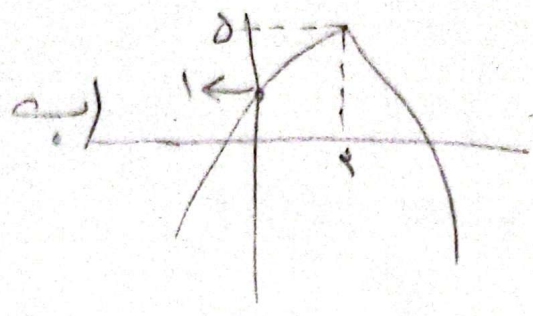
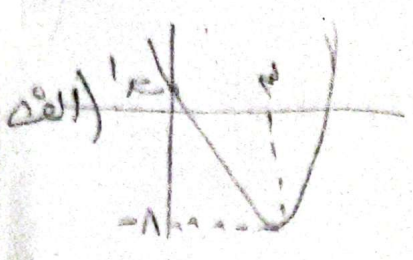


تعدادی

الف)  $\frac{-b}{2a} = 1 \rightarrow 1 - 4 + 1 = -1 \rightarrow \text{ext min} \quad | \quad -1$  (1)

ب)  $\frac{-b}{2a} = \frac{1}{2} \rightarrow \text{ext: Max} \quad | \quad \frac{1}{4}$



$\begin{cases} a+b = -1 \\ a+b = 1 \end{cases} \Rightarrow a = -1, b = 1 \rightarrow -1 - 4 + 1 + k = 0 \rightarrow k = 2$  (2)

$(\sqrt{a} - \sqrt{b})^2 \Rightarrow a + b - 2\sqrt{ab} = 1 \rightarrow 2m - 2\sqrt{m} = 0 \Rightarrow \begin{cases} t = \frac{1}{4} \\ t = 1 \end{cases} \Rightarrow m = 1$   
 $\frac{c}{a} = \frac{-1}{1}$  (3)

$a+b+c=0 \Rightarrow \begin{cases} a=1 \\ c = \frac{m}{4} \end{cases} \quad |a-b| = \left| \frac{m}{4} - 1 \right|$  (4)

$S = \left| \frac{m}{4} - 1 \right| \times |a| \times \frac{1}{4} = \frac{1}{4} \rightarrow |m^2 - 4|m| = 1 \rightarrow \begin{cases} |m|^2 - 4|m| - 1 = 0 \\ |m|^2 - 4|m| + 1 = 0 \end{cases}$   
 $\Rightarrow m = \pm 1 \rightarrow \frac{-b}{2a} = \frac{m}{4} = \pm \frac{1}{4}$

1)  $\frac{-\Delta}{2a} = \frac{1}{1} \Rightarrow \frac{9 - 4a^2}{2a} = 1 \rightarrow 1a^2 - 4a - 1 = 0$  (5)

$\Rightarrow a = \frac{5 \pm \sqrt{33}}{2}$       2)  $\frac{-\Delta}{2a} = 1 \Rightarrow a = 1 \Rightarrow \text{شماره 1}$

$a+b+c=0 \rightarrow \begin{cases} a=1 \\ c=a \end{cases} \Rightarrow a = 1 \Rightarrow r_1 = 1$  (6)

$|x_2 - x_1| = \frac{\sqrt{\Delta}}{|2a|} = 1 \Rightarrow \sqrt{10a - 4b} = 1 \Rightarrow b = 4a \Rightarrow a^2 - 10a + 4a = 0 \rightarrow r_2 = 4a$   
 $r_2 - r_1 = 4$

$$\text{cat} \Rightarrow y_1 = y_2 \Rightarrow \text{cat}_1 \left| \frac{1}{x_0} \right. \Rightarrow -1 \Rightarrow \frac{a}{x} + \frac{a}{y} + 1 = -1 \Rightarrow a = -14 \quad (8)$$

$$\text{cat}_2 \left| \frac{1}{x} \right. \Rightarrow -1 \Rightarrow \frac{b}{x} - \frac{b}{y} - 1 = \frac{-1}{x} \Rightarrow b = -4 \rightarrow b - a = 4$$

$$AB = \frac{B}{\Delta x} \Rightarrow \Delta x = 1 \rightarrow A = \frac{1}{\Delta}$$

$$\Rightarrow A+B = \begin{cases} A = \frac{1}{\Delta} \rightarrow B = -1x \\ A = -\frac{1}{\Delta} \rightarrow B = 1x \end{cases} \rightarrow y = -\Delta x + 1 \Rightarrow x = 1 \begin{cases} a = \frac{1}{\Delta} \\ a = -\frac{1}{\Delta} \end{cases} \quad (9)$$

$$\rightarrow \frac{1}{\Delta} = \frac{1}{\Delta} \rightarrow x \rightarrow \oplus, y \rightarrow \oplus \Rightarrow \text{Sol} \text{ } \Delta = 0$$

$$a+b = a^2 + b^2 - 14 \Rightarrow a+b = \frac{(a+b)^2}{t} - 4ab - 14 \rightarrow t^2 - 4(ab) + 14 \xrightarrow{ab = a+b - 1} \quad (10)$$

$$t^2 - 4(t-1) - 14 = t^2 - 4t - 10 = 0 \Rightarrow \begin{cases} t = -2 \\ t = 0 \end{cases} \rightarrow a+b = 0$$