

(1)

④

$$u = 1V$$

$$\sqrt{\log_r (x-1)} = r$$

$$\Rightarrow \log_r^{(\pi-1)} = r$$

$$\Rightarrow x-1 = 14$$

1.

4

4

$$a^r + b^r = \frac{(a+b)^r}{b} - \frac{rab}{r_v} = 100 - 2v = 4r \rightarrow \text{مجموع عدد } 4r$$

(2)

2

• به ازای $T = 0$ و n کتون متعارض خود را دارد

$$g(\underline{x-v}) = \frac{\omega(\underline{x-v})^T}{\kappa} + 11 = 11 \checkmark \rightarrow \min$$

$$f_{\log}(n) = \nu n^i + c_n - 1$$

②

$$g \circ f = (rx - r)^r - y(rx - r) + 1 = rx^r - r_0 x + r_1$$

$$r(y(n)) = r f(n) - 1r \quad \Rightarrow \quad g(n) = r/r f(n) - v$$

$$f(x) = -x + d \quad f(x) = r_f f(x) + v(-x + d) \rightarrow f(x) = \frac{v}{1-r_f}(-x + d)$$

$g(x) = 4x - 1$

$$\log(n) = \text{CREND}^*(n-1) + r = 9n - r + \epsilon = 9n + r$$

→ مش- جنوب، φ_2

$$\frac{r}{a} = 9 \Rightarrow \underline{a = -\frac{1}{9}} \rightarrow \underline{-1}$$

$$f(x) = a^x, \quad g(x) = \log_r x \quad (4)$$

$$f \circ g(x) = a^{\log_r x} = x^r \quad / \quad g \circ f(x) = \log_r a^x = x \quad (5)$$

$$r^x \text{ for } x \rightarrow x=r, x=1, x=0 \quad \checkmark \quad (\text{با زای ۳ صفر})$$

$$f\left(\frac{x^r - r}{x}\right) = x^r + \frac{r}{x^r} + x - \frac{r}{x} - r \quad (6)$$

$$\downarrow \quad \rightarrow \quad \left(x - \frac{r}{x}\right)^r + x - \frac{r}{x}$$

$$x^r + \frac{r}{x^r} = \left(x - \frac{r}{x}\right)^r + r$$

$$t = x - \frac{r}{x} \quad f(t) = t^r + t \quad \checkmark$$

$$Df \circ g = x \in Dg \cap g(x) \in Df \Rightarrow \log_r x \Rightarrow x > 0 = Df \quad (7)$$

$$\Rightarrow Df \circ g = (0, \infty) \cap \mathbb{R} \quad \rightarrow \quad \frac{1}{-1+t} = \dots$$

$$\rightarrow \min g(x) = g\left(\frac{r}{x}\right) = g(r) = 1 \quad \rightarrow Rg = (-\infty, 1] \quad \xrightarrow{\log_r} (-\infty, 2]$$

$$\rightarrow f \circ g(x) = \min \rightarrow f \circ g(r) = f(1) = 2 \quad \rightarrow Rf \circ g = [2, +\infty)$$

$$[0, 1) \cap [2, +\infty) \Rightarrow [2, +\infty) \quad Rf \circ g = (-\infty, 2] \quad \rightarrow A \cap Rg = (0, 2]$$

$$f \circ f(x) = 1 - r f(x)^r = f(x) = 1 - r x^r \quad (8)$$

$$h \circ g(x) = (x-1)^r + r(x-1) + 1 = x^r - r x^r + \delta x - r$$

$$x^r - r x^r + \delta x - r = 1 - r x^r \Rightarrow x^r + \delta x - r = 0$$

$$\xrightarrow{\text{شماره}} r x^r + \delta \quad \text{تابع شیب است، تابع صاف است} \quad \checkmark \quad \text{است - پس - زنده دارد}$$

$$f(x) = x - \frac{r}{x} \quad g \circ f(x) = a x^r + r x \quad (9)$$

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

$$\rightarrow \text{if } x = 1 \quad a f(x) + 1 = 1 \rightarrow a = 0$$

$$\text{if } x = -1 \quad -a + r = 1 \rightarrow a = r - 1$$