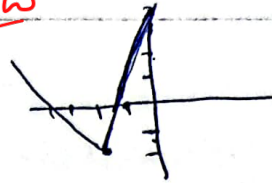


الف) $n + |2n + 4|$

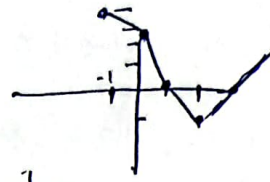
$-n - 4 | 2n + 4$



$R_f = [-2, +\infty)$ ✓

(۲)

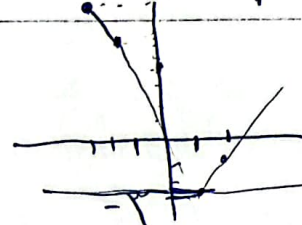
ب) $y = \frac{-n+3}{-n+3} | -2n+2 | -n+1 | n-3$



$R_f = [-1, +\infty)$ ✓

ج)

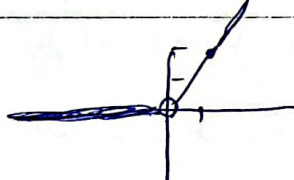
اشتها
یک فصل
 $(-3, 11)$
 $(-2, 9)$
 $(1, -3)$
 $(2, -1)$
 $n+1$



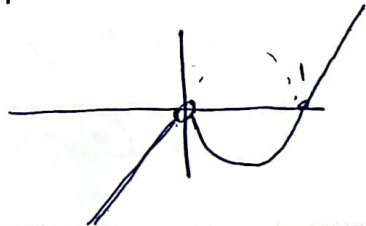
$k = -3$ ✓

(۲)

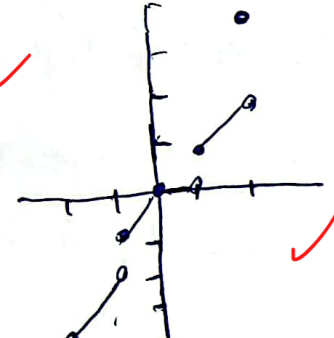
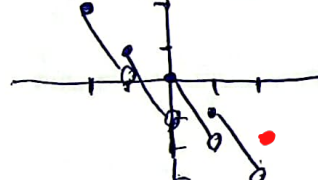
الف) $f(n) = \begin{cases} n & n > 0 \\ n-1 & n < 0 \end{cases}$
دقت!



ب) $f(n) = \begin{cases} n^2-1 & n > 0 \\ -n^2+1 & n < 0 \end{cases}$



الف) $y = [n] - 2m \Rightarrow$



ب) $y = [n] |n|$

باید حتماً بازه بندی هارو بنویس

(۱)

الف) $0 \leq 2n - [2n] < 1$ $R_f = [0, 1)$ ✓

(۲)

ب) $0 \leq n - [n] < 1$ $0 \leq 4n - 4[n] < 4$ $R_f = [0, 4)$ ✓

ج) $0 \leq \frac{n}{2} - [\frac{n}{2}] < 1$ $0 \leq n - 2[\frac{n}{2}] < 2$ $R_f = [0, 2)$ ✓

د) $-1 \leq [2n] - 2n \leq 0$ $R_f = [-1, 0]$ ✓

الف) $-\sqrt{13} \leq r \sin m + r \cos m \leq \sqrt{13} \Rightarrow R_f = [-\sqrt{13}, \sqrt{13}]$ ✓

ب) $-\sqrt{15} \leq r \sin m - r \cos m \leq \sqrt{15} \Rightarrow R_f = [-\sqrt{15}, \sqrt{15}]$ ✓

ج) $-\sqrt{19} \leq r \sin m + 0 \cos m \leq \sqrt{19} \Rightarrow -0.5 \leq [r \sin m] \leq +0.5 \Rightarrow R_f = \{-1, -0.5, 0, 0.5, 1\}$ ✓

د) $-\sqrt{5} \leq \cos m + r \sin m \leq +\sqrt{5} \Rightarrow R_f = [0, \sqrt{5}]$ ✓

الف) $\sin^2 + r \sin m + r = \frac{1}{4} \Rightarrow R_f = [\frac{1}{4}, 1]$

ب) $r \sin^2 + r \sin m + r = \frac{1}{4} \Rightarrow R_f = [\frac{1}{4}, 1]$ ✓

الف) $(1 - \cos^2) + r \cos^2 = r \cos^2 + 1 \Rightarrow R_f = [1, 2]$ ✓

ب) $\frac{r \cos^2}{1 \sin^2 + \cos^2} = r \sin m \cos m = \sin \frac{\pi}{4} \Rightarrow R_f = [-1, 1]$

الف) $r \sin^2 + r \cos^2 \leq 1 \Rightarrow R_f = [\frac{1}{2}, 1]$ ✓

ب) $\frac{1}{n} \leq \sin^2 + \cos^2 \leq 1 \Rightarrow [\sin^2 + \cos^2] \in \{0, 1\} = R_f$ ✓

الف) $y = \frac{(n-1)(n+1)}{(n+1)} \Rightarrow R_f = \mathbb{R} - \{-1\}$ ✓

ب) $\frac{(n-1)(n^2+n+1)}{(n-1)} = n^2+n+1 \Rightarrow R_f = [\frac{3}{4}, +\infty)$ ✓

$f_{n+1} = f_{n-1} = 3$
 $\frac{f-1}{f}$

مربی رضایی