

افزین کامل نوشتی!

۱۹، ۷۵

$$f(x) = x^2 + 2x + 1 + 9x^2 + 1 - 4x + mx^2 + 11x + mn \quad f(x) = 10x^2 - 2x + 1 + mn + mx^2 + 11x$$

$$m = -10 \quad n = 1$$

$$g(x) = \{(2, -1), (K, D+1), (P+2, -1), (-9, D+K)\}$$

$$-10 = P+1 \quad -11 = D$$

$$g(x) = \{(K, -1), (K, -11+1), (-11+2, -1), (-9, -11+K)\}$$

$$-11+K = -1 \Rightarrow K = -1+11 = K = 10$$

$$m+n+P+K = -10+1-11+10 = -10 \checkmark$$

(الف) $\sqrt{\frac{x-2}{x^2-2x-1}}$ $\frac{x-2}{x^2-2x-1} \geq 0$ $x=2$ $Df = (-2, 5) - [2]$ $(x^2-2)(x^2+2) = 0 \rightarrow x^2 = 2 \quad x = \pm\sqrt{2}$

(ب) $x-2[-2] \neq 0 \quad x \neq 2[-2] \quad x \neq [-2] \quad x \neq -2, 3 \quad -3 < x < -2 \quad Df = [R - (-3, -2)]$

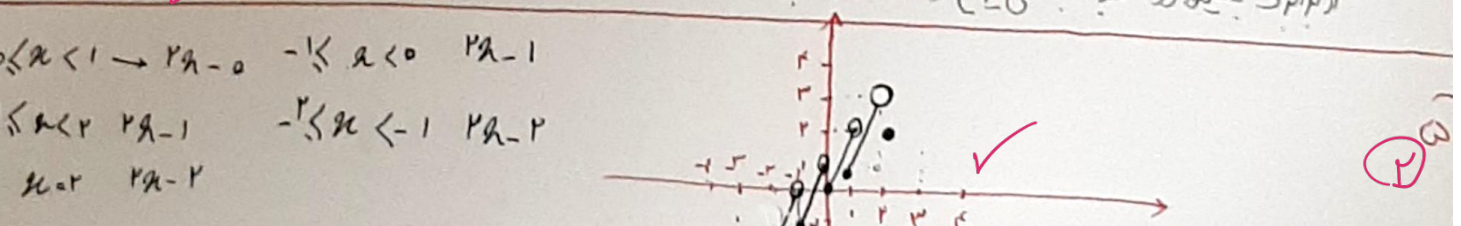
(الف) $x(x^2-1) \geq 0 \quad x \neq 0 \quad x = \pm 1 \quad \frac{-1}{-1+1-1} \quad [1, +\infty) \cup [-1, 0]$ $Df = [1, +\infty) \cup [-1, 0]$

$\begin{cases} x < 0 & -x+x=0 \\ x > 0 & x+x=2x \end{cases} \Rightarrow 2x \Rightarrow x \in [0, +\infty)$ $Df = [1, +\infty) \cup [-1, 0]$

(ب) $|x-2|-2^x \geq 0$ $\begin{cases} x-2 \geq 2^x \\ x-2 \leq -2^x \end{cases}$ $2^x+2x-2 \leq 0 \quad \frac{-2}{+} - \frac{1}{+}$

$|x| \neq 1 \quad x \neq \pm 1 \quad Df = [-2, 0) - [-1]$

$|12-x|-1 \neq K$ $\begin{cases} x-2 \neq K+1 \\ x-2 \neq -K+1 \\ x-2 \neq K-1 \\ x-2 \neq -K-1 \end{cases}$ $|x-2|-1 \neq K-1 \quad |x-2| \neq K+1 \quad |x-2| \neq K+1 \quad |x-2| \neq K+1$



$\frac{(x-1)(x-3)}{x+a} + b =$ $a = -1, b = +3 \quad a = -3, b = +1$ $-1-3 = -4 \quad -3-1 = -4 \quad a-b = -4 \checkmark$

$\frac{(0)^3 + 2(0)^2}{(0)^2 - 1} = \frac{-2}{-1} = 2 = 0 + C \quad C = 2$

$-1+2 = \frac{-a+2}{-1+b} \quad 1+2 = \frac{a+2}{1+b} \quad \begin{cases} b+a=3 \\ a-3b=1 \end{cases} \quad \begin{cases} -b-a=3 \\ a-3b=1 \end{cases} \quad \begin{cases} -2b = -2 \quad b = \frac{1}{2} \\ \frac{1}{2} + a = 3 \quad a = \frac{5}{2} \end{cases}$

$$x \geq -1 \quad n = \sqrt{1-x} \quad m+n = \sqrt{1-x} + \sqrt{1-x} = 2\sqrt{1-x}$$

(2) -1

DF: $x \geq a \quad x \geq \frac{a}{f}$ $Dg: x \leq b \quad x \leq \frac{b}{f}$ $\frac{a}{f} = \frac{b}{f} = 1$

$a = 1 \quad b = 1 \quad x = 1$ $f-g = \sqrt{1-x} + \sqrt{1-x} = 2\sqrt{1-x}$

$a - \frac{b}{f} = 1 - 1 = 0$ ✓

$Dg = [-1, +\infty)$ $Dfg = [-1, \sqrt{1-x}] \rightarrow Df = (-\infty, \sqrt{1-x}]$ $Df \quad x \leq m$

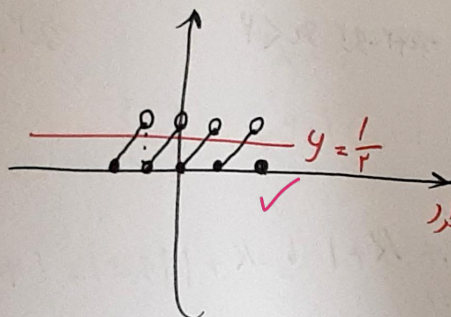
$x = \sqrt{1-x} \rightarrow f-g(x) = \sqrt{1-x} + \sqrt{1-x} = 2\sqrt{1-x}$ $m+n = 2\sqrt{1-x}$

$m+n = 2\sqrt{1-x}$ ✓

(2) 4

$$y = (-1)^x (2-x) = \frac{1}{x}$$

$$\begin{cases} x+2 & -2 \leq x < -1 \\ x+1 & -1 \leq x < 0 \\ x & 0 \leq x < 1 \\ x-1 & 1 \leq x < 2 \\ 0 & x = 2 \end{cases}$$



طبق تست
مقادیر
جواب دارد

(2) -10