

$$\log_m^n = a$$

$a \geq 0$

$$\log_{mn}^{m^r n} = b$$

$$n^a = m$$

طایفه نزاری

نوسین اریجی

یادهم سری B

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$$[b] = ?$$

$$\frac{r(a+1)}{a+1} \log_{n^a \times n} n^{ra} \times n = n^{ra+1} = b$$

$$\frac{ra+1}{a+1} = b$$

$$1 < \frac{ra+1}{a+1} < r$$

$$[b] = 1$$

①

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الف) $y = \sqrt{\frac{x}{\log \frac{1}{x}}}$ $x > 0$

(112)

$\log \frac{1}{x} \neq 0 \Rightarrow x \neq 1$

$\frac{x}{\log \frac{1}{x}} > 0 \Rightarrow x > 0$

$D_f = (0, +\infty) - \{1\}$

$\frac{x}{\log \frac{1}{x}} > 0 \rightarrow x < 1 \rightarrow \begin{cases} x > 1 \rightarrow D = (0, 1) \\ x < 1 \end{cases}$

ب) $y = \log \frac{(x^x - x - 1)}{x}$

$\sqrt{x^x - 1} + 1$

$x^x - 1 > 0$

$x^x > 1$

$\begin{cases} x > 1 \\ x < -1 \end{cases}$

II

$x^x - x - 1 > 0$

$(x - 1)(x + 1)$

$\frac{1}{1 + 0 - 0} + 1$ I

D. $I \cap II = (-\infty, -1) \cup (1, +\infty)$

$$2 \log_a x + \log \sqrt{x} = 2$$

$$x=4$$

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نوشتن اریبی
یازده سری ③

$$\frac{1}{x} \log a' + \frac{1}{\log a} = 2$$

$$\log_a \frac{a}{x} + \frac{1}{\log_a} = 2$$

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$$t + \frac{1}{t} = 2$$

$$t^2 + 1 - 2t = 0$$

$$(t-1)^2 = 0$$

$$(t-1)^2 = 0$$

$$\log_a x = +1$$

$$a = x$$

$$\log K = 0,1\psi$$

$$\log \omega = 0,1V$$

$$\log \psi = 0,1\chi$$

$$(\log \frac{\omega}{\psi})\chi + (\log \psi)\chi - \log \omega = 0$$

$$(\log \omega - \log \psi)\chi + \chi(\log \psi) - (\log \psi + \log \omega) = 0$$

$$(0,1V - 0,1\chi)\chi + \chi(0,1\chi) - (0,1\chi + 0,1V) = 0$$

$$0,1\psi\chi + 0,1\chi - 1,1 = 0$$

$$\psi\chi + \chi - 11 = 0$$

$$\chi^2 + \chi - \psi\psi = 0$$

$$(\chi + 11)(\chi - \psi) = 0$$

$$\left(\chi + \frac{11}{\psi}\right)(\chi - 1) = 0$$

$$-\frac{11}{\psi}$$

$$\text{اختلاف ریشه ها} = \frac{1\chi}{\psi}$$

$$\log_V^V = V, 1$$

$$\log_a^V = 0, a$$

$$\log_{17}^b = ?$$

$$\log_V^a = \frac{1}{\log_a^V} = V$$

$$\frac{\log_{10}^1}{\log_{17}^1} = \frac{\log_V^a + \log_V^1}{\log_V^V + \log_V^1} = \frac{V}{V, 1}$$

⑧

✓

$$\log_{14}^a = 1, a$$

$$\log_V^1 = 1, 4 \quad \log_V^V = \frac{10}{14}$$

$$\log_{10}^4 = ?$$

$$\frac{\log_V^4}{\log_{10}^1} = \frac{\log_V^1 + \log_V^1}{\log_{10}^a + \log_{10}^1} = \frac{1, 4}{1, a}$$

$$\frac{10 \times 14}{14 \times 10} = \frac{40}{100}$$

⑨

✓

$$\frac{1}{V} \log_{17}^{11} = m$$

$$\frac{1}{V} \log_{17}^{11} = ?$$

$$\log_V^{11} = Vm$$

$$\log_V^1 + \log_V^{11} = Vm + 1$$

$$\log_V^4 = \frac{Vm + 1}{V}$$

$$\log_V^4 + \log_V^1 = \frac{Vm + 1}{V} + 1$$

$$\log_V^{11} = \frac{Vm + V}{V}$$

$$\frac{1}{V} \log_V^{11} = \frac{Vm + V}{V}$$

$$1) \log_n 4n+1$$

$$(0.1x)^{2n-1} = \left(\frac{11\phi}{n}\right)^{2n}$$

$$\Rightarrow \begin{cases} x = \frac{1}{2} \\ x = -1 \end{cases}$$

$$\log_n x = \frac{1}{2}$$

$$\log_n (11) \rightarrow \text{تعريف مسدود}$$

⑦

فوتسني اوسي - خاذه سري

$$\frac{x}{10} = \frac{1}{2} = \left(\frac{3}{2}\right)^{-1} \left(\left(\frac{3}{2}\right)^n\right)^{2n}$$

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

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$$2n \cdot 2n + 2n - 1 = 0$$

$$x = \begin{cases} \frac{1}{2} \\ -1 \end{cases}$$

④

$$\log_r^w = a \quad \log(r^b - 1)$$

$$\frac{1}{w} \log_r^b = \frac{v}{w} (1 + a)$$

$$\frac{1}{w} \log_r^b = \frac{v}{w} (1 + a)$$

$$\log_r^b = v + va = \log_r^v + \log_r^q$$

$$\log_r^b = \log_r^{vq} \quad b = vq$$

$$\log(r^b - 1) = \log 100 = \textcircled{v}$$

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$$a = \frac{b+c}{r} \rightarrow b = ra - c \rightarrow \frac{1}{x_1 + 2x_2} = \frac{1}{s} = \frac{ra}{b} = \frac{ra}{ra-c} = r \log_r^r$$

$$\rightarrow \frac{ra}{ra-c} = \log_r^r \xrightarrow{\text{cross}} \frac{ra-c}{ra} = \log_r^1 \rightarrow 1 - \log_r^1 = \frac{c}{ra} \rightarrow r - \log_r^1 = \frac{c}{a} \quad (1)$$

$$\left(\frac{1}{r}\right)^{\frac{c}{a}} = \left(r^{-\frac{1}{a}}\right)^{\frac{c}{a}} = \left(r^{\frac{c}{a}}\right)^{-\frac{1}{a}} \xrightarrow{(1)} \left(r^{r - \log_r^1}\right)^{-\frac{1}{a}}$$

$$\left(\frac{r^r}{r \log_r^1}\right)^{-\frac{1}{a}} = \left(\frac{r}{1}\right)^{-\frac{1}{a}} = (ra)^{\frac{1}{a}} = \sqrt[a]{a}$$

11.

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