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مجلس دهم دفتر A
جمعه ۱۸:۳۰ - ۱۷:۳۰
تکلیف شماره ۲۸۵۱
برتو یرویش

$$f(a) = \begin{cases} a^2 + 2a \\ a^2 - 4 \end{cases} \rightarrow a^2 + 2a = a^2 - 4$$
$$2a = -4 \Rightarrow a = -2$$

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$$f(x) = \frac{x+a}{x-b} = 3$$
$$g(x) = x+b = 3 \Rightarrow b = -1$$
$$f(x) = \frac{x^2+11}{x^2+1} \xrightarrow{x=1} f(1) = \frac{12}{2} = 6$$

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$$\begin{matrix} x=1 \rightarrow x-a+b=0 \\ x=2 \rightarrow 2^2+fa+b=0 \end{matrix}$$
$$\begin{matrix} -2+a-b=0 \\ 4+2a+b=0 \\ \hline 3a=0 \end{matrix}$$
$$a = -6$$
$$2+6+b=0 \Rightarrow b = -8$$
$$f(x) = \frac{x^2+1}{x^2-6x-8}$$
$$f(1) = \frac{2}{-12}$$

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$$\Delta = 0 \quad a^2 + 16b = 0 \quad \text{نسبت متغیر} = \frac{-b}{2a} \rightarrow \frac{-a}{-2} = -1 \Rightarrow a = -2$$
$$4a + 16b = 0 \Rightarrow b = -\frac{4a}{16} = -\frac{a}{4}$$
$$a + b = -2 - \frac{1}{2} = -\frac{5}{2}$$

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$$\Delta < 0 \quad m^2 - 4 < 0$$
$$\begin{array}{c|cc} & -2 & 2 \\ \hline & + & - \\ \hline & 0 & 0 \end{array}$$
$$(-2, 2) \text{ I}$$

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من توانم معانی عبارت باشد

$$(x-1)^2 = x^2 - 2x + 1 \quad m = -2 \text{ II}$$
$$\text{I} \cup \text{II} = [-2, 2]$$

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$$n \neq 0 \text{ (1)}$$

$$f - \frac{1}{2r} \geq 0 \quad \left| \begin{array}{ccc} -\frac{1}{2r} & 0 & \frac{1}{2r} \\ \times & 0 & - & \times & + \end{array} \right. \quad D = (-\infty, \frac{1}{2r}] \cup [\frac{1}{2r}, \infty)$$

(5)

$$m > 0 \text{ (1)}$$

$$a \leq 0 \text{ (2)}$$

$$f_m^r - f_{m-1} \quad \left| \begin{array}{ccc} + & - & + \\ + & - & + \end{array} \right. \quad [0, 1]$$

$$\Rightarrow m \in [0, 1]$$

(5)

$$f(\frac{1}{r}) = f \times \frac{1}{r} + k = r + k$$

$$D_g = D_f = R$$

$$g(\frac{1}{r}) = r \times \frac{1}{r} + 1 = r \quad f(\frac{1}{r}) = g(\frac{1}{r}) \Rightarrow r + k = r \quad \underline{k=0}$$

$$ra - 1 < 0 \Rightarrow a = \frac{1}{r} \quad a + k = \frac{1}{r} + 0 = \frac{1}{r}$$

(5)

$$f(-\frac{r}{r}) = r \times (-\frac{r}{r}) + r = -r + r$$

$$D_g = D_f = R$$

$$g(-\frac{r}{r}) = r \times (-\frac{r}{r}) + b = -r + b \quad \Rightarrow f = g \Rightarrow -r + r = -r + b \text{ (1)}$$

$$f(0) = \frac{-f}{r} = -r$$

$$g(0) = b \quad \Rightarrow \underline{b = -r}$$

$$|g(r) \Rightarrow -ra + r = -f$$

$$\underline{a=r}$$

$$a - b = r + r = 2r$$

$$D_g = D_f = R$$

$$f(r) = ra^r + ra$$

$$f(r) = g(r) \Rightarrow ra^r + ra - f = 0 \Rightarrow \begin{cases} -r < 0 \checkmark \\ 1 < 0 \checkmark \end{cases}$$

$$g(r) = f$$

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