

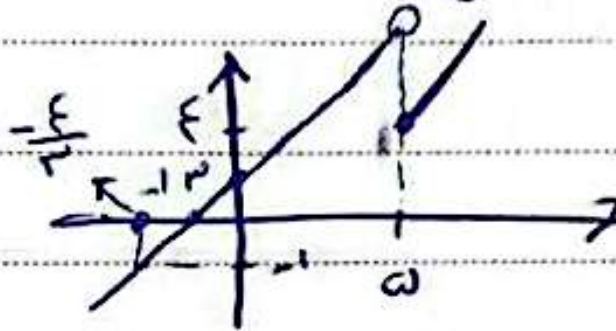
۱۲-۱۳ سوالی یاد ۱۲-۱۳

۲۰-۲۱ آفیدین

۱-۲

$$f(x) = \begin{cases} 2x-1 & x \geq 0 \\ 2x+3 & x < 0 \end{cases} \xrightarrow{-x} \begin{cases} x-1 & x \geq 0 \\ 2x+3 & x < 0 \end{cases}$$

$$f(x) - x \geq -1$$



$$\Rightarrow D_f = \left[-\frac{1}{2}, +\infty\right)$$

$$D_f = \mathbb{R} - \left\{\frac{1}{2}\right\}$$

۲-۲

$$\frac{2(1x^2 + 12x^2 + 9x + 1)}{(2x+1)^2} = \frac{2(2x+1)^2}{(2x+1)^2} = \frac{2}{2x+1}$$

$$\frac{x^r(x+r) - (x+r)}{x^r - 1} = \frac{(x+r)(x^r - 1)}{x^r - 1} = x+r \Rightarrow C=r \quad (r) \text{ - } \checkmark$$

$$\frac{a+r}{b+1} \leq r \quad \frac{r-a}{b-1} \leq 1 \Rightarrow b-1 \leq r-a \quad a+b \leq r$$

$$a+r \leq r b+r \Rightarrow a-r b \leq 1$$

$$a-r b = 1$$

$$b+C \leq r + \frac{1}{r} \leq r \quad \checkmark$$

$$b = \frac{1-r}{-r} = \left(\frac{1}{r}\right) \quad \checkmark$$

$$x^r + a x + b = (x-c)^r \Rightarrow b=c^r \quad a=-rc \quad (r) \text{ - } \checkmark$$

$$\frac{(x-1)(x+r)}{(x-c)^r} = \frac{x+r}{x-c} \Rightarrow C=1 \quad a=-r \quad b=1$$

$$1+1-r \leq r \quad \checkmark$$

$$g(x) = (x-r)^r(x) + (r-x)^r(-x) = 0 \quad \checkmark \quad (r) \text{ - } \checkmark$$

$$f(-1) = f(1-r(1)) = f \quad \checkmark$$

$$f(r) = f(1-r(-1)) = 1 \quad \checkmark \Rightarrow 0 \quad \checkmark \quad (r) \text{ - } \checkmark$$

$$x+\sqrt{x} \leq r \Rightarrow x \leq r \quad \checkmark \quad r+1 \leq r \quad \checkmark \quad (r) \text{ - } \checkmark$$

$$(x-1)^r + x - 1 + (1-x)^r + 1 - x = (x-1)^r + (1-x)^r = 0 \quad \checkmark \quad (r) \text{ - } \checkmark$$

$$f - 2 + 1 = 5 \quad -9$$

$$D_g = (-\infty, 1], D_f = [1, +\infty)$$



$$b = f$$



$$a = \frac{f}{2}$$

$$f(1) = K - 1 \quad g(1) = 2K$$

$$2K - 2 - 2K = K \Rightarrow K = -1$$

{1} تنها عضو مشترک دارند اشونه پس

(2)

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

(2) -10

$$D_g = [-1, +\infty)$$

$$D_f = (-\infty, M]$$

$$D_{fg} = [-1, M] \Rightarrow M \geq \sqrt{}$$

$$x + n = 1\sqrt{x} \Rightarrow n = 1\sqrt{x} - x$$

$$M + n = \sqrt{M} + 1\sqrt{x} - x \leq \underline{0 + 1\sqrt{x}}$$