

$$\mu^A \times \mu^B = \mu^r \quad \begin{matrix} n=3 \\ n=1 \end{matrix} \rightarrow \begin{matrix} \mu^A \times \mu^B = 9 \\ \mu^A \times \mu^B = 1 = \mu^0 \end{matrix} \rightarrow \begin{matrix} 3A+B=2 \\ A+B=0 \end{matrix} \rightarrow \begin{matrix} -3A-B=-2 \\ A+B=0 \end{matrix}$$

$$\begin{matrix} A=1 \\ B=-1 \end{matrix}$$

$$f(n) = \mu^{n-1} \rightarrow \text{در } n=0 \rightarrow \mu^{-1} = \frac{1}{\mu}$$

1

$$\mu^{n+r} = r^{n+10} \rightarrow r - n + 10 = 0 \rightarrow r = n - 10 \rightarrow r^n = r^{n-10} = \mu$$

$$S = n_1 + n_2 = \log_r \mu + \log_r \mu = \log_r \mu$$

2

$$(\log_{r_1} \mu)^r + \log_{r_1} \mu \times \log_{r_1} \mu^r = (\log_{r_1} \mu)^r + (\log_{r_1} \mu + 1) (\log_{r_1} \mu + r)$$

$$\log_{r_1} \mu + \log_{r_1} \mu = 1 \sim a^r + (r-a)(r+a) = F$$

3

$$\log(n-1)^r + r \log(1-n) = 0 \sim \log(1-n)^r + r \log(1-n) = 0$$

$$= \Delta \log(1-n) = 0 \rightarrow 1-n=0 \rightarrow n=-1$$

$$\log_{\mu}^{-(-1)} = r$$

4

$$\log_{\mu} \mu^{r+r+1} + \log_{\mu} \mu^{-r} = r \rightarrow \log_{\mu} [\mu^{(r+r+1)(-r)}] \rightarrow \mu^r = \mu^{r-1}$$

$$n^r = 14$$

$$\log_{\sqrt{r}} \mu = r \log_{\mu} \mu = \log_{\mu} \mu^r = \log_{\mu} 14 = F$$

