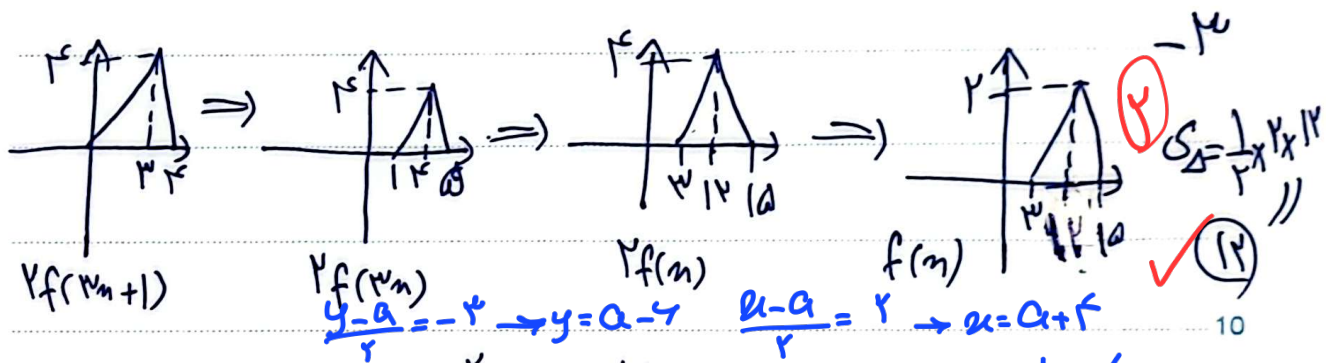


الف) $-15x_2 - 21x_2 + 2 \rightarrow -21x_2 \leq 4 \rightarrow \frac{-21}{15} x_2 \leq \frac{4}{15}$ $\frac{-21}{15} x_2 \leq \frac{4}{15}$ ✓

ب) $-15x_2 - 21x_2 + 2 \rightarrow -21x_2 \leq 10 \rightarrow \frac{-21}{15} x_2 \leq \frac{10}{15}$ $\frac{-21}{15} x_2 \leq \frac{10}{15}$

$-15 \leq x_2 \leq -2 \rightarrow -15 \leq x_2 - 2 \leq -8 \rightarrow D_f = [-15, -8]$

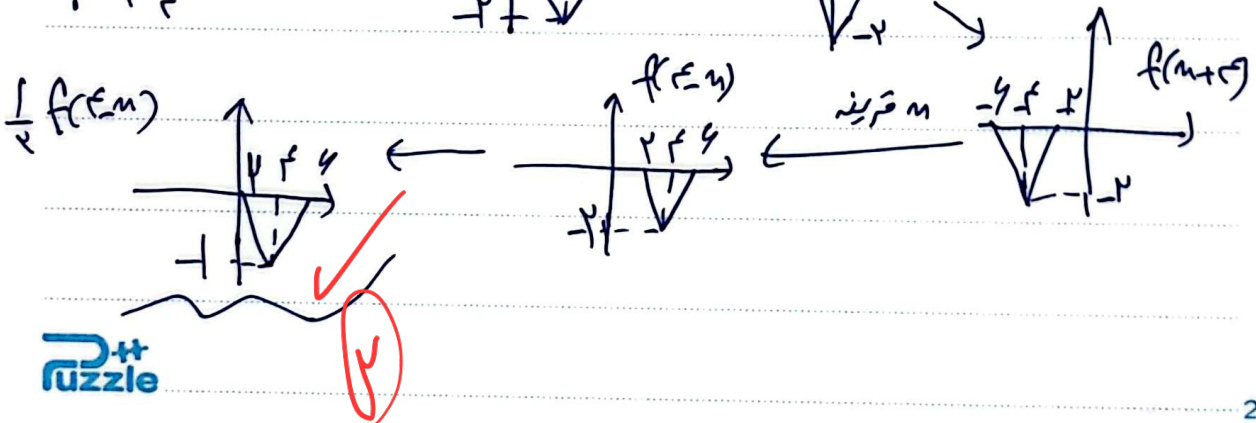
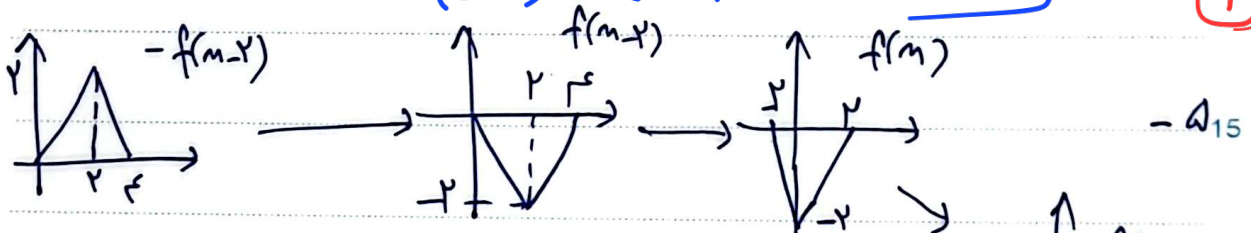
$f(x) = x + \sqrt{x-2}$ $\xrightarrow{\text{تبدیل متغیر}}$ $f(x-2) = (x-2) + \sqrt{x-2}$ $\xrightarrow{y=x-2}$ $y = x-2 \Rightarrow x = y+2$
 $\sqrt{y+2-2} = y+2-2 + \sqrt{y+2-2} = y$
 $\sqrt{y} = y \Rightarrow y = 1 \Rightarrow x = 3$



$$f(y) = -\psi \circ A'(n, y) \xrightarrow{y = \gamma n - 1} A \Big|_{\gamma n - 1} \quad \psi = \psi a + n \quad A \Big|_{\substack{a + \psi \\ a - \gamma - \psi}}$$

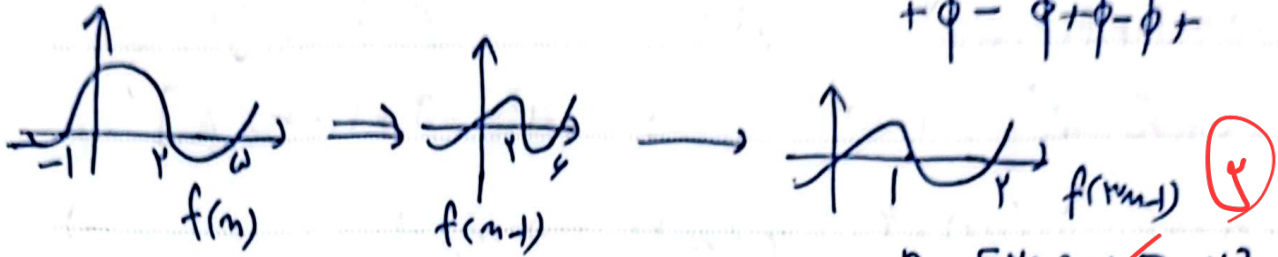
$$f\left(\frac{n-a}{\psi}\right) = \frac{\gamma-a}{\psi} \checkmark \rightarrow f(n') = \frac{n-a-\gamma-1}{\psi} = \frac{n-\psi a-1}{\psi} = -\psi \quad \boxed{n=\gamma} \quad \boxed{a=\psi}$$

$$n' = \frac{n-a}{\psi} \Rightarrow y = \psi n' - 1 = \psi\left(\frac{n-a}{\psi}\right) - 1 = n-a-1 \quad \& \quad \frac{n-a}{\psi} = \psi \Rightarrow \boxed{a=-\gamma} \quad (-10)$$



$$-(n+2) \times f(n+1) \xrightarrow{x-1} (n+2) f(n+1) \text{ is } -2$$

$$\begin{array}{ccccccc} & -2 & & 0 & & 2 & \\ + & \phi & - & \phi & + & \phi & - \end{array}$$



$$Dy = [-2, 0] \vee [0, 2]$$

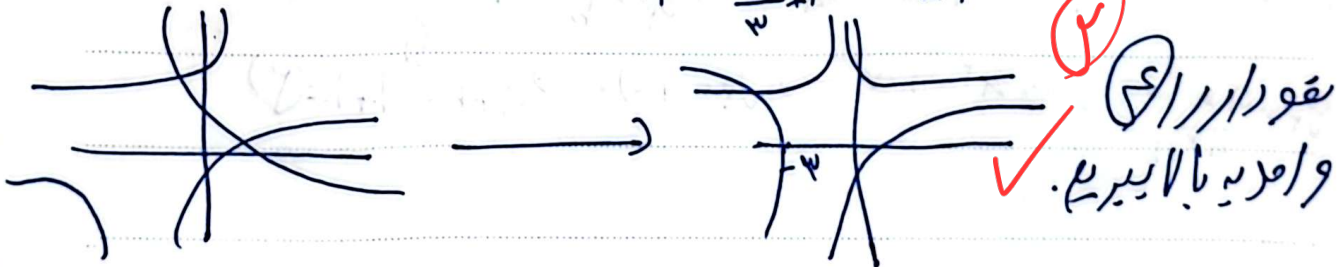
$$f(n) = |2(n+k) - 3| + 1 - 3 \Rightarrow g(n) = |2n + 2k - 3| - 2$$

$$y \text{ is odd } \Rightarrow n=0 \Rightarrow |2(0) - 3| + 1 = 2 = |2(0) + 2k - 3| - 2 \Rightarrow 4 = |2k - 3| - 2$$

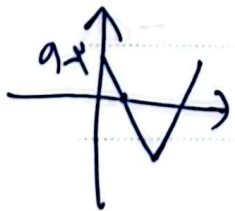
$$\checkmark \text{ (i) } \boxed{k = \frac{7}{2}} \leftarrow 4 = 2k - 3$$

$$\checkmark \text{ (ii) } k = \frac{5}{2} \leftarrow -4 = 2k - 3$$

$$f(n) = \frac{2n-1}{n+1} \Rightarrow \frac{-2n-1}{n+1} = \frac{-2n}{n+1} \Rightarrow \frac{1-2n}{n+1} = \frac{2-2n}{n+2}$$



مقدار را در ۱/۲
و عدد بالا ببریم.



$$a+2-a+2=4: 0 \times 6 \quad -10$$

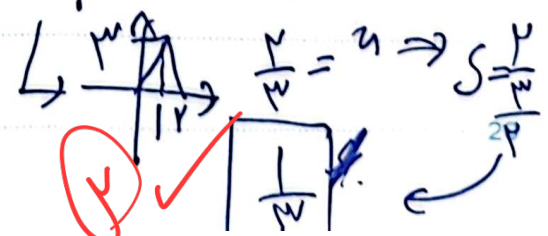
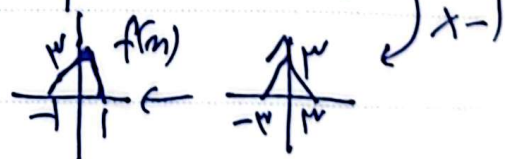
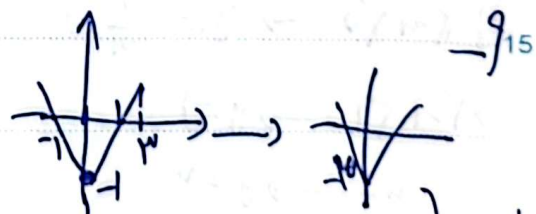
$$\frac{4}{2} = 2: \text{ (تعداد)}$$

$$60+60=120 \rightarrow 9 \times \frac{2+3-5}{2} + \frac{1}{2}$$

$$\leftarrow a^2 - 5a + 6 = 0 \quad \frac{1}{2} \quad \frac{1}{2}$$

$$f(n) = |n-1| = 1$$

$$f\left(\frac{1}{2}\right) = \frac{1}{2} - \frac{3}{2} = -1$$



$$\checkmark \text{ (i) } a=1$$

$$\checkmark \text{ (ii) } a=3$$