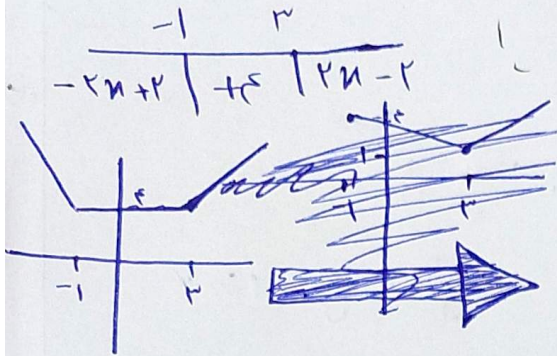


$$\underline{R_f = [1, +\infty) K}$$

(9)

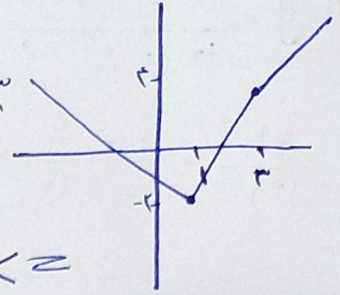
$$c) y = |2x-1| - |x-1|$$

$$b) y = |x-1| + |x+1|$$



$x < -1$	$-1 < x < 1$	$x > 1$
$-2x+1 + x-1 = -x$	$x-1 + x+1 = 2x$	$x-1 + x+1 = 2x$

$$R_f = [-1, +\infty) \quad \Leftarrow$$



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

(10)

$$|x-1| - |2x+1| \leq 1$$

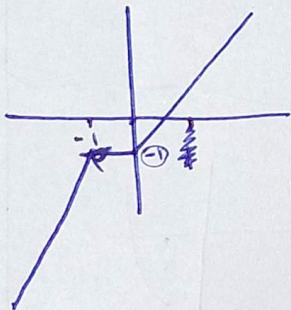
$$(-\infty, -1] \cup [-\frac{1}{2}, +\infty) \Leftarrow$$

$x < -1$	$-1 < x < -\frac{1}{2}$	$x > -\frac{1}{2}$
$-x+1 - 2x-1 \leq 1 \Rightarrow -3x \leq 1 \Rightarrow x \geq -\frac{1}{3}$	$x-1 - 2x-1 \leq 1 \Rightarrow -x-2 \leq 1 \Rightarrow -x \leq 3 \Rightarrow x \geq -3$	$x-1 - 2x+1 \leq 1 \Rightarrow -x \leq 1 \Rightarrow x \geq -1$

$$R_f = (-\infty, -1] \cup [-\frac{1}{2}, +\infty)$$

(11)

$$y = 2x - |2x+1| + |x|$$



$$\Leftarrow$$

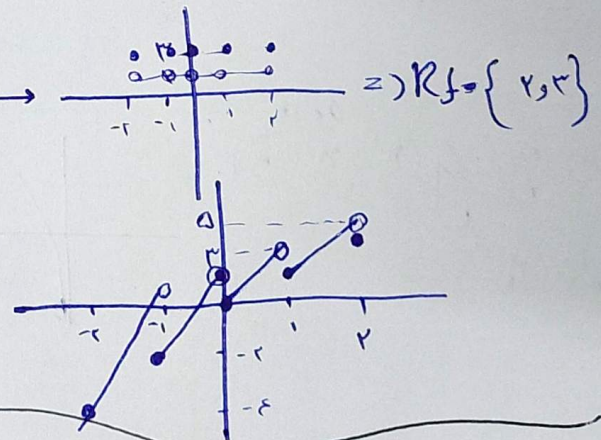
$x < -1$	$-1 < x < 0$	$x > 0$
$2x - 2x - 1 + (-x) = -x - 1$	$2x - 2x - 1 + x = -1 + x$	$2x - 2x - 1 + x = -1 + x$

$$\Rightarrow R_f = \mathbb{R}$$

(12)

$$c) y = [x] + [x-1] = [x] + [-x] + 1 \rightarrow R_f = \{1, 2\}$$

$$b) y = 2x - [x] \quad \begin{cases} [1, 2) = 2x - 1 \\ [0, 1) = 2x \\ [-1, 0) = 2x + 1 \\ [-2, -1) = 2x + 2 \end{cases}$$



(13)

$$c) y = \sin^2 x - \sin x + 1 \quad \Rightarrow R_f = [\frac{1}{4}, 2]$$

$$b) y = \sin^2 x + \sin^2 x + 1 \quad \Rightarrow R_f = [1, 2]$$