

۱۱, ۵

$$D_f = [-1, 2]$$

$$f(x_m - 1) \Rightarrow D_f = ? \Rightarrow -1 \leq x_m - 1 \leq 2$$

$$-1 \leq x_m - 1 \leq 2 \Rightarrow -2 \leq x_m \leq 3 \Rightarrow -\frac{2}{3} \leq u \leq \frac{3}{3} \Rightarrow [-\frac{2}{3}, 1]$$

$$D_f = [-1, 2] \Rightarrow D_{f(x)} = ? \Rightarrow -1 \leq x_m - 1 \leq 2 \Rightarrow -2 \leq x_m \leq 3$$

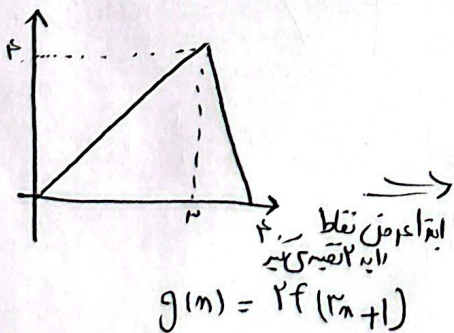
$$\Rightarrow -\frac{2}{3} \leq u \leq 0 \Rightarrow [-\frac{2}{3}, 0] \quad -2 \leq x_m \leq -1 \quad D_f = [-1, 2]$$

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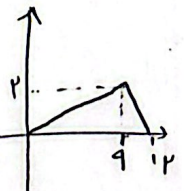
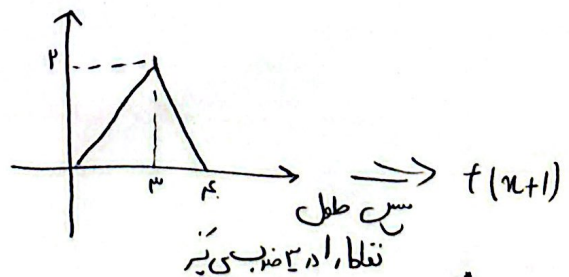
$$f(x) = x + \sqrt{x-2} \xrightarrow{\substack{\text{نقطه انتقال} \\ \text{نقطه} \\ x \rightarrow x-2}} x-2 + \sqrt{x-2-2} = x-2 + \sqrt{x-4} \Rightarrow x = y-2 + \sqrt{y-4}$$

$$\Rightarrow x = y = y-2 + \sqrt{y-4} \Rightarrow y = y-2 + \sqrt{y-4} \Rightarrow 2 = \sqrt{y-4} \Rightarrow 4 = y-4 \Rightarrow y = 8$$

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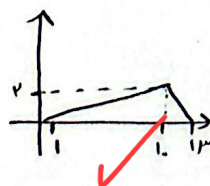


$$f(x_{m+1})$$



$$[12] = \frac{12 \times 2}{2}$$

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سایت طول نقاط را اندازه گیری می کند

14

$$y = f(m)$$

$$y = a + r f\left(\frac{x-a}{r}\right) \Rightarrow \begin{cases} \frac{m-a}{r} = y_0 \\ y' = a + r y_0 \end{cases}$$

نقطه $A(r, -r)$ روی $f(t)$ قرار دارد
 A, K
 متناظر بر روی
 نمودار f

$$\Rightarrow \frac{m'-a}{r} = r \Rightarrow m' - a = r^2 \Rightarrow m' = a + r^2$$

$$y' = a + r y_0 \Rightarrow a + r(-r) = a - r$$

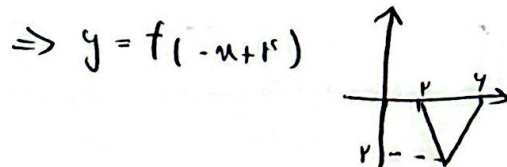
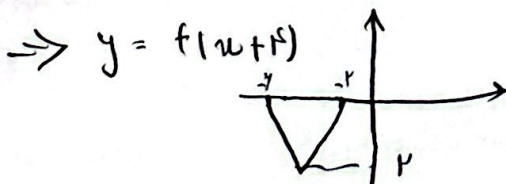
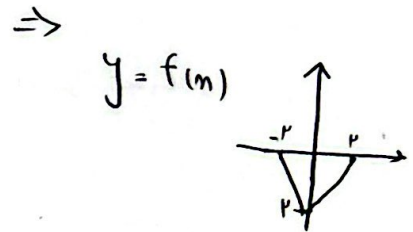
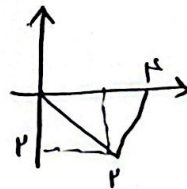
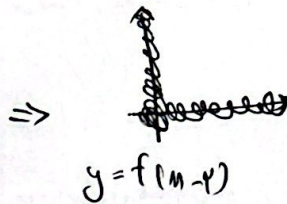
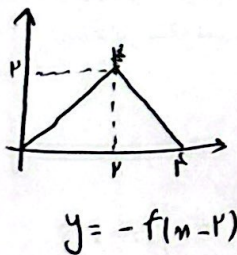
$$\Rightarrow A' = (a + r^2, a - r) \Rightarrow a - r = r(a + r) - a$$

طبق سوال
 نقطه A'
 عبور کند
 r_{m-a}

$$\Rightarrow a - r = r a + a - r^2 \Rightarrow \boxed{a = -r}$$

(2)

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$$\Rightarrow y = \frac{1}{r} f(r-m) \Rightarrow$$

(2)

$$r_{m-1} \begin{cases} = 1 \\ = r \\ = 0 \end{cases}$$

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(16)

$$y = \sqrt{-(m+r)f(rm-1)} \Rightarrow - (m+r)f(rm-1) \geq 0 \Rightarrow [1, \infty) \subseteq f(m) \text{ دامنه}$$

طبق نمودار

$$\Rightarrow -1 \leq rm - 1 \leq 0 \Rightarrow 0 \leq rm \leq r \Rightarrow rm \leq r \Rightarrow -(m+r)f(rm-1) \geq 0$$

$$\Rightarrow (m+r)f(rm-1) \leq 0 \Rightarrow \begin{matrix} (m+r) \\ \in [-1, 0] \end{matrix} \Rightarrow m+r \leq 0 \Rightarrow m \leq -r$$

$(-1, 0] \subseteq D_f \Rightarrow [0, r]$

$$\frac{-r}{-} \cdot \frac{1}{-} \cdot \frac{r}{-}$$

$$D_f = [-r, 0] \cup [1, r]$$

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$$f(n) = |p_n - r| + 1 \Rightarrow g(n) = f(n+k) - r \Rightarrow |p(n+k) - r| + 1 - r \Rightarrow \textcircled{1}$$

$$|p_n + r_k - r| - r \Rightarrow f(n) = g(n) = 0 \Rightarrow f(n) = |p_n - r| + 1 = 0$$

$f(1) = 2 \quad y = 0$

$|p_n - r| = -1$ غلط

$$\Rightarrow f(n) = g(n) \Rightarrow |p_n - r| + 1 = |p_n + r_k - r| - r \Rightarrow |p_n - r| - |p_n + r_k - r| = -r$$

$|r_k - r| = 4 \rightarrow k = \frac{4}{r}$

$p_n + r_k - r \geq 0 \Rightarrow n \geq \frac{r - r_k}{p} \rightarrow k = -\frac{r}{p}$ غلط

$n \geq \frac{r}{p} \Rightarrow$ مطلقاً $\Rightarrow (p_n - r) - (p_n + r_k - r) = -r \Rightarrow p_n - r - p_n - r_k + r = -r$

$|k = \frac{r}{p}| \leftarrow = -r$

معبر طولی

$$f(n) = \frac{p_n - 1}{n+1} \Rightarrow y \rightarrow -y$$

قربینیت

$$-y = \frac{-p_n + 1}{n+1} \Rightarrow -f(n) = \frac{-p(\frac{n}{r}) + 1}{\frac{n}{r} + 1}$$

$\frac{-\frac{r}{p}n + 1}{\frac{n}{r} + 1}$ ✓ $\textcircled{1}$

$$\frac{-p_n + r}{n+r} + k = \frac{p_n - 1}{n+1}$$

$$(k-1)n^2 + \epsilon n (k-1) + rk + 1$$

اگر معادله خط باشد یک جواب دارد $\leftarrow k=4$