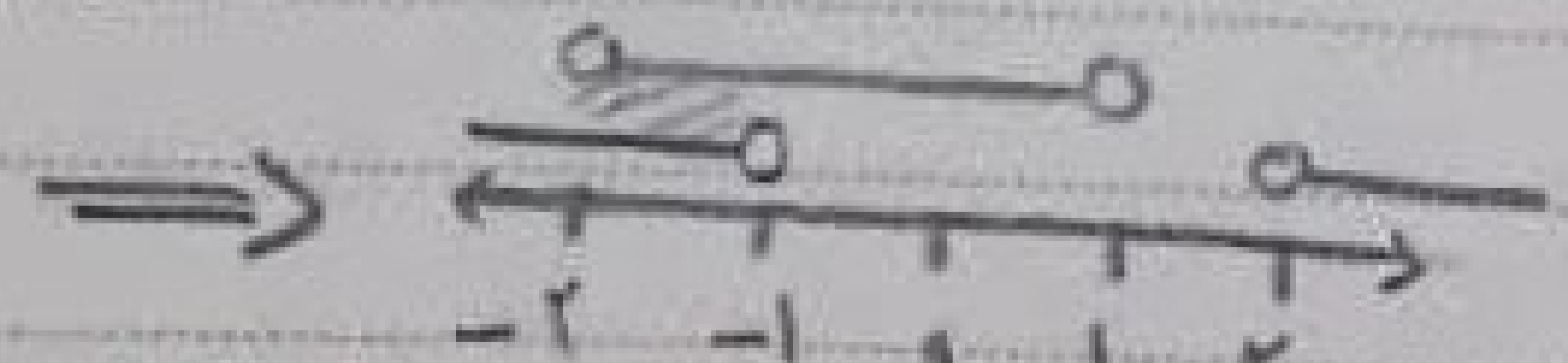
$$\Rightarrow r = \log_{\frac{b}{a}}^{r/5a+b} \Rightarrow r \Delta = \frac{b}{r/5a+b} \Rightarrow 4 \cdot a + r \Delta b = b$$
$$4 \cdot a = -r \Delta b \Rightarrow \frac{a}{b} = \frac{-r \Delta}{4} = \frac{-r}{4}$$

$$\log_{\epsilon} (|x^r - r| - x) > 0 \Rightarrow |x^r - r| - x > 0$$

$$x^r - r - x > 0 \rightarrow x^r - x - r > 0$$

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$$-x^r + r - x > 0 \rightarrow x^r + x - r < 0$$



$$D = (-\infty, 1) \cup (5, +\infty)$$

$$x=1 \rightarrow -1 - 2 + 1 = \varepsilon \Rightarrow \varepsilon = 2 + 2^{b-a}$$

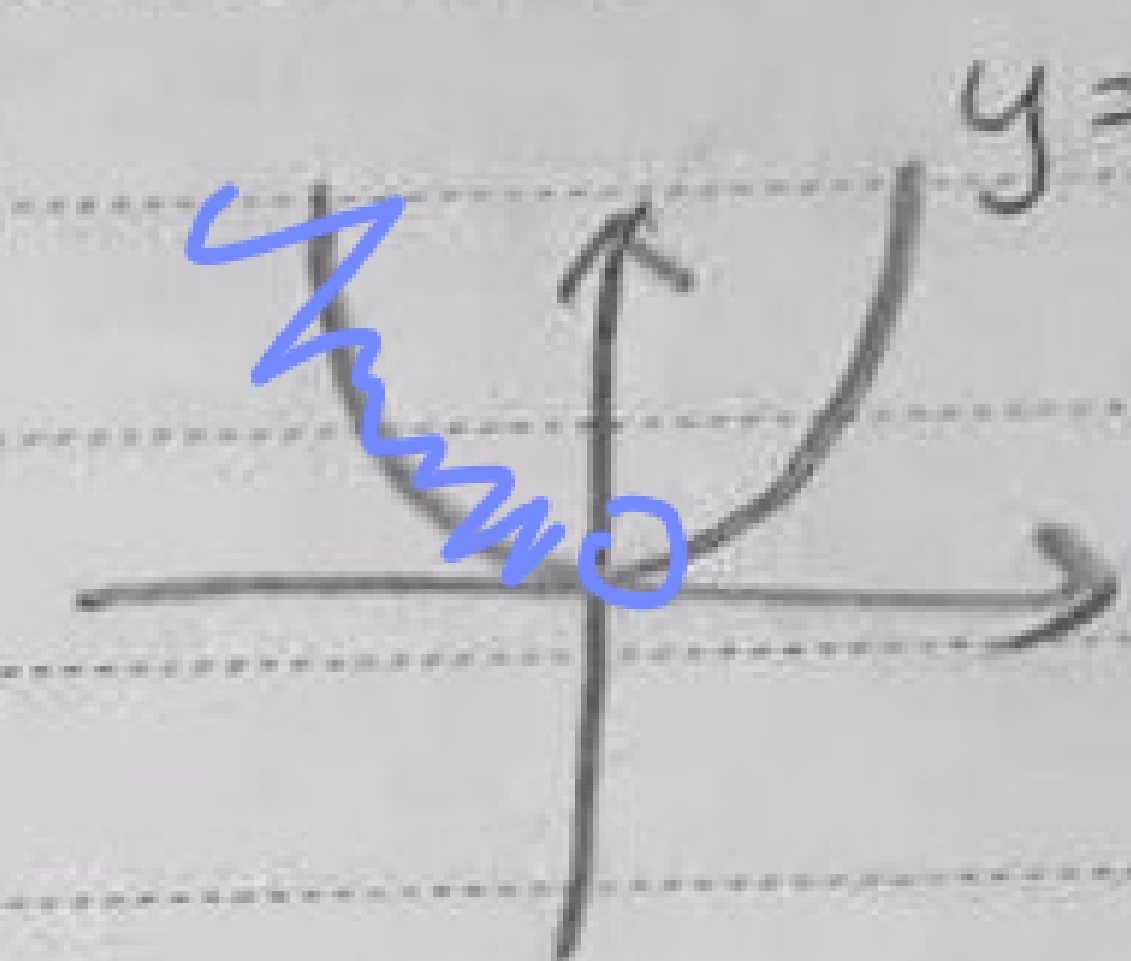
$$\star b - a = 1 \quad | \quad f(-1) = 10 \Rightarrow 10 = 2 + 2^{b+a} \Rightarrow b + a = 3 \quad \star\star$$

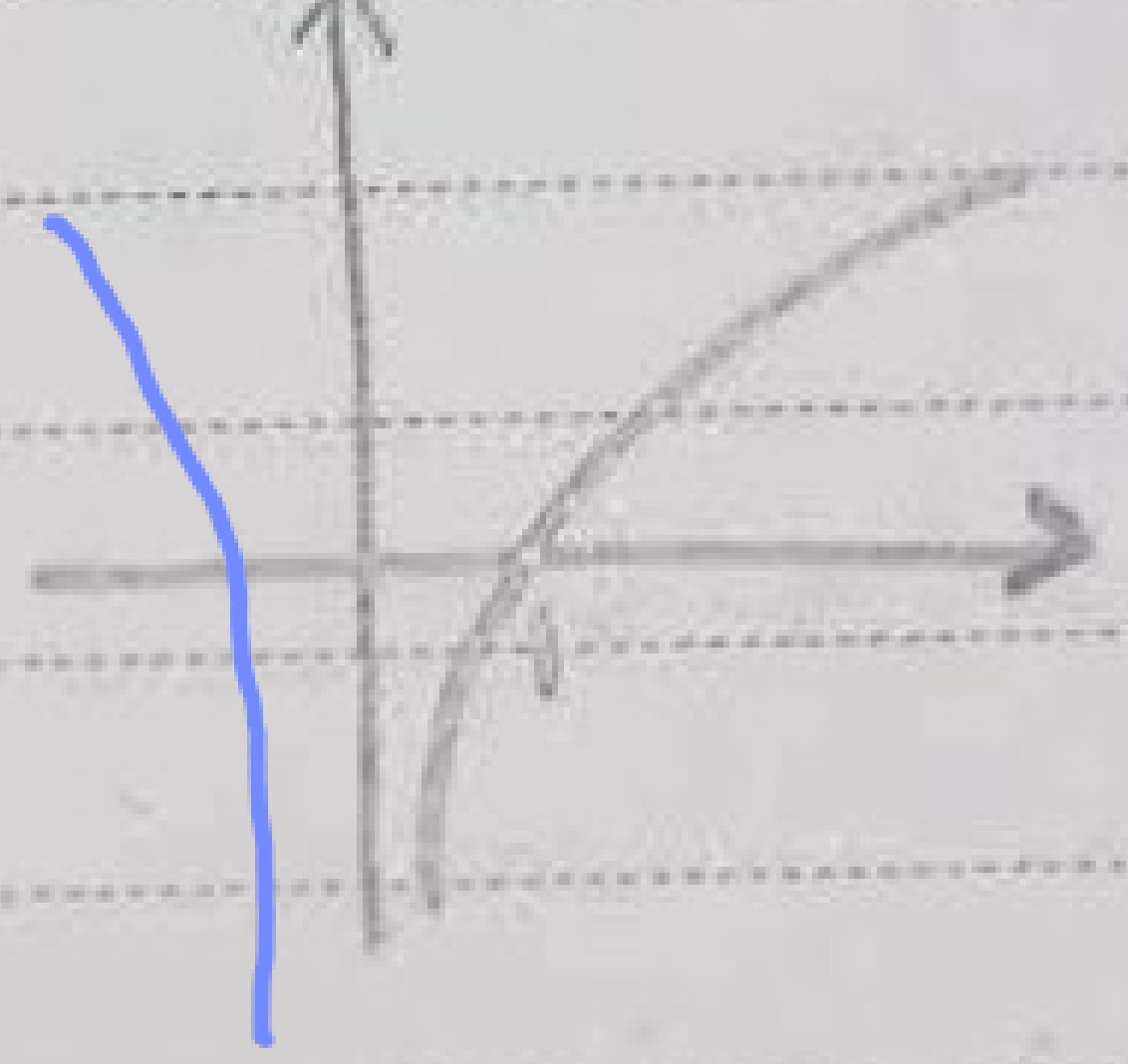
$$\star, \star\star \Rightarrow 2b = \varepsilon \Rightarrow b = 2, a = 1 \quad \{ \quad 2b - a = \varepsilon - 1 = 3 \}$$

$$x=1 \rightarrow 0 \Rightarrow 0 = -2 + \left(\frac{1}{2}\right)^{A+B} \Rightarrow A+B = -1 \quad \left. \begin{array}{l} A = -1 \\ B = 0 \end{array} \right\} \quad -4$$

$$x=2 \rightarrow 2 \Rightarrow 2 = -2 + \left(\frac{1}{2}\right)^{2A+B} \Rightarrow 2A+B = -2 \quad \left. \begin{array}{l} A = -1 \\ B = 0 \end{array} \right\} \quad (5)$$

$$f(3) = -2 + \left(\frac{1}{2}\right)^{-1(3)} = -2 + 1 = -1$$

الف) $y = 9 \log_3 x = 3^2 \log_3 x = x \log_3 x^2 = x^2$  $D = (1, +\infty) - 10$ (1)

ب) $y = \log_3 x^a \Rightarrow a > 0 (a \neq 10)$  $D = \mathbb{R} - \{0\}$

(9, 1, 1)