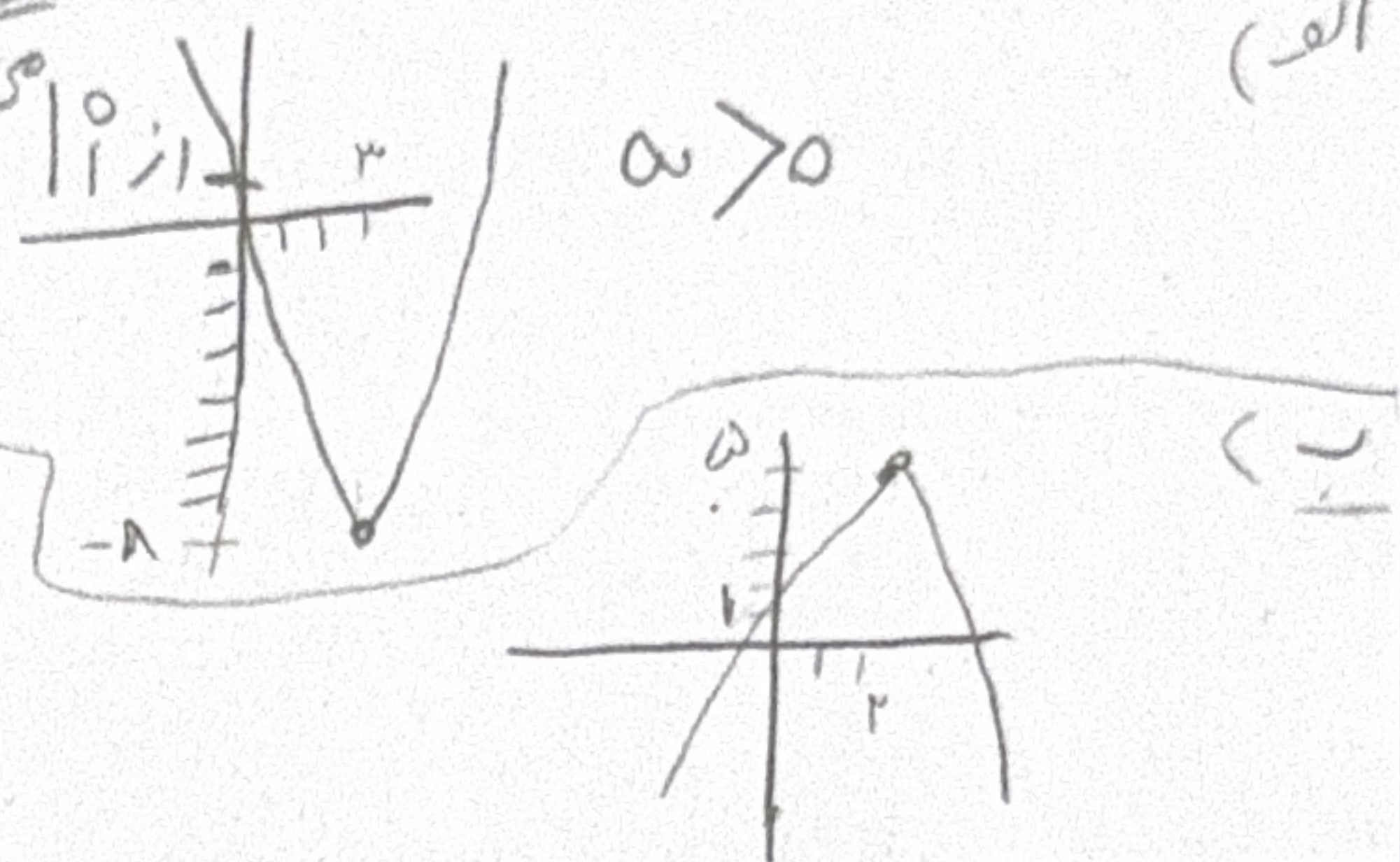


الف) $\alpha > 0$ $\left. \begin{aligned} -\frac{b}{2\alpha} = \frac{4}{4} = 1 = x_{\text{رأس}} \\ y_{\text{رأس}} = 1 - 4 + 1 = -1 \end{aligned} \right\} \text{ext} \begin{cases} 1 \\ -1 \end{cases}$

الف) $\alpha < 0$ $\left. \begin{aligned} -\frac{b}{2\alpha} = \frac{-3}{-2} = \frac{3}{2} = x_{\text{رأس}} \\ y_{\text{رأس}} = -2 \times \frac{9}{4} + \frac{9}{2} - \frac{20}{2} = -\frac{9}{2} + \frac{18}{2} - \frac{20}{2} = -\frac{11}{2} \end{aligned} \right\} \text{ext} \begin{cases} \frac{3}{2} \\ -\frac{11}{2} \end{cases}$

الف) $\alpha > 0$ $\frac{3}{2} = x_{\text{رأس}} \rightarrow y_{\text{رأس}} = 9 - 18 + 1 = -8$ $\text{ext} \begin{cases} 3 \\ -8 \end{cases}$

$\alpha < 0$ $-\frac{4}{-2} = 2 = x_{\text{رأس}}$ $\text{ext} \begin{cases} 2 \\ 5 \end{cases}$
 $y_{\text{رأس}} = -4 + 8 + 1 = 5$



$a + b + c + d = 0$
 $1 + k - 9 - 2 = 0 \quad k = 10$
 $\alpha = 1 \quad \alpha + \beta = 1$
 $\beta = 0 \quad \alpha\beta = 0 \quad \times$

$a + (-b) - d = 0 \rightarrow a + c = b + d$
 $1 - 9 = k - 2$
 $k = -3$
 $\alpha = -1 \quad \alpha\beta = -2$
 $\beta = 2 \quad \alpha + \beta = 1$

$\sqrt{\alpha} - \sqrt{\beta} = 1 \xrightarrow{\text{تربیع}} \alpha + \beta - 2\sqrt{\alpha\beta} = 1 \rightarrow 3m - 2\sqrt{m} = 1 \rightarrow 3m - 2\sqrt{m} - 1 = 0$
 $\frac{-b}{2a} + 3m \quad \frac{c}{a} = m$

$\rightarrow m - 2\sqrt{m} - 1 = 0 \rightarrow (\sqrt{m} - 3)(\sqrt{m} + 1) = 0 \rightarrow \sqrt{m} = 1 \text{ و } \sqrt{m} = -\frac{1}{3}$
 $m = 1 \rightarrow 2x^2 - x - 1 = 0 \rightarrow \frac{c}{a} = \text{ضریب} = \frac{-1}{2}$

$a + b + c = 0 \rightarrow x = 1, \frac{m}{2}$

$\frac{m}{2} \times \frac{\sqrt{\Delta}}{|a|} = \frac{m \times \sqrt{m^2 - 4m + 4}}{2} = \frac{m|m-2|}{2} = \frac{3}{2} \rightarrow m|m-2| = 3$

$m \geq 2 \rightarrow m^2 - 2m - 3 = 0 \rightarrow m = 3 \text{ و } -1$

$y = x^2 + x + 1 \rightarrow x_5 = \frac{-1}{2}$

$m < 2 \rightarrow m^2 - 2m + 3 \rightarrow \Delta < 0$ جواب ندارد.

$y = x^2 - \frac{3}{2}x + 1 =$

$y_5 = \frac{3}{4}$

$$y_p = \frac{-\Delta}{fa} = \frac{-b^r + fa}{fa} = \frac{-9 + fa}{fa} = \frac{V}{\Lambda} \rightarrow \Lambda a^r - Va - \Lambda = 0$$

$$a > 0$$

$$a_1, a_2 = \frac{V \pm \sqrt{10000}}{14} \rightarrow a_1 > 0, a_2 < 0$$

بجوابه

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$$a = B + r \rightarrow \frac{\sqrt{\Delta}}{|a|} = B + r - B = r = \sqrt{a^r + ra + 1 - fa}$$

$$\rightarrow |a - 1| = r \rightarrow a = \begin{cases} r \\ -1 \end{cases} \begin{matrix} ab > 0 \\ x \end{matrix}$$

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$$\rightarrow x_s = \frac{1}{r} \quad y_s = \frac{-a^r + \Lambda a}{-fa} \quad x_s = \frac{1}{r} \quad y_s = \frac{-b^r - \Lambda b}{\Lambda b}$$

$$y = -ax^r + ax + r$$

$$y = rx^r - bx - 1$$

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

$$\frac{-a^r + \Lambda a}{-fa} = \frac{b}{r} - \frac{b}{r} - 1 \rightarrow -a^r + \Lambda a = fa \rightarrow a = r > 0$$

$$\frac{-b^r - \Lambda b}{\Lambda b} = \frac{-a}{r} + \frac{a}{r} + r \Rightarrow \Lambda \Lambda b = fa - r b \Rightarrow f b (b + r) = 0$$

$b = 0, -r$

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$$\left. \begin{matrix} x_s > 0 \\ y_s > 0 \end{matrix} \right\} \text{جوابه}$$

$$B = 0 > a$$

$$x + \left| \frac{-b}{ra} = \frac{-r}{\Delta 0 a} > 0 \right.$$

$$\left. -\frac{\Delta}{fa} = \frac{-14}{1000} > 0 \right\}$$

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$$s = \frac{-b}{a} = a^r + b^r - 1r = a + b, \quad p = \frac{c}{a} = ab = a + b - 1$$

$$\rightarrow ab + 1 = a^r b^r + rab + 1 - rab - 1r \rightarrow (ab - r)(ab + r) = 0$$

$$ab = r \rightarrow a + b = \frac{r}{ab} + 1 = r + 1 = a$$

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