

نام و نام خانوادگی پاسنامه تشریحی تکلیف شماره ... کلاس ... (دانشه) (فصل)

الف) $-4 \leq x \leq 2 \xrightarrow{\times 3} -12 \leq 3x \leq 6 \xrightarrow{-2} -14 \leq 3x-2 \leq 4$

$D_{f(3x-2)} \Rightarrow [-14, 4]$

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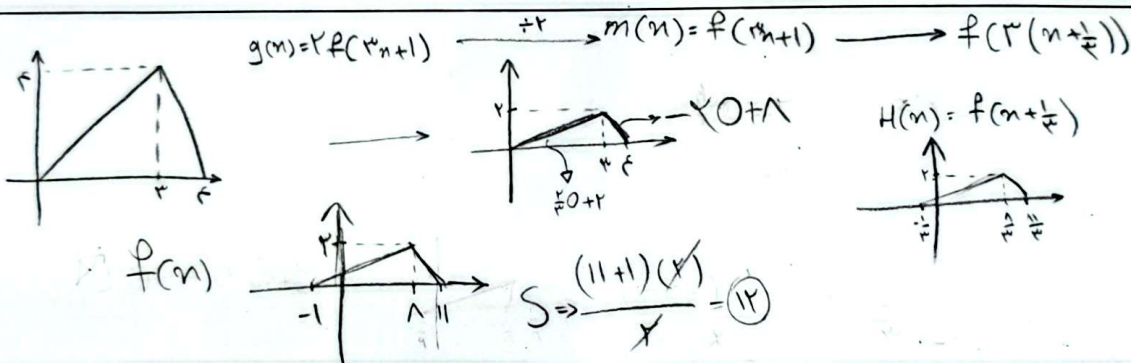
ب) $-2 \leq x \leq 2 \xrightarrow{\times 3} -6 \leq 3x \leq 6 \xrightarrow{-2} -8 \leq 3x-2 \leq 4$

$\rightarrow D_f = [-8, 4]$

$x + \sqrt{x-2} \xrightarrow{\text{قرینه‌سازی}} x-2 + \sqrt{x-2} \xrightarrow{\text{تبدیل به مربع کامل}} (x-2) + \sqrt{x-2} = 4 \rightarrow x-2 = 4 \rightarrow x = 6$

$x-2 + \sqrt{x-2} = 4 \rightarrow \sqrt{x-2} = 6 \rightarrow x-2 = 36 \rightarrow x = 38$
 $x-2 = 4 \rightarrow x = 6$
 $\boxed{x = 6}$

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$y = f(x) \rightarrow -2 = f(x)$

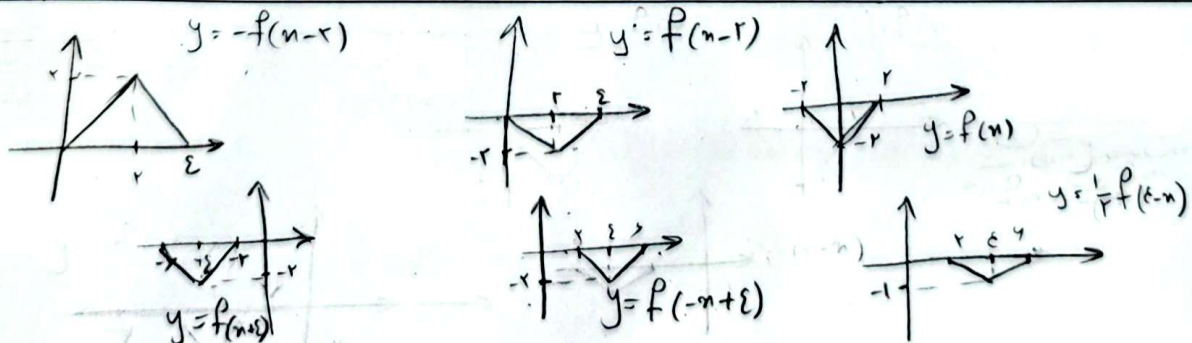
$3x-1 = a + 2f\left(\frac{x-a}{2}\right) \rightarrow f\left(\frac{x-a}{2}\right) = \frac{3x-1-a}{2}$

$\frac{x-a}{2} = 2 \rightarrow x-a = 4 \rightarrow x = a+4$
 $\frac{3x-1-a}{2} = -2 \rightarrow 3x-1-a = -4 \rightarrow 3x-a = -3 \rightarrow x = \frac{a-3}{3}$

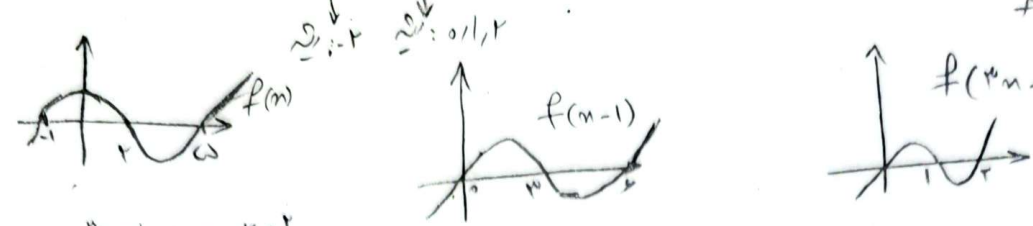
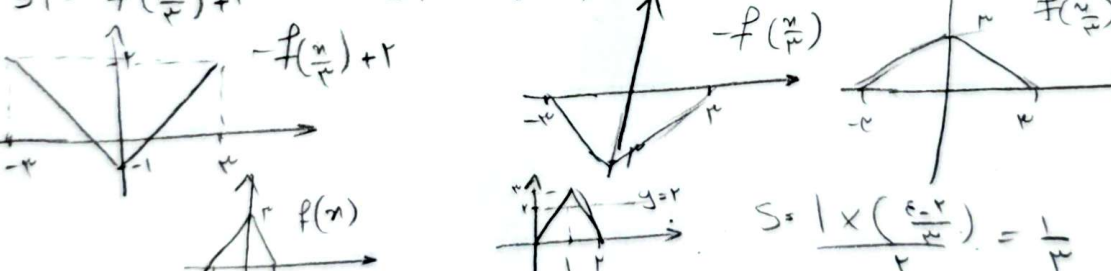
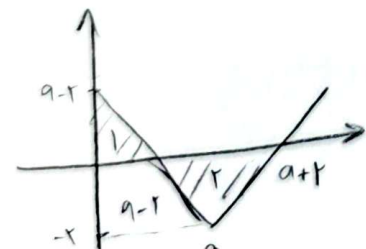
$\frac{x-a}{2} = 2 \rightarrow x-a = 4 \rightarrow x = a+4$

$\frac{3x-1-a}{2} = -2 \rightarrow 3x-1-a = -4 \rightarrow 3x-a = -3 \rightarrow x = \frac{a-3}{3}$

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$y = \sqrt{-(n+r)f(n-1)}$ $D_f = [-r, 0] \cup [1, r]$  $r_{n-1} = a \rightarrow k = r$ $r_{n-1} = -1 \rightarrow k = 0$ $r_{n-1} = r \rightarrow k = 1$	6
$f(n) = r_n - r + 1 \xrightarrow{\text{نقطة } K} r(n+k) - r + 1 \xrightarrow{\text{نقطة } r} r(n+k) - r - r$ $\log_{\text{نقطة } r} \rightarrow n=0 \quad g(0) = rk - r - r = f(n) = -r + 1 = \varepsilon$ $rk - r - r = \varepsilon \rightarrow rk - r = \pm \varepsilon \xrightarrow{\text{نقطة } r} rk - r = +\varepsilon$ $k = \frac{\varepsilon}{r} = f(n)$	7
$f(n) = \frac{r_{n-1}}{n+1} \xrightarrow{\text{نقطة } r} -\frac{(r_{n-1})}{n+1} \xrightarrow{\frac{1}{r}} -\frac{(\frac{r}{n} - 1)}{\frac{n}{r} + 1} \Rightarrow \frac{r - r_n}{n+r}$ $g(n) = \frac{r - r_n}{n+r} + K \quad \boxed{K = f}$	8
$y_1 = -f(\frac{n}{r}) + r \quad y_r = f(n-1)$  $S = 1 \times \left(\frac{\varepsilon - r}{r} \right) = \frac{1}{r}$	9
 $S_1 = \left \frac{(a-r)(a-r)}{r} \right = \frac{(a-r)^2}{r}$ $S_r = \left \frac{((a-r) - (a+r)) \times r}{r} \right = \varepsilon$ $\frac{(a-r)^2}{r} + \varepsilon = \frac{a}{r} \rightarrow a^2 - \varepsilon a + \varepsilon = 1 \rightarrow a = r$ $f(n) = n - r - r \rightarrow f(\frac{1}{r}) = \frac{1}{r} - r - r = \left(\frac{r}{r} \right)$	10