



$$f(x) = -r + \left(\frac{1}{r}\right) Ax + B \xrightarrow{x=1}$$

$$y = x^r - x \begin{cases} x=1 \rightarrow y=0 \\ x=r \rightarrow y=r \end{cases}$$

$$\begin{cases} -r + \left(\frac{1}{r}\right) A + B = 0 \\ -r + \left(\frac{1}{r}\right) A + B = r \end{cases} \Rightarrow \begin{cases} A + B = r \\ -A - B = r \end{cases} \Rightarrow \begin{cases} A = -1 \\ B = 0 \end{cases}$$

$$f(r) = -r + \left(\frac{1}{r}\right) r \cdot r = r$$

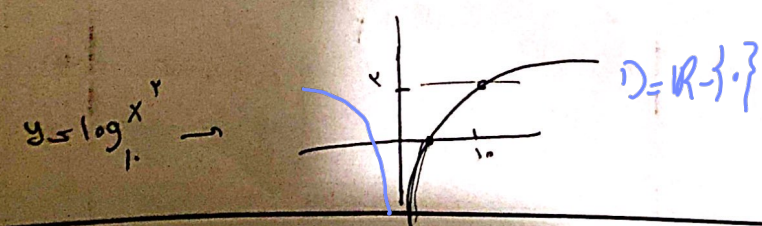
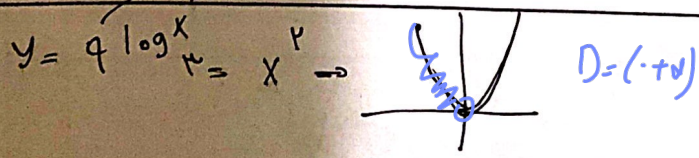
$$P(t) = P_0 \left(1 - \frac{1}{a}\right)^t$$

$$\frac{1}{a} = \left(\frac{1}{a}\right)^t \rightarrow \log \frac{1}{a} = t \rightarrow \log \frac{1}{a} = t \rightarrow \frac{\log \frac{1}{a}}{\log \frac{1}{a}} = t$$

$$\frac{1}{v} P_0 = P_0 \left(1 - \frac{1}{v}\right)^t$$

$$\frac{1}{v} = \left(\frac{1-v}{v}\right)^t \rightarrow \log \frac{1}{v} = t \log \frac{1-v}{v} \rightarrow t = \frac{\log \frac{1}{v}}{\log \frac{1-v}{v}}$$

$$\left(\frac{q}{1..}\right)^t \frac{1}{r} \rightarrow \log \frac{q}{1..} = t \rightarrow \frac{\log \frac{q}{1..}}{\log \frac{q}{1..}} = t$$



1)  $x=0 \rightarrow y = 1 - \log_c^{-b} = r \rightarrow bc = -1$

$$\begin{cases} b+c = -\frac{r}{c} \\ bc = -1 \end{cases} \rightarrow \begin{cases} b = -r \\ b = \frac{1}{c} \end{cases}$$

طابقه قرانه (+) باشد چون در این صورت C مقدر می شود

$$x = -1, a = \frac{r}{c} \rightarrow 1 - \log_{\frac{r}{c}}^{-b} = r \rightarrow a = 1 \quad (a+c)b = -r$$