

نام و نام خانوادگی: بهرلاد حسین باغبان کالیف، آدرس: دره خنجر A

$$y = \sqrt{x-4} + (x-2) \rightarrow x = y-2 + \sqrt{y-4} \Rightarrow \text{...}$$

$$x = y-2 + \sqrt{y-4} \rightarrow 2 = \sqrt{y-4}$$

$$4 + 4 = y = 8$$

$$\text{ارتفاع} = \frac{y}{2} = \frac{8}{2} = 4$$

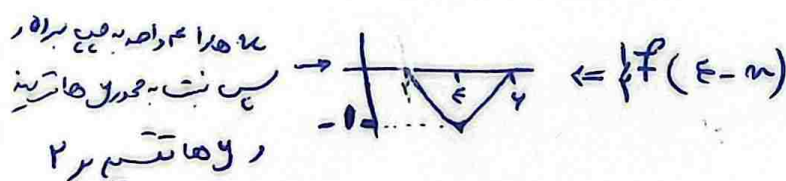
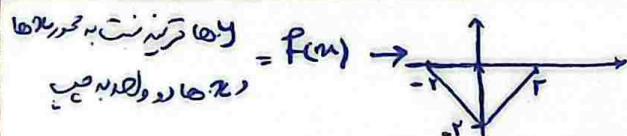
$$\text{قاعده} = 12$$

$$\begin{cases} x=0 \rightarrow 3(0)+1=1 \\ x=4 \rightarrow 3(4)+1=13 \end{cases} \rightarrow 13-1=12$$

$$S = \frac{12 \times 4}{2} = 24$$

$$2\left(2 + \frac{a}{2}\right) = 4 + a \quad -2(2) + a = -4 + a = y_{A'}$$

$$-4 + a = 2(4 + a) - 8 \rightarrow -4 + a = 8 + 2a - 8 \rightarrow a = -4$$



مجموعه $x = \{-1, 2, 5\} \leftarrow f(x)$ تغییرات x ها: یک واحد به راست و یک
تقسیم بر ۳

مجموعه $x' = \{0, 1, 2\} \leftarrow f(x_{n-1})$

$$-(n+2)f(x_{n-1}) \rightarrow \begin{array}{c} -2 & 0 & 2 \\ | & | & | \\ -1 & +1 & -1 \end{array}$$

$$D = [-2, 0] \cup [1, 2]$$

$$f \circ g = \{ (r, r), (r, a) \}$$

$$f(g(r)) = r \quad / \quad f(g(r)) = a$$

$$f \circ g = \{ (1, 0), (0, 1), (2, 1) \}$$

$$g \circ f = \{ (r, r), (r, r) \} \quad D_{f \circ g} \cap D_{g \circ f} = \{ r \}$$

$$g \circ f(r) - f \circ g(r) = r - 1 = r$$

$$-1 \leq \sin x \leq 1 \rightarrow 0 \leq \sin^2 x \leq 1 \rightarrow -1 \leq -\sin^2 x \leq 0$$

$$\begin{array}{ccc} 1 - \sin^2 x & & 1 - \cos^2 x \\ \uparrow & & \uparrow \\ f \circ f(\sin^2 x) = f(\cos^2 x) = \sin^2 x \end{array}$$

$$f(r) = r(r) + r \rightarrow f(r) = r \rightarrow f(n) = r_n + r - r = r_n - r$$

$$f \circ f(x) = r(r_n - r) - r = 9x - 1 \quad \frac{x=0}{y=?} \rightarrow \boxed{y = -1}$$

$$f \circ g = r(a^r - r_n + 1) - a = r_n^r - 4n + 11$$

$$\begin{aligned} g \circ f &= (r_n - 0)^r - r(r_n - 0) + 11 = r_n^r + r - 6n - 4n + 10 + 11 \\ &= r_n^r - 24n + 22 \rightarrow f \circ g(n) = g \circ f(n) \end{aligned}$$

$$\begin{aligned} r_n^r - 4n + 11 &= r_n^r - 24n + 22 \rightarrow r_n^r - 20n + 11 \\ &\rightarrow \begin{cases} S = -\frac{b}{a} = \frac{r_0}{r} = 10 \\ P = \frac{c}{a} = \frac{r_0}{r} \end{cases} \end{aligned}$$

$$a^r + b^r = S^r - rP = 100 - r\left(\frac{r_0}{r}\right) = 4r$$