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$$m = n^a \Rightarrow \log_m n = b \Rightarrow \log_{n^{a+1}} n^{a+1} = b \Rightarrow \frac{a+1}{a+1} = b$$

افزودن

$$b = \frac{a+1+1-1}{a+1} = \frac{a+1-1}{a+1} = \frac{a}{a+1} \xrightarrow{a \rightarrow \infty} [b] = 1$$

علامه (الف)

	0	1
n	-	+
$\log \frac{n}{2}$	+	-

$\rightarrow 0 < n < 1$ ✓

استقرار

$$(-\infty, -1) \cup (1, +\infty)$$

$$\log_q a + \log_q a = 2 \Rightarrow \log_q a = 1 \Rightarrow a = q$$

$$\log \Delta = 0, 1 \Rightarrow \log \Delta - \log \Delta = 0, 1 \Rightarrow \log \Delta = \log \Delta$$

$$\log \Delta = \log q = 0, 1$$

$$\frac{\sqrt{\Delta}}{|\Delta|} = \frac{\sqrt{9+16}}{2} = \frac{5}{2}$$

$$\log V = 2, 1 \Rightarrow \log V = 2, 1$$

$$\frac{\log V}{\log \frac{1}{2}} = \frac{1 + \log \Delta}{1 + \log V} = \frac{2}{2, 1} = \frac{20}{19}$$

$$\log \Delta = 1, \Delta$$

$$\log \frac{1}{2} = \frac{1}{2} \Rightarrow \log \frac{1}{2} = \frac{1}{2}$$

$$\log \frac{1}{2} = \frac{1 + \log \Delta}{1 + \log \frac{1}{2}} = \frac{1 + \log \Delta}{1 + \frac{1}{2}} = \frac{2 + 2 \log \Delta}{3}$$

$$\frac{1}{2} (\log \frac{1}{2})^m \rightarrow m = 1 + 2 \log \frac{1}{2} \Rightarrow \frac{m-1}{2} = \log \frac{1}{2}$$

$$\log \frac{1}{2} = \frac{1}{2} (2 + \log \frac{1}{2}) = \frac{1}{2} (2 + \frac{m-1}{2}) = \frac{m+3}{4}$$

$$(\frac{1}{2})^{m+1} = (\frac{1}{2})^m \Rightarrow m = -m+1 \Rightarrow m = 0$$

$$\log q \times \frac{1}{2} = \log \frac{1}{2} = \frac{1}{2} \times \log \frac{1}{2} = \frac{1}{2}$$

$$\frac{1}{2} \log \frac{b}{2} = \frac{1}{2} (1 + a) \Rightarrow \log \frac{b}{2} = 1 + a \Rightarrow 1 + a = \log \frac{b}{2} \Rightarrow a = \log \frac{b}{2} - 1$$

$$\Rightarrow \frac{\sqrt{b}}{2} = 2 \Rightarrow b = 16$$

$$\frac{1}{5} = \log \frac{1}{5} = \frac{\log a}{b} \quad \log a = \log b \quad \log a - \log b = 0$$

$$\log \frac{1}{5} = \frac{\log a}{\log b} \Rightarrow \frac{1}{5} = \frac{1}{\log b} \Rightarrow \log b = 5 \Rightarrow b = 10^5$$