

۱۹۵۰ آزمون ۱

$F(3x-2) \rightarrow D = [-12, -2]$ $F(x)?$

$-12 \leq x \leq -2$

$-12 \leq 3x \leq -6$

$-12 \leq 3x-2 \leq -8$

$D_{F(x)} = [-12, -8]$ ✓

$F(x) \rightarrow D = [-2, 2]$ $F(3x-2)?$

$-2 \leq 3x-2 \leq 2$

$-2 \leq 3x \leq 4$

$-\frac{2}{3} \leq x \leq \frac{4}{3}$

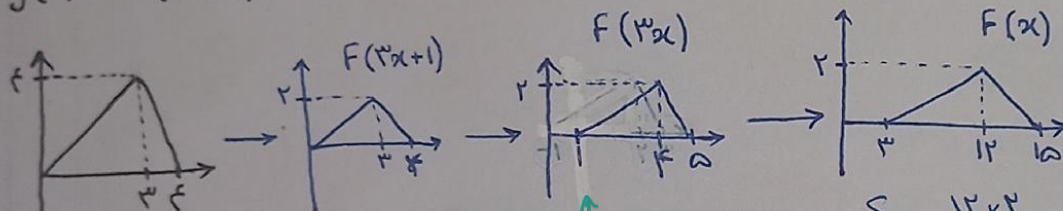
$D_{F(3x-2)} = \left[-\frac{2}{3}, \frac{4}{3}\right]$ ✓

$F(x) = x + \sqrt{x-2} \xrightarrow[\text{راست}]{\text{در دایره ۳}} F(x) = x-2 + \sqrt{x-2-2} = x-2 + \sqrt{x-4}$

$\xrightarrow[\text{نسبت}]{\text{قرینه}} \left. \begin{aligned} y=x \\ x=y-2+\sqrt{y-4} \end{aligned} \right\} \begin{aligned} y=y-2+\sqrt{y-4} \rightarrow 2=\sqrt{y-4} \rightarrow 4=y-4 \rightarrow y=8 \end{aligned}$

نیمساز
تعادل $\rightarrow y=x$

$g(x) = 2F(3x+1)$



$1 \leq 3x+1 \leq 13$

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

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$A(2, -3) \rightarrow y = F(x) \quad A' \rightarrow y = a + 2F\left(\frac{x-a}{2}\right), y = 2x-1$

عرض نقاط $\rightarrow 2 \text{ در } 2 \rightarrow a \text{ یار } 2 \rightarrow -2(r) + a \rightarrow -4 + a \rightarrow \frac{2}{2} - \frac{a}{2}$

طول نقاط $\rightarrow + \frac{a}{2} \rightarrow x2 \rightarrow (2 + \frac{a}{2}) \times 2 \rightarrow 4 + a$

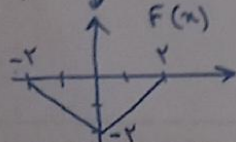
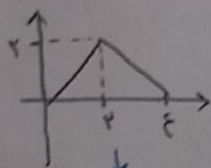
$A' \begin{vmatrix} 4+a \\ -4+a \end{vmatrix}$

$\rightarrow -4+a = 2(4+a)-1 \rightarrow -4+a = 8+2a-1 \rightarrow a = -4$ ✓

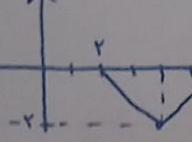
$y = -F(x-2)$

$y = \frac{1}{2}F(5-x)$

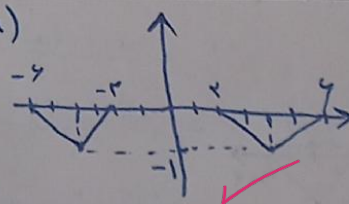
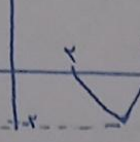
$\frac{1}{2}F(5-x)$

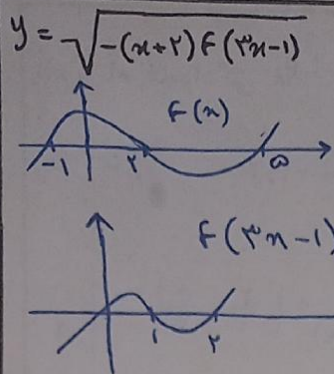


$F(x+5)$



$F(5-x)$





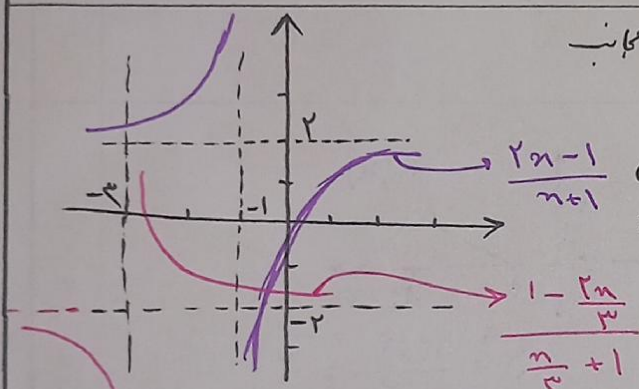
	-2	0	1	2
$-(n+2)$	+	0	-	-
$F(3n-1)$	-	-	0	+
	-	+	+	-
		+	+	-

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

$F(x) = |2x - 3| + 1$ K را به پایین $K > 0$

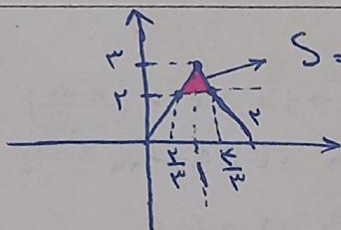
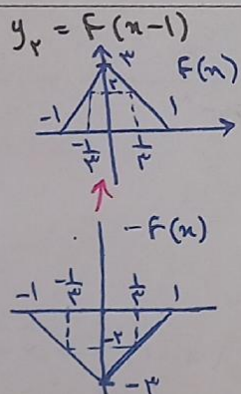
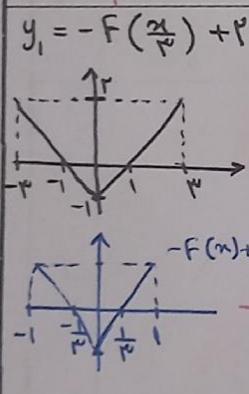
$g(x) = |2(x+K) - 3| + 1 - 3$

y روی محور $x=0 \rightarrow |-3|+1=4 = |2K-3|-2 \rightarrow 2K-3=4 \rightarrow K=\frac{7}{2}$ ✓
 $\rightarrow 2K-3=-4 \rightarrow K=-\frac{1}{2}$ $\overline{00}$



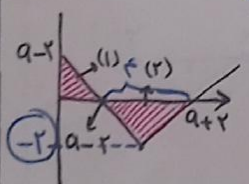
در صورتی یک جواب بیانی که به جانب افقی نمودار قدم با اولی یکی شود پس آن جواب را در اولی قرار می دهیم یک جواب خواهد داشت

$\frac{2n-1}{n+1}$
 $\frac{1-2n}{1+n}$
 $\frac{1-\frac{2n}{2}}{1+\frac{n}{2}}$



$S = \frac{1 \times \frac{2}{3}}{2} = \frac{1}{3} = \frac{1}{3}$

$F(x) = |x-a| - 2$ $S_1 + S_2 = \frac{9}{2}$ $F(\frac{1}{a})?$ $a > 0$



$S_1 = \frac{(a-2)(a-2)}{2} = \frac{a^2 - 4a + 4}{2}$

$S_2 = \frac{2(+2)}{2} = 2$

$F(x) = |x-3| - 2$

$F(\frac{1}{3}) = \frac{2}{3}$ ✓

$a^2 - 4a + 4 = 0$
 $a^2 - 4a + 4 + 4 = 8 \rightarrow a^2 - 4a + 8 = 8$ ✓