

$$\rightarrow (\log 2) \Rightarrow 1 - \log_c^{-b} = 2 \rightarrow -1 = \log_c^{-b} \rightarrow \frac{1}{c} = -b \quad (1)$$

$$\rightarrow Cb = +1 \rightarrow Cb = -1 = P$$

$$\Rightarrow x^2 - Sm + P = x^2 + \frac{P}{x} n - 1 = 0 \rightarrow (n + \frac{1}{x})(n + 2)$$

$$\rightarrow n = +\frac{1}{x} \text{ و } -2 \rightarrow C = \frac{1}{x} \text{ و } b = -2 \rightarrow (\frac{-2}{x}, 0)$$

$$\rightarrow \log_c \frac{-\frac{2}{x} + 2}{\frac{1}{x}} \rightarrow a = 1 \rightarrow \text{خبرنامه بدین: } \frac{P}{x} * (-2) = \boxed{-\frac{2}{x}}$$

خبرنامه بدین

$$\rightarrow (\log 2) \Rightarrow 1 + Cx(r^a) = \frac{P}{x} \rightarrow Cx r^a = \frac{-1}{x} \quad (2)$$

$$\rightarrow (\log 0) \Rightarrow 1 + Cx(r^{a+b}) = 0 \rightarrow Cx r^{a+b} = -1$$

$$\Rightarrow r^b = r \Rightarrow b = +1 \rightarrow f(-1) = 1 + Cx r^{a-b} = 1 + \frac{1}{x} = \boxed{\frac{1+x}{x}}$$

مخرج

$$\begin{aligned} (\log 2) &\rightarrow C + \log_c \frac{b}{a} = 2 \\ (\log 0) &\rightarrow C + \log_c \frac{r^b}{r^{a+b}} = 0 \end{aligned} \xrightarrow{\text{دو طرفه}} \log_c \frac{b}{r^{a+b}} = 2 \rightarrow \frac{b}{r^{a+b}} = r^2$$

$$\rightarrow 40a + 20b = b \rightarrow 40a = -20b \rightarrow \boxed{\frac{a}{b} = \frac{-1}{2}}$$

$|x^2 - x| > a$  (۴)

$$\frac{x^2 - a - x}{-a^2 - a + x} \quad \frac{x^2 - a - x}{a^2 - a - x}$$

$x^2 - a - x \rightarrow \frac{(x+\sqrt{a})(x-\sqrt{a})}{(x+\sqrt{a})(x-\sqrt{a})} > 0 \rightarrow \frac{-1 + \sqrt{a}}{+1 - \sqrt{a}} \rightarrow (-\infty, -\sqrt{a}]$

$-a^2 - a + x \rightarrow -\frac{(x+\sqrt{a})(x-\sqrt{a})}{(x+\sqrt{a})(x-\sqrt{a})} > 0 \rightarrow \frac{-x + 1}{-1 + \sqrt{a}} \rightarrow [-\sqrt{a}, +1)$

$a^2 - a - x \rightarrow \frac{(x+\sqrt{a})(x-\sqrt{a})}{(x+\sqrt{a})(x-\sqrt{a})} > 0 \rightarrow \frac{-1 - \sqrt{a}}{-1 - \sqrt{a}} \rightarrow (x, +\infty)$

$\Rightarrow f(x) = (-\infty, -\sqrt{a}) \cup (x, +\infty)$

$g(1) = e \rightarrow f(1) = e \rightarrow x = x^{b-a} \rightarrow b-a=1$  (۵)  
 $\hookrightarrow f(-1) = 10 \rightarrow x^e = y^{b+a} \rightarrow \frac{b+a=e}{x^b = e \rightarrow b=e \rightarrow a=1}$  (۶)

$\rightarrow \text{دومینو} \Rightarrow x^b \cdot a = e - 1 = \frac{e}{e} \leftarrow \text{جواب}$

$y = x^2 - a = g(x)$  (۷)

$\rightarrow g(1) = 0 \rightarrow f(1) = 0 \rightarrow -x + (\frac{1}{x})^{A+B} = 0$

$\rightarrow x^{-(A+B)} = x^1 \Rightarrow A+B = \frac{-1}{1}$

$\rightarrow g(x) = x \rightarrow f(x) = x \rightarrow -x + (\frac{1}{x})^{A+B} = x \rightarrow -x + x^{-(A+B)} = x$

$\rightarrow xA + B = x \rightarrow \begin{cases} A+B = \frac{-1}{1} \\ xA + B = -x \end{cases} \Rightarrow \begin{cases} A = -1 \\ B = 0 \end{cases}$

$\rightarrow f(x) = -x + (\frac{1}{x})^x = -x + 1 = \boxed{+y} \leftarrow \text{جواب}$

$$\frac{1}{4} A_1 = A_1 \times \left(\frac{A}{A}\right)^{+14} \rightarrow 4 = \left(\frac{A}{A}\right)^{\frac{+}{4}} \rightarrow \log_4 4 = \frac{+}{4} \log_4 \frac{A}{A} \quad (7)$$

$$\Rightarrow \log_4 \frac{A}{A} + \log_4 4 = \frac{+}{4} + \frac{+}{4} = \frac{+}{4} (2 \log_4 \frac{A}{A} - 2 \log_4 \frac{A}{A})$$

$$\Rightarrow \frac{9A}{12 \times U} = \frac{+}{4} \left( \frac{1A}{12 \times U} \right) \Rightarrow \boxed{+ = 280} \leftarrow \text{جواب سوال}$$

$$\frac{A_1}{V} = \left(\frac{V A_1}{A}\right)^{\frac{+}{V}} \rightarrow \frac{1}{V} = \left(\frac{V}{A}\right)^{\frac{+}{V}} \rightarrow V = \left(\frac{A}{V}\right)^{\frac{+}{V}} \quad (8)$$

$$\Rightarrow \log_4 \frac{V}{V} = \frac{+}{V} \log_4 \frac{A}{V} \Rightarrow \frac{10}{4} = \frac{+}{V} \left( \frac{30}{14} - \frac{10}{4} \right)$$

$$\Rightarrow \frac{A}{V} = \frac{+}{V} \left( \frac{A}{A} \right) \Rightarrow \boxed{+ = 52} \leftarrow \text{جواب سوال}$$

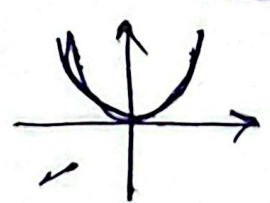
$$\frac{1}{r} = \left(\frac{94}{100}\right)^{\frac{+}{r}} \rightarrow r = \left(\frac{100}{94}\right)^{\frac{+}{r}} \rightarrow \log_4 r + \log_4 \frac{100}{94} \quad (9)$$

$$\Rightarrow \frac{rA}{100} = + (r - \log_4 94) = + (r - (5 \log_4 r + \log_4 3))$$

$$\rightarrow \frac{rA}{100} = + \left( \frac{r}{100} \right) \Rightarrow \boxed{+ = 25} \leftarrow \text{جواب سوال}$$

ج)  $9 \log_2^2 = 2 \log_2^2 = 2r^2 \Rightarrow$

$D = (0, +\infty)$



$\leftarrow 2r^2$

ب)  $y = 2 \log_2^2 \Rightarrow$

