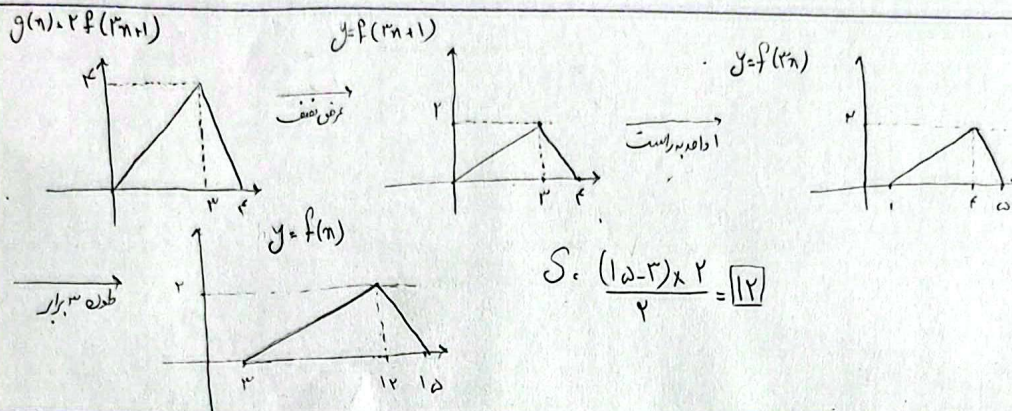
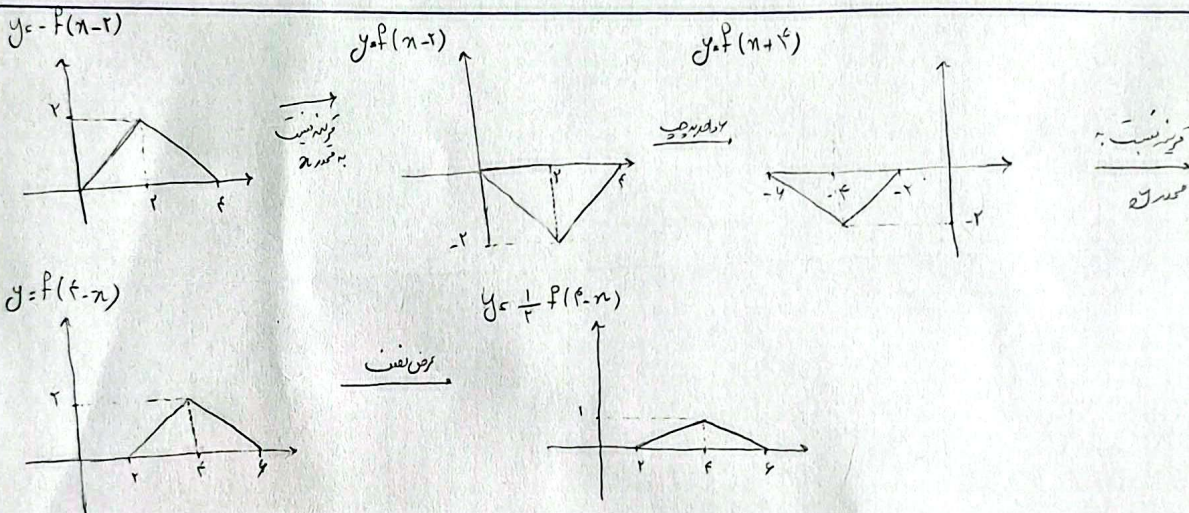


الف) $4 \leq 2n-2 \leq 2 \Rightarrow 2 \leq n \leq 2 \Rightarrow \frac{2}{2} \leq n \leq \frac{2}{2} \rightarrow D: [\frac{2}{2}, \frac{2}{2}]$
 ب) $4 \leq 2n-2 \leq 2 \Rightarrow 2 \leq n \leq 2 \Rightarrow -1 \leq 2n-2 \leq -1 \rightarrow D: [-1, -1]$

$f(n) = n + \sqrt{n-2}$ $\xrightarrow{\text{تجزیه نسبت به } n}$ $n + 2 - \sqrt{n-2} = g(n)$ $g(n) = n \Rightarrow n + 2 - \sqrt{n-2} = n$
 $\Rightarrow 2 = \sqrt{n-2} \Rightarrow 4 = n-2 \Rightarrow n = 6 \Rightarrow y = 6$



$A(2, -2) \quad y = f(n)$
 $\frac{n-a}{2} = 2 \Rightarrow n = 4+a \rightarrow A'(4+a, -2) \Rightarrow y = 2n-1 \Rightarrow a-2 = 2(4+a)-1 = 8+2a-1 = 7+2a \Rightarrow a = -2$
 $a + 2(-2) = a-4 = y$



$y = \sqrt{-(n+2)f(n-1)}$ $-(n+2)f(n-1) \geq 0$ $f(n-1) \leq 0$

n	-2	-1	0	1	2
$f(n-1)$	+	-	-	-	+
y	+	-	-	-	+

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

$f(n) = |n-3|+1$ $\xrightarrow{\text{داده به } K}$ $|n-3+K|+1$ $\xrightarrow{\text{داده به } 3}$ $|n-3+K|-2 = g(n)$
 $f(n) = g(n) \Rightarrow |n-3|+1 = |n-3+K|-2 \xrightarrow{\text{طبق فرض } K=0} |2-3|+1 = |2-3+K|-2 \Rightarrow 2 = |K-3|-2 \Rightarrow 4 = |K-3|$
 $\Rightarrow K-3 = 4 \Rightarrow K = 7$
 $\Rightarrow K-3 = -4 \Rightarrow K = -1$

$f(n) = \frac{n-1}{n+1}$ $\xrightarrow{\text{نسبت به } n}$ $f(n) = \frac{n-1}{n+1}$ $\xrightarrow{\text{طرحه ۳ بار}}$ $f(\frac{n}{3}) = \frac{\frac{n}{3}-1}{\frac{n}{3}+1} = \frac{n-3}{n+3} = g(n)$
 $g(n) + K = f(n) \Rightarrow \frac{n-3}{n+3} + K = \frac{n-1}{n+1} \Rightarrow -2 + \frac{9}{n+3} + K = \frac{n-1}{n+1} \Rightarrow K = \frac{n-1}{n+1} + 2 - \frac{9}{n+3}$

