

$$b = \log_{mn} mn = \log_n n = 1$$

$$r_{a+1} \rightarrow [b] = \left[\frac{r_{a+1}}{a+1} \right] = 1$$

$$\left[r - \frac{1}{a+1} \right]$$

(2)

Synthetic

$$r \log_a a + \log_a a = r \rightarrow \log_a r + \log_a a = r$$

$$\log_a r = 1 \quad a = r \quad r + \frac{1}{r} = r$$

$$\frac{1}{r} = 1$$

(3)

$$\log_{12} 12 = \log_{12} 12 = 1$$

$$\frac{b}{1} = \frac{r}{1} = 1$$

(4)

$$\textcircled{1} \log^{\mu} \varepsilon = \log^{\mu} \frac{\mu^{\mu-1}}{\mu} \rightarrow \mu \frac{\mu^{\mu-1}}{\mu} = \log^{\mu} \mu = \frac{\mu^{\mu} + \mu}{\varepsilon}$$

$$\mu^{\mu} \geq \mu \rightarrow \mu^{\mu}, \mu^{\mu} \rightarrow \mu, \mu^{\mu-1} \rightarrow \mu \rightarrow \mu^{\frac{\mu-1}{\mu}}$$

Simple

1

$$\textcircled{2} \log^{\mu} \frac{\mu^{\mu}(1+\mu)}{\mu} = \mu^{\mu} (1+\mu) = \mu^{\mu} + (\mu^{\mu})^{\mu}$$

$$b = \varepsilon + \mu^{\mu}, \mu^{\mu}$$

$$\log^{\mu} 1 = \log^{\mu} 1 = \mu$$

$$\textcircled{10} \frac{1}{\mu + \mu} \cdot \log^{\mu} \rightarrow \frac{\varepsilon A}{b} = \mu \log^{\mu} \rightarrow \frac{a}{b} = \frac{\log^{\mu} r}{\mu}$$

$$a = \frac{b+c}{\mu} \rightarrow \mu A + b + c \div a \rightarrow \mu \cdot \frac{b}{a} + \frac{c}{a} \rightarrow \frac{c}{a} = \mu \cdot \frac{b}{a} \cdot \mu^{-\frac{1}{\mu}} \cdot \frac{\log^{\mu} r}{\mu}$$

$$\left(\mu^{-\frac{1}{\mu}} \right)^{\frac{c}{a}} = \mu^{-\frac{1}{\mu} + \frac{1}{\varepsilon \log^{\mu} r}} = \mu^{-\frac{1}{\mu}} \times \mu^{\frac{\log^{\mu} r}{\varepsilon}} = \mu^{-\frac{1}{\mu}} \times 1 \cdot \frac{1}{\varepsilon} \cdot \frac{1}{\mu} \cdot \frac{\log^{\mu} r}{\mu} = \omega^{\frac{1}{\varepsilon}} \sqrt{\omega}$$