

IV



$$Dy = \left[-\frac{1}{4}, +\infty\right) \checkmark$$

②

$$Dy = 12 - \left\{ -\frac{1}{4} \right\}$$

$$y = \frac{p}{p+1}$$

②

$$a + r = r + r^2 b \rightarrow b = \frac{a-1}{r}$$

$$\rightarrow \frac{-a+p}{-1+b} = 1$$

$$-a + r_2 - 1 + b \rightarrow b_2 - a + r_2$$

20/05 ✓

$$b + C_2 \gamma(0)$$

(K)

④

۴۔ ریسہ مخرج (۱۱) ۴

$$\frac{(a+1)(a-1)}{a^2+aa+b} = \frac{(a+1)}{(a-c)} \rightarrow \frac{(a-1)}{(a-c)} = \frac{1}{1}$$

$$(\cancel{q_1 - c}) (q_1 - c)$$

$$(u-1)^T = u^T - 1 \quad u \neq 1$$

$$u-1, u-($$

$C = 1$

0 (a)

$$f(a), (a-x)^r(a-1) \quad g(a), f(a+1)+f(1-a)$$

$$f(a+1) \rightarrow f(t), (t-1-x)^r(t-1-1) = (t-1)^r(t-2) = (t^2-2t+1)(t-2) =$$

$$a+1=t \quad x=t-1 \quad t^3-2t^2+14t-2t^2+14t-2t^2 = t^3-1 \cdot t^2+14t-2t^2$$

صفت آفر...

$$f(t) = t^3 - 1 \cdot t^2 + 14t - 2t^2$$

$$f(1-a) \rightarrow f(t) = (1-t-x)^r(1-t-1) = (-t-1)^r(-t), (t^2+t+1)(-t) =$$

$$1-a=t \quad a=1-t \quad -t^3 - t^2 - t \quad f(a) = -a^3 - t^2 - fa$$

$$g(a) = a^3 - 1 \cdot a^2 + 14a - 2a^2 - a^3 - t^2 - fa = -14a^2 + 14a - 2t^2$$

(2) (4)

$$f(-1) + f(3) = ?$$

$$f(-1) \rightarrow 1-2a = -1 \quad -2a = -2 \rightarrow a = 1 \quad a > 0$$

$$f(-1), \sqrt{1}, 1$$

$$f(-1) + f(3) = 1 + 1 = 2$$

$$f(3) \rightarrow 1-2a = 3 \quad -2a = 2 \rightarrow a = -1 \quad a < 0$$

$$f(3), \sqrt{1} + 1, -1 + 1 = 1$$

$$f(a+\sqrt{a}) = a^2 + 2a \quad f(a) = ? \quad a+\sqrt{a} = 4 \quad a+\sqrt{a}-4=0 \rightarrow t^2+t-4=0 \quad \sqrt{a}=t \quad (2)$$

$$(t+3)(t-2) = 0 \rightarrow t = -3 \rightarrow \sqrt{a} = -3 \quad \text{و چون}$$

$$t=2 \rightarrow \sqrt{a}=2 \quad \text{و چون} \rightarrow a=4$$

$$f(4) = f^2 + 3 \times 4 = 16 + 12 = 28$$

$$f(a-1) + f(1-a) = ? \quad f(a-1) \rightarrow f(t), (t+1)^r + (t+1) \quad f(a) = (a+1)^r + a+1 \quad (1)$$

$$f(a) = a^r + a \quad t=a-1 \quad a=t+1$$

نیازی به t نبود اصلاً

$$f(1-a) \rightarrow f(t) = (1-t)^r + (1-t) \quad f(a) = (1-a)^r + 1-a$$

$$1-a=t \quad a=1-t$$

$$f(a) + f(1-a) = (a-1)^r + a + (1-a)^r + 1-a = a^r + 1 + 1 + a^r + 1 - a - 1 - a + 1 = 2a^r + 2$$

$$= 2a^r + 2$$

$$f(n-1) = (n-1)^r + (n-1)$$

$$f(1-n) = (1-n)^r + (1-n)$$

صفت

-1

(2) (9)

$$f(x) = \sqrt{f_0 x - f_0^2} + k - 1 \quad D_f = \left[ \frac{f_0}{\epsilon}, +\infty \right) \quad \frac{\frac{f_0}{\epsilon}}{\epsilon} \quad - \quad \phi \quad +$$

$$g(x) = \sqrt{b - f_0 x} + 3k \quad D_g = (-\infty, \frac{b}{\epsilon}] \quad \frac{b}{\epsilon} \quad + \quad \phi \quad -$$

$$D_{f \cap g} = D_f \cap D_g = \{1\} \quad \eta_{D_f \cap D_g} = 1 \rightarrow \text{فقط ستاری که صفر را عبارت زیر رادیکال را منفرد کند} \rightarrow \frac{f_0}{\epsilon} = \frac{b}{\epsilon} = 1$$

$$b = f_0 \alpha = \frac{f_0^2}{f_0}$$

$$y = 2f - g = 2k - 1 \rightarrow x = 1$$

$$2(\sqrt{f_0 x - f_0^2} + k - 1) - (\sqrt{b - f_0 x} + 3k) = k$$

$$2k - 2 - 3k = k \quad -2 - k = k \quad -2 = 2k \rightarrow k = -1$$

$$f_0 \alpha - \frac{b}{f_0} - k = 2 \times \frac{f_0}{f_0} - \frac{f_0}{f_0} - (-1) = f_0 - 1 + 1 = f_0$$

$$f(x) = \sqrt{m - x} + n \quad \frac{m}{x} \quad + \quad \phi \quad - \quad D_f = (-\infty, m]$$

(2) (10)

$$g(x) = \sqrt{x + 1} \quad \frac{-1}{x} \quad - \quad \phi \quad + \quad D_g = [-1, +\infty)$$

$$D_{g \cap f} = D_g \cap D_f = (-\infty, m] \cup [-1, +\infty) = [-1, m] \rightarrow m = \sqrt{5} \quad f(x) = \sqrt{5 - x} + n$$

$$f - g(x) = f(x) - g(x) = 4\sqrt{2} = \sqrt{5 - x} + n - \sqrt{x + 1} = \sqrt{5} + n - \sqrt{1} =$$

$$4 - 2\sqrt{2} + n = 4\sqrt{2} \quad n = 1\sqrt{2} - 2 \quad m + n = \sqrt{2} - 2 + \sqrt{5} = 1\sqrt{2} + \sqrt{5}$$

$$f(1-n) = (1-n-r)^r (1-n-1) = -n(n+r)^r$$

$$f(n+1) = (n+1-r)^r (n+1-1) = n(n-r)^r$$

$$g(n) = n(n-r)^r - n(n+r)^r = n((n-r)^r - (n+r)^r) =$$

$$= n((n-r-n-r)(n-r+n+r)) = n(-2n) = -2n^2$$