

تابع کتبت منب  $x$  و  $x$  منی  $x^2 + px + 1 + 9x^2 - 4x + 1 + mx^2 + n$   $m, n \in \mathbb{R}$   
 $m = -10 \mid n = 4$   $n + m + p + R = -1$

$m = x_1 \rightarrow y_1, y_2$   $-n$

$(x, m) (n, p+1) \xrightarrow{n=4} -10 = p+1 \rightarrow p = -11$   $p \in \mathbb{R} = -1$   
 $R = -10$

$f - p[-x] \neq 0$

$[-x] \neq 2 \rightarrow p \leq -x \leq 3$

$-2 \leq x \leq -p$   
 $D = \mathbb{R} - (-p, -2]$

الف)  $x^2 - px - 1 = 0$

$x^2 = -2$   $x^2 = 4$   $x^2 = 1$   
 $x = \pm 2$   $x = \pm 1$

مشتق  $-2$   $p$

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

$D = (-2, +\infty) - \{2\}$

$|n - p| \leq x^2 \rightarrow x \leq p$

$x = 100$   $x = 100$

$x \leq p \rightarrow x^2 + x - p \leq 0$   $-p$

$x \neq \pm 1$   $+ \frac{1}{2}$

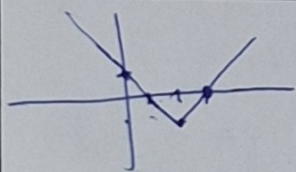
$D = [-1, 1) - \{1\}$

الف)  $\sqrt{x(x^2 - 1)} \geq 0$

$D = [-1, 0] \cup [1, +\infty)$   $- \frac{1}{2} + \frac{1}{2} - \frac{1}{2} +$

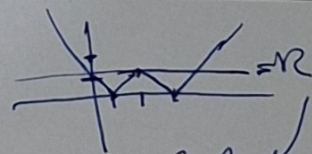
$|x + x| \geq 0 \rightarrow |x| \geq 1$

$D \cap D = [1, +\infty)$   $D \cap D = (0, +\infty) - \mathbb{R}^+$



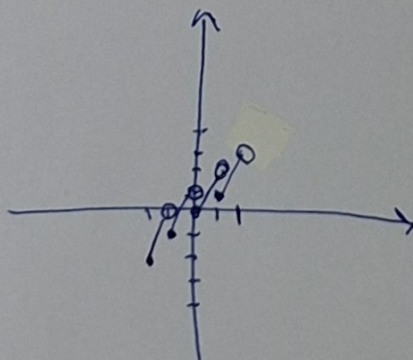
$|x - p| = 1$

$|x - p| = 1$



کتاب در این فصل به بی‌نهایت از مسائل مشابه بیان کرده است  
 $R = 1$

$y = \begin{cases} x + p \\ x + 1 \\ x \\ x - 1 \\ x - p \end{cases}$   $-p \leq x \leq -1$   
 $-1 \leq x \leq 0$   
 $0 \leq x \leq 1$   
 $1 \leq x \leq p$   
 $x \leq p$



$$(x+y)^2 = x^2 + 2xy + y^2 = x^2 + 2x + 2y + 1 = x^2 + (-1+y)x + 1+y$$

$$ax = -1+y \rightarrow x = \frac{-1+y}{a}$$

$$ab = a^2 \rightarrow a = 0 \rightarrow b = 1$$

$$\rightarrow a = 0 \rightarrow a = b = 1$$

$$a-b \rightarrow 0$$

$$a-b \rightarrow -1$$

$$\{0, -1\}$$

$$D_f = D_g \quad \frac{(x+1)(x-1)(x+1)}{(x-1)(x-1)} = x+1 \leq x+1 \rightarrow x \leq 1$$

$$x=1 \rightarrow x+1 = 2 \leq a+1 \rightarrow a \geq 1$$

$$x \leq 1 \rightarrow x+1 \leq 1 \leq \frac{a+1}{-1+b} \rightarrow a \leq -b$$

$$\left. \begin{array}{l} a \geq 1 \\ a \leq -b \end{array} \right\} \begin{array}{l} 1 \leq b \leq -b \\ b \leq \frac{1}{-b} \end{array}$$

$$D_f \rightarrow \frac{f(x)}{g(x)} \quad D_g = \frac{f(x)}{g(x)}$$

$$D_f \cap D_g = 1 \rightarrow \frac{f(x)}{g(x)} \leq 0$$

$$b \leq 1 \text{ and } \frac{f(x)}{g(x)} \leq 0$$

$$f(x) - \frac{b}{g(x)} - R = 0 \rightarrow f(x) - R = 0$$

$$\text{if } x \leq 1 \rightarrow R = 0$$

$$D_f \rightarrow \frac{f(x)}{g(x)} \quad D_g \rightarrow \frac{f(x)}{g(x)} - 1$$

$$(-\infty, \infty) \quad [-1, \infty)$$

$$D_f \cap D_g = [-1, \infty)$$

$$g(x) = 1 \rightarrow f(x) - g(x) = h(x) \leq \sqrt{N}$$

$$f(x) = x + n$$

$$m+n \leq \sqrt{N}$$

