

دوم نمیشد (ختر)

بنام آنیبا، مهر

۲۰

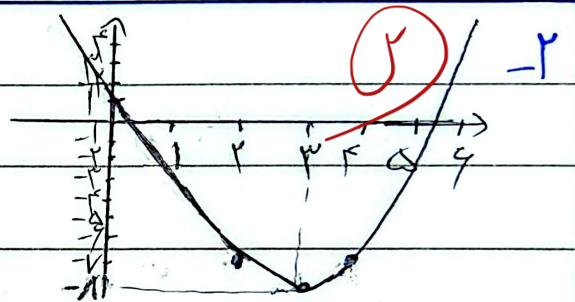
نگارفتی

الف)  $a > a \rightarrow \min$   $\text{ext} \left| \begin{array}{l} -\frac{b}{2a} = \frac{4}{2(1)} = 2 \\ \frac{-\Delta}{2a} = \frac{-19+1}{2(1)} = -4 \end{array} \right. \checkmark$  ۵-۱

ب)  $a < 0 \rightarrow \max$   $\text{ext} \left| \begin{array}{l} -\frac{b}{2a} = -\frac{3}{2(-1)} = 1.5 \\ \frac{-\Delta}{2a} = \frac{-9+10}{2(-1)} = -0.5 \end{array} \right. \checkmark$

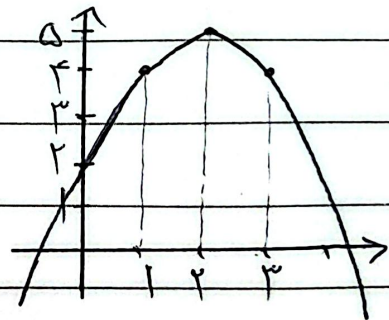
الف)  $-\frac{b}{2a} = \frac{4}{2} = 2 \checkmark$   $-\frac{\Delta}{2a} = \frac{-19+1}{2} = -4 \checkmark$

x	2	3	4
y	-7	-1	-7



ب)  $-\frac{b}{2a} = -\frac{1}{2} = -0.5 \checkmark$   $-\frac{\Delta}{2a} = \frac{-19+1}{-2} = 9 \checkmark$

x	1	2	3
y	4	9	4



$\alpha + \beta = 1$   $\alpha \beta = 2$   $\frac{2x^2 - kx^2 + 4x - 2}{x^2 - x - 2} \bigg| \frac{x^2 - x - 2}{x^2 + k}$  ۵-۲

$-(2x^2 - kx^2 - 4x + 2)$

$(k+2)x^2 - x - 2$

$-(k+2)x^2 - (k+2)x + 2k - 2$

$(3+k)x + 2k + 4 \rightarrow 3+k=0 \rightarrow k=-3$

$2k+4=0 \rightarrow k=-2$

$(\sqrt{x} - \sqrt{y})^2 = (1)^2 \rightarrow \alpha + \beta - 2\sqrt{\alpha\beta} = 1$   $m - 2\sqrt{m} - 1 = 0 \rightarrow \sqrt{m} = t$  ۵-۳

$t^2 - 2t - 1 = 0 \rightarrow (t-1)(t+1)$   $\frac{-m}{p} = -\frac{1}{1}$

$m=1 \rightarrow t=1$   $\rightarrow -\frac{1}{1}x$   $\rightarrow$   $\frac{1}{1}x$

$$\Delta = m^2 + (m+1 - 1)m \pm (m-1)^2 \quad x = \frac{-b \pm \sqrt{\Delta}}{2a} \Rightarrow x = \frac{m+1 \pm (m-1)}{2} \quad -5$$

$$x_1 = \frac{m+1+m-1}{2} = \frac{2m}{2} = m, \quad x_2 = \frac{m+1-m+1}{2} = \frac{2}{2} = 1$$

نقطه تقاطع با محور y ها  $\rightarrow x=0 \rightarrow y=2m \quad (m, 0), (1, 0), (0, 2m) \rightarrow$  9

$$S = \frac{1}{2} \times |AB| \times |m| \rightarrow \frac{1}{2} \times \left| \frac{1-m}{2} \right| \times m = \frac{m}{4} \left| 1-m \right|$$

$$\left( \frac{1-m}{2} \right) m \geq \frac{m}{4} \rightarrow m-m \geq \frac{m}{4} \rightarrow \frac{3m-m}{4} \geq 0 \rightarrow \Delta < 0 \quad \times$$

$$-(1-m)m \geq \frac{m}{4} \rightarrow -m+m \geq \frac{m}{4} \rightarrow \frac{-(m+m)}{4} = 0 \rightarrow \Delta > 0 \rightarrow m = \frac{1}{2}, -\frac{1}{2}$$

$$\frac{-\Delta}{2a} = \frac{-9+4a^2}{2a} \geq \frac{1}{2} \rightarrow 2a^2 - 2a - 1 \geq 0 \rightarrow a^2 - a - \frac{1}{2} \geq 0 \quad -6$$

$$(a-1)(a+\frac{1}{2})$$

$a \geq 1$  9  
بعضی  $a$  می تواند (min)

$$\sqrt{\Delta} = 2 \rightarrow \sqrt{a^2+1+a-1} = \sqrt{(a-1)^2} = |a-1| = 2 \rightarrow a=3, a=-1 \quad -7$$

$$|a| \quad x^2 - (a+1)x + 1 \geq 0 \rightarrow x = 1, 1 \quad x^2 - 10x + 1 \geq 0 \rightarrow \sqrt{\Delta} = 2 \quad \text{دو نقطه}$$

$$(4 \times 1) - (3 \times 1) = 1 \quad x = 9, 1 \quad (x-9)(x-1)$$

$$y = ax^2 + ax + 1 \rightarrow \frac{1}{2}, \frac{a+1}{2}, \quad y = bx^2 - bx - 1 \rightarrow \frac{1}{2}, \frac{-b}{2} = -1 \quad -8$$

$$\frac{1}{2} b \times \frac{1}{2} - b \left( \frac{1}{2} \right) - 1 = \frac{a}{2} + 1 \rightarrow \frac{a}{2} = -1 \rightarrow a = -2$$

$$\frac{-a}{2} + \frac{a+1}{2} = -\frac{b}{2} = -1 \rightarrow -b = 2 \rightarrow b = -2 \quad b = a - 9 - (-2) = 7$$

$$x + \beta = \frac{1}{a} \quad x\beta = \beta \rightarrow \frac{1}{a} \times \beta = \beta \rightarrow x = \frac{1}{a} \rightarrow x = -\frac{1}{a} \quad -9$$

$$-\frac{1}{a} + \beta = \frac{1}{a} \rightarrow \beta = \frac{2}{a}, \quad a = \frac{1}{a} \rightarrow \frac{1}{a} + \beta = \frac{1}{a} \rightarrow \beta = -\frac{1}{a}$$

$$a+b = a^2 + b^2 - 12 \quad a+b = 12ab \quad a+b = (a+b)^2 - 2(ab) - 12$$

$a+bt \rightarrow t = t^2 - 12t - 10 \rightarrow t^2 - 13t - 10 = 0 \quad (t-17)(t+2) \rightarrow t = 17$

$a+b \geq 0$