

$$\sqrt{y_r^{(n-1)}} = r \rightarrow n=1v$$

۱۰۰٪ : ۲۰ : B (دوازدهم) : B

$$D_{f \circ g} = \{n \mid n \in D_f, f(n) \in D_g\}$$

$$D_g: \frac{n^r - \varepsilon_{n+1}}{r} \rightarrow n=2$$

$$D_f: n > 1, y_r^{(n-1)} > \dots \rightarrow n \geq r^{-1}$$

$$D_{f \circ g} = [r, \infty) \cap \{1\} = \{1\}$$

$$r g - a = f^r - r f + 1$$

$$\rightarrow (r n^r - r n + 1) a = (r n^r + r a - r n) - r(r n - a) + 1$$

$$\rightarrow 0 = r n^r - r n + r a - r(r n - a) + 1$$

$$\alpha^r + \beta^r = S^r - r p \quad S = \frac{b}{a} = 1$$

$$g(r n) = a n^r + 1 \xrightarrow{n \rightarrow \infty} g(n) = \frac{a n^r}{r} + 1$$

$$g(n-v) = \frac{a(n-v)^r}{r} + 1$$

$$g_s = g(v) = 1$$

$$f(g(n)) = r g - r = r n^r - r n - 1 \rightarrow g(n) = \frac{r n^r - r n + r}{r} = n^r - n + 1$$

$$g \circ f(n) = g(f(n)) = f^r - r f + 1 = (r n - r)^r - r(r n - r) + 1 = r^r (n-1)^r - r^2 n + r^2 + 1$$

$$\begin{cases} (f-g)(n) = -n + 1 \\ r g = r f - 1 \end{cases}$$

$$f(n) = r n + r$$

$$g(n) = r n - 1 \rightarrow f \circ g(n) = ?$$

$$f \circ g(n) = r(r n - 1) + r = r^2 n - r + r = r^2 n$$

$$f \circ g(a) = 0$$

$$r a + r = 0 \rightarrow a = -\frac{1}{r}$$

