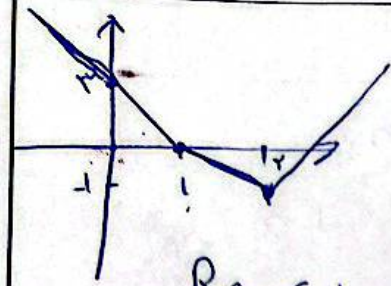
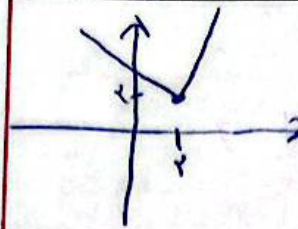


۱۷، ۱۷، ۱۷



$$R_f = [-1, +\infty) \checkmark$$

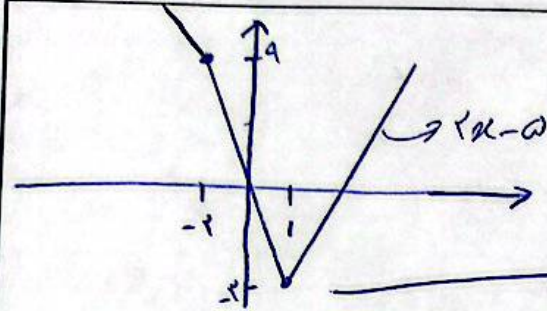
(ب)



$$R_f = [1, +\infty) \checkmark$$

(الف)

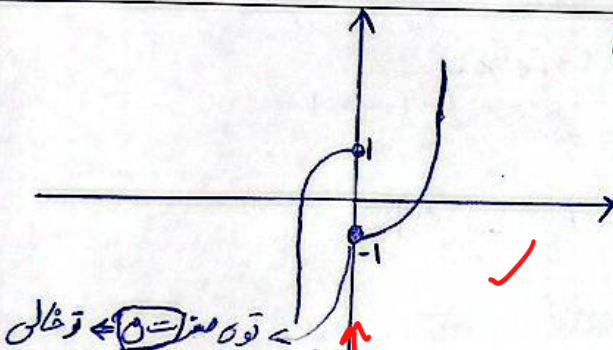
(۲)



$$K = -3 \checkmark$$

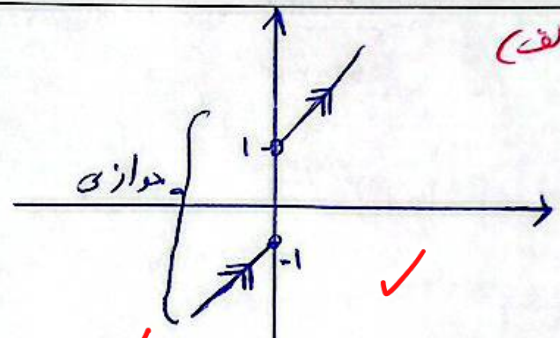
(۲)

۲



توجه: معادله $x^2 - 1 = 0$ را حل کنید

(ب)

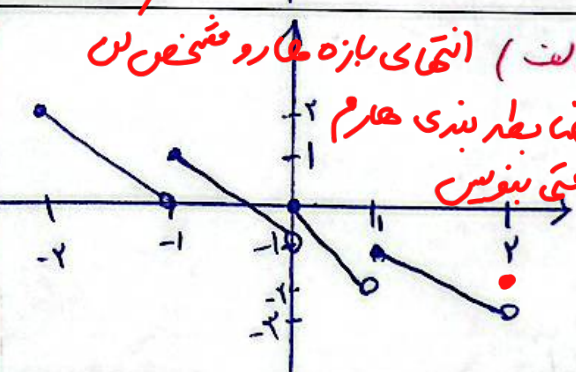


(الف)

(۲)

۳

انتهای بازه ها رو مشخص کن
خفا بفرستی هارم
حق بنویس



(۱)

۴

$$\{x - [x] \mid 0 \leq x < 1\} \Rightarrow R_f = [0, 1) \checkmark$$

(ب)

$$A = 2x \quad A - [A] \rightarrow R_f = [0, 1) \checkmark$$

(الف)

(۱، ۱)

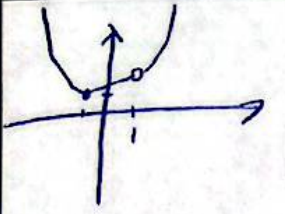
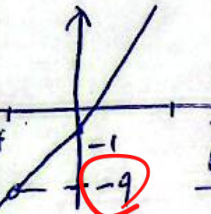
$$2x = A \quad [A] - A \quad \hookrightarrow R_f = [-1, 0] \checkmark$$

(ب)

$$x - [x] \quad \hookrightarrow R_f = [0, 1) \checkmark$$

(ع)

۵

$\sqrt{x^2 + (-x)^2} = \sqrt{1 + x^2} = 1$ $R_f = [-\infty, \infty] \checkmark$	(الف) $R_f = [-\sqrt{1-x^2}, \sqrt{1-x^2}] \checkmark$ وضع بنفسي	٢
$\sqrt{[-\sqrt{1-x^2}, \sqrt{1-x^2}]} \Rightarrow [0, \sqrt{1-x^2}]$ $\sqrt{1-x^2} = \sqrt{1}$ $R_f = [0, \sqrt{1-x^2}] \checkmark$	(ج) $[-\sqrt{1-x^2}, \sqrt{1-x^2}] \Rightarrow [-1, 1]$ $\sqrt{1-x^2} = 0$ $R_f = [-1, 1] \checkmark$	٦
$\begin{cases} \rightarrow 0 \Rightarrow 2 \\ \rightarrow 1 \Rightarrow 7 \end{cases}$ $\rightarrow \frac{-x}{x} \Rightarrow x(\frac{9}{x}) + x(\frac{-x}{x}) + 2 = \frac{9}{x} - \frac{x}{x} + 2$ $\frac{-9}{x} + 2 = \frac{1}{x}$ $R_f = [\frac{1}{x}, 9] \checkmark$	$\begin{cases} \rightarrow 1 \Rightarrow 0 \\ \rightarrow 1 \Rightarrow 2 \end{cases}$ $\rightarrow \frac{-x}{x} = x \Rightarrow 0$ $R_f = [0, 2] \checkmark$ (الف) ١, ٥ با Sin و Cos	٧
$\frac{x \frac{\cos}{\sin}}{\frac{1}{\sin^2}} = x \frac{\cos \times \sin x}{\frac{1}{\sin^2} \sin^2 x} = \sin^2 x$ $\Rightarrow R_f = [-1, 1] \checkmark$	$\sin^2 - \epsilon \sin^2 + \epsilon$ $\begin{cases} \rightarrow 0 \Rightarrow \epsilon \\ \rightarrow 1 \Rightarrow 1 \end{cases}$ $R_f = [1, \epsilon] \checkmark$	٢ ٨
$[[\frac{1}{x}, 1]] \Rightarrow [0, 1]$ $R_f = \{0, 1\}$ انبساط عدد صحیح میاد بیرون	$\frac{1}{x} \leq \sin^2 x + \cos^2 x \leq 1$ $R_f = [\frac{1}{x}, 1] \checkmark$	١, ٥ ٩
 $R_f = [\frac{1}{x}, +\infty) \checkmark$ $\frac{(x-1)(x^2+x+1)}{x-x} \Rightarrow \frac{-1}{x}$	 $R_f = \mathbb{R} - \{-1\} \checkmark$ رفت! $\frac{(x-1)(x+1)}{x+1} = x-1$	٢ ١٠