

نام و نام خانوادگی پروردگار پاسخنامه تشریحی تکلیف شماره ۲ کلاس روز دوشنبه ۱۳۹۷/۱/۱۰

$$f(x) = x^4 + 1 + 2x + 9x^2 + -7x + mx^2 + nx + mn$$

$$= 10x^2 - 5x + 2 + mx^2 + nx + mn \Rightarrow m = -10, n = +5$$

$$\Rightarrow p + 1 = -10 \Rightarrow p = -11 \quad -11 + 5 = -6 \Rightarrow k = 10$$

$$-10 + 5 - 11 + 10 = -6 \Rightarrow V$$

$$\frac{x-2}{x^2-2x^2-1} \geq 0 \Rightarrow \frac{x-2}{(x^2-2)(x^2+2)} \geq 0$$

$$\frac{x-2}{(x-2)(x+2)(x^2+2)} \geq 0 \Rightarrow$$

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

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

$$F = \{2, 3\}$$

$$2 \neq 2[-2]$$

$$2 \neq [-2]$$

$$2 \neq -2 \neq 3$$

$$-2 \neq x \neq 2 \Rightarrow D = \mathbb{R} - (-2, 2]$$

$$x(x^2-1) \geq 0 \Rightarrow$$

$$x(x-1)(x+1) \geq 0$$

$$I \cap II: x \leq -1$$

$$|x-2| - x^2 \geq 0$$

$$x \geq 2: -x^2 + x - 2 \geq 0$$

$$\Delta < 0$$

$$x \leq 2: -x^2 - x + 2 \geq 0$$

$$\Rightarrow x^2 + x - 2 \leq 0$$

$$(x+2)(x-1) \leq 0 \Rightarrow \frac{-2}{+1} - \frac{+1}{+}$$

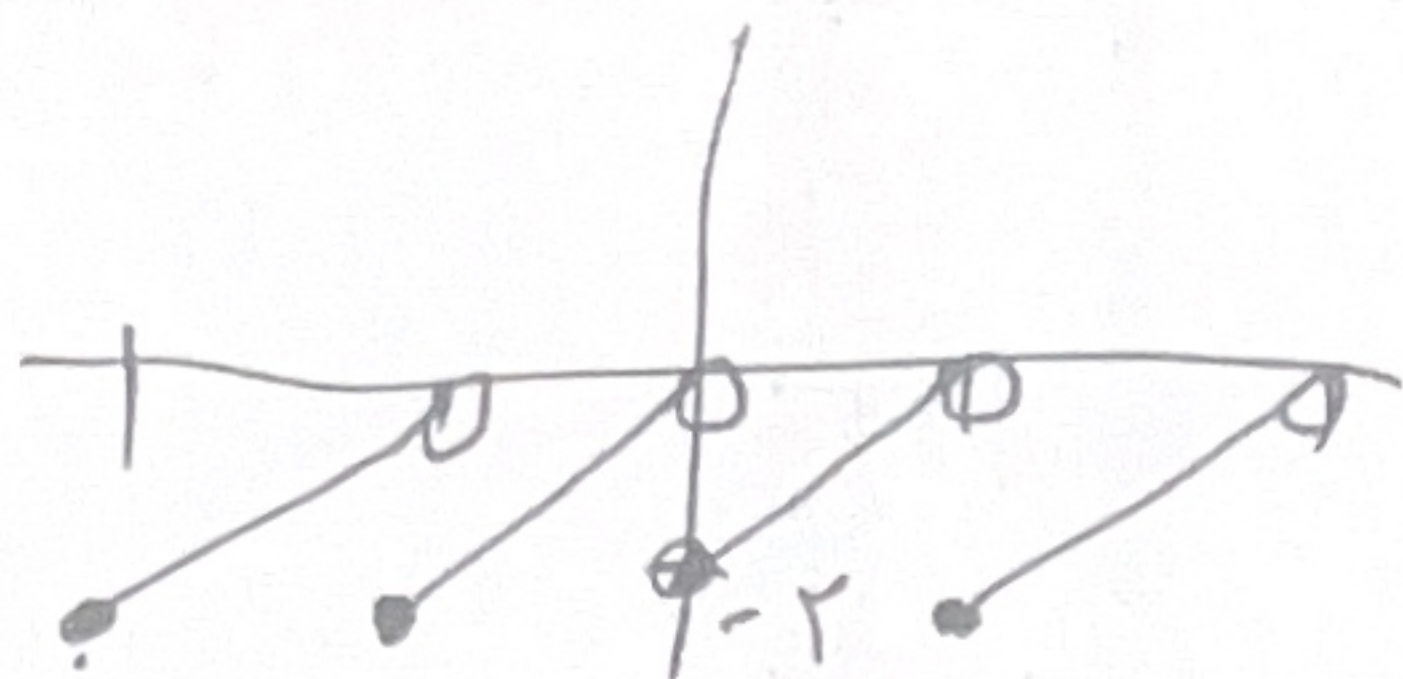
ادامه ب:

$$|x| - 1 \neq 0 \Rightarrow x \neq \pm 1$$

$$\Rightarrow D_f = (-\infty, -2] \cup (1, 2)$$

$$1 - x - k \mid x - 1 - k \mid 2 - x - k \mid x - 3 - k$$

$$\Rightarrow x \neq 1, 2, 3 \Rightarrow k = 0, 1$$



$$\frac{(n-3)(n-1)}{n+a} + b = n \Rightarrow \frac{(n-3)(n-1)}{n+a} = n-b$$

$$\Rightarrow (n-3)(n-1) = (n-b)(n+a) \begin{cases} a=-3, b=1 \Rightarrow a-b=-4 \\ a=-1, b=3 \Rightarrow -1-b=-4 \end{cases}$$

$$n=0 \Rightarrow \frac{-3}{-1} = 0+c \Rightarrow c=3$$

$$n=1 \Rightarrow \frac{a+3}{1+b} = 3 \Rightarrow a+3 = 3+b \Rightarrow a-b=1$$

$$n=-1 \Rightarrow \frac{3-a}{b-1} = 1 \Rightarrow 3-a = b-1 \Rightarrow a+b = -2$$

$$b+c=0$$

$$f(1) = \sqrt{4-3a} + k-1, g(1) = \sqrt{b-3} + 3k$$

$$2 \times \sqrt{4-3a} + 2k-2 - \sqrt{b-3} - 3k = k$$

$$2\sqrt{4-3a} - \sqrt{b-3} = 2(k+1)$$

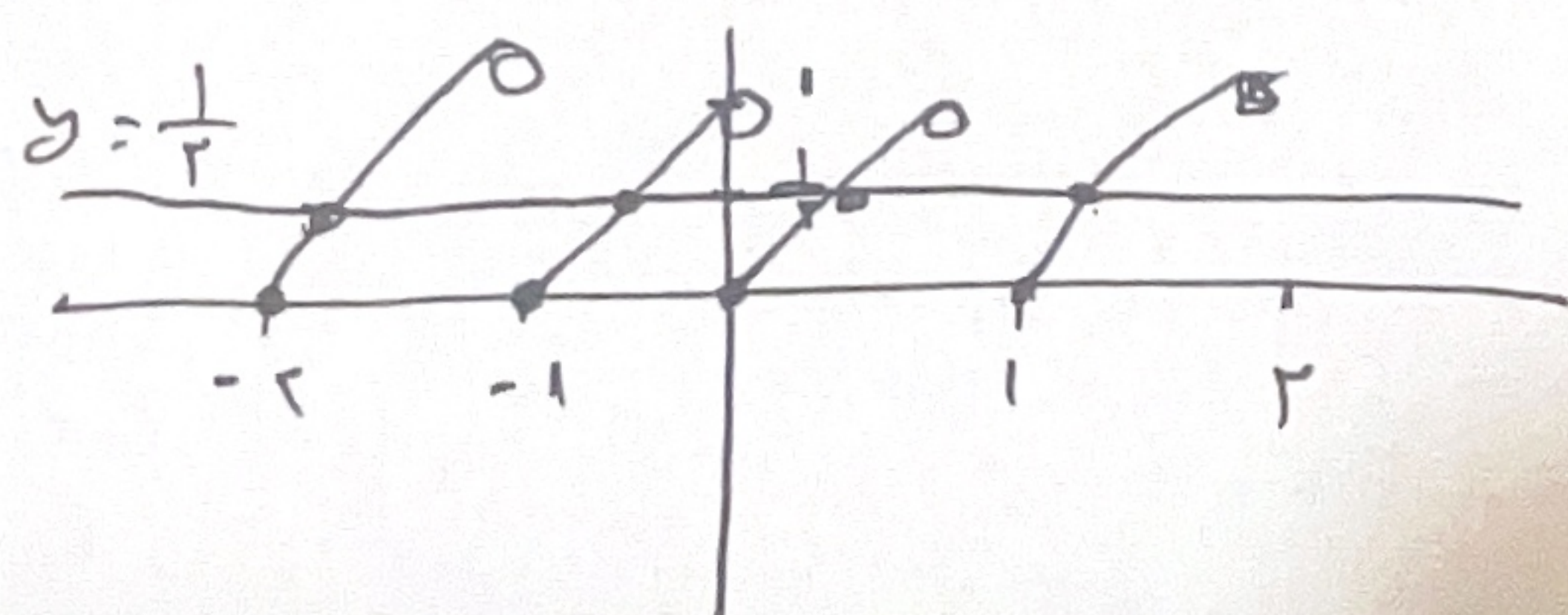
$$\begin{cases} 4-3a \geq 0 \Rightarrow a \leq \frac{4}{3} \\ b-3 \geq 0 \Rightarrow b \geq 3 \\ \frac{4}{3} \geq a \Rightarrow a = \frac{4}{3} \\ b \geq 3 \Rightarrow b = 3 \end{cases} \Rightarrow a = \frac{4}{3}, b = 3$$

$$m-x \geq 0 \Rightarrow m \geq x$$

$$p_g: n \geq -1$$

$$\frac{\sqrt{4-3}}{2} + n - \frac{\sqrt{3-3}}{1} = 2\sqrt{2}$$

$$n = 1\sqrt{2}-2 \Rightarrow m+n = 1\sqrt{2}+0$$



۴ جواب دارد