

بازدم دفتر

حرف باقی

تکلیف شماره ۲۵

$$m = n^a \Rightarrow \log_{m,m}^{m^n} = b \Rightarrow \log_{n^a \times n}^{n^a \times n} = b \Rightarrow \log_{n^{a+1}}^{n^{a+1}} = b \Rightarrow \frac{a+1}{a+1} \log_n^n = b \Rightarrow \left[\frac{a+1}{a+1} \right] = [b] \Rightarrow \left[1 + \frac{a}{a+1} \right] = [b] \Rightarrow 1 + \left[\frac{a}{a+1} \right] = [b] \Rightarrow 0 < \frac{a}{a+1} < 1 \rightarrow [b] = 1$$

الف) $y = \sqrt{\frac{n}{\log \frac{n}{\frac{1}{r}}}}$ $x > 0$
 $\log \frac{n}{\frac{1}{r}} \neq 0 \rightarrow n \neq 1$
 $\log \frac{n}{\frac{1}{r}} = 0 \rightarrow n = 1$
 $D_f = (0, 1)$
 $y = \log \frac{(n^r - n - r)}{\sqrt{n^r - 1} + 1}$ $n^r - n - r > 0$
 $n = -1, n = 2$
 $\sqrt{n^r - 1} \neq -1 \rightarrow n^r > 0$
 $n^r - 1 > 0 \rightarrow n = 1, n = -1$
 $D_f = (-\infty, -1) \cup (1, +\infty)$

$$r \log_n^a + \log_a^{\frac{1}{r}} \Rightarrow r \log_n^a + \frac{1}{r} \log_a^n \Rightarrow r \log_n^a + r \log_n^a = r$$

$$\log_n^a = \frac{1}{r} \rightarrow a = n^{\frac{1}{r}} \rightarrow n = 9 \rightarrow a = 9^{\frac{1}{r}} = 3$$

$$(\log a - \log c) n^r + (r \log c) n - (\log c + \log a) = 0 \Rightarrow n = 1, n = \frac{c}{a}$$

$$\frac{c}{a} = \frac{-\log c - \log a}{\log a - \log c} = \frac{-0.18 - \log 10 - \log 2}{\log 10 - \log 2 - 0.18} = \frac{-0.18 - 1 + 0.18}{1 - 0.18 - 0.18} = \frac{-1}{0.72} = \frac{-11}{8}$$

$$n_1 - n_2 = 1 - \left(\frac{-11}{8} \right) = \left(\frac{19}{8} \right)$$

$$\log_2^r \times \log_2^r = 0.18 \times 2/11 \rightarrow \log_2^r = 1/8$$

$$\log_{18}^1 = \frac{\log_2^1}{\log_2^{18}}$$

$$\log_{18}^1 = \frac{r \log_2^r + \log_2^1}{\log_2^r + \log_2^1} = \frac{0.18 + 1}{0.18 + 1/8} = \left(\frac{18}{19} \right)$$

$$\log_2^a \times \log_2^c = \log_2^a = 2/8$$

$$\log_{18}^r = \frac{\log_2^r}{\log_2^{18}} \Rightarrow \frac{\log_2^r + \log_2^c}{\log_2^r + \log_2^a} = \frac{1 + 1/8}{1/8 + 2/8} = 0.18$$

$$\log_{18}^{12} = \frac{\log_{18}^{12}}{\log_{18}^8} \Rightarrow \log_{18}^{12} = \log_{18}^8 + \log_{18}^4 \rightarrow \frac{r}{8} + \frac{1}{8} \log_{18}^4$$

$$\log_{18}^8 = \frac{r}{8} \log_{18}^4 = \frac{r}{8}$$

$$\log_{18}^{11} = m \rightarrow \log_{18}^9 + \log_{18}^2 = m \rightarrow \frac{r}{8} \log_{18}^9 + \frac{1}{8} \log_{18}^2 = m \rightarrow \frac{r}{8} \log_{18}^9 + \frac{1}{8} = m$$

$$\log_{18}^9 = \frac{9m-1}{r} \cdot \log_{18}^{12} = \frac{\frac{r}{8} + \frac{1}{8} \log_{18}^9}{\frac{r}{8}} = \frac{\frac{r}{8} + \frac{1}{8} \left(\frac{9m-1}{r} \right)}{\frac{r}{8}} = \left(\frac{r}{8} (m+1) \right)$$

$$\left(\frac{\varepsilon}{1.}\right)^{r_n-1} = \left(\frac{2^{\varepsilon}}{r^{\varepsilon}}\right)^{r^r} \rightarrow \left(\frac{r}{2}\right)^{r_n-1} \rightarrow \left(\frac{2}{r}\right)^{\varepsilon r^r} \rightarrow r_n-1 = -\varepsilon r^r$$

(1)

$$r_n^r + r_n - 1 = 0 \rightarrow \left(n + \frac{\varepsilon}{r}\right) \left(n - \frac{1}{\varepsilon}\right) = 0 \rightarrow n = -1 \text{ أو } 9n+1 = -1 \times$$

$$\rightarrow n = \frac{1}{\varepsilon} \rightarrow \log_{r^{\varepsilon}}^{(r+1)} = \log_{r^{\varepsilon}}^{r^r} = \frac{r}{\varepsilon} \log_r^r = \left(\frac{r}{\varepsilon}\right)$$

$$\frac{1}{\varepsilon} \log_r^b = \frac{r}{\varepsilon} (a+1) \rightarrow \log_r^b = ra + r \quad r^{(ra+r)} = b \rightarrow (r^a)^r \times \varepsilon = \varepsilon b \rightarrow b = \varepsilon r \quad (9)$$

$$\log(\varepsilon b - 1) \rightarrow \log(1.0) = (1.0)$$

$$S = \frac{-b}{-\varepsilon a} \rightarrow \frac{b}{\varepsilon a} = \log \varepsilon \rightarrow \frac{a}{b} = \frac{\log \varepsilon}{\varepsilon} = \frac{r \log_r^r}{r^r} = \frac{\log_r^r}{r}$$

$$ra = b + c \rightarrow r \frac{a}{b} = 1 + \frac{c}{b} \quad \frac{a}{b} = \frac{\log_r^r}{r} \rightarrow r \left(\frac{\log_r^r}{r}\right) = 1 + \frac{c}{b}$$

$$\frac{c}{b} = -1 + \log_r^r \rightarrow \frac{c}{a} = \frac{-1 + \log_r^r}{\frac{\log_r^r}{r}} \Rightarrow \frac{c}{a} = \frac{\log_r^r - \log_r^1}{\frac{1}{r} \log_r^r} = \frac{\log_r^r}{\frac{1}{r} \log_r^r} = \frac{\log_r^r}{\frac{1}{r} \log_r^r}$$

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