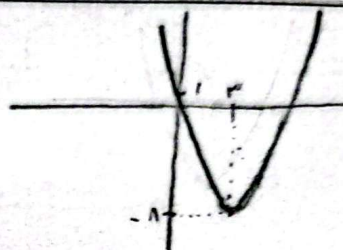


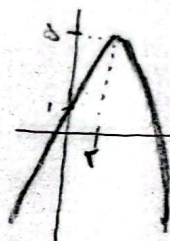
الف)  $x^2 - 4x + 1 \rightarrow \text{ent} \begin{vmatrix} -\frac{b}{2a} \\ \frac{-\Delta}{4a} \end{vmatrix} \rightarrow \begin{vmatrix} 2 \\ -1 \end{vmatrix} \rightarrow \boxed{\text{دار min}}$

ب)  $-2x^2 + 3x - 5 \rightarrow \text{ent} \begin{vmatrix} -\frac{b}{2a} \\ \frac{-\Delta}{4a} \end{vmatrix} \rightarrow \text{ent} \begin{vmatrix} \frac{3}{4} \\ \frac{-(-9-40)}{-8} \end{vmatrix} \rightarrow \begin{vmatrix} \frac{3}{4} \\ \frac{-49}{8} \end{vmatrix} \rightarrow \boxed{\text{دار Max}}$

الف)  $x^2 - 4x + 1 \rightarrow \text{ent} \begin{vmatrix} 2 \\ -1 \end{vmatrix} \rightarrow$



ب)  $y = -x^2 + 4x + 1 \rightarrow \text{ent} \begin{vmatrix} 2 \\ 1 \end{vmatrix} \rightarrow$



برای این مسئله  
مثال می زنیم

$\alpha = -1 \rightarrow 4\alpha + K\alpha - 9\alpha - 2 = 0 \rightarrow -4 + K + 9 - 2 = 0 \rightarrow \underline{K = -3}$

$\beta = 2 \rightarrow 4\beta + K\beta - 9\beta - 2 = 0 \rightarrow 8 + 2K - 18 - 2 = 0 \rightarrow 2K = 12 \rightarrow \underline{K = 6}$

$\rightarrow \boxed{K = -3}$

$\sqrt{\alpha} - \sqrt{\beta} = 1 \xrightarrow{\text{نمونه}} (\alpha + \beta) - 2\sqrt{\alpha\beta} = 1 \rightarrow 8 - 2\sqrt{p} = 3m - 2\sqrt{m} = 1$

$\sqrt{m} = t \rightarrow 2t^2 - 2t - 1 = 0 \xrightarrow{\text{atb}} \begin{cases} \sqrt{m} = 1 \checkmark \rightarrow \underline{m = 1} \\ \sqrt{m} = -\frac{1}{2} \times \text{قوی} \end{cases}$

$2x^2 - x - 1 = 0 \rightarrow \rho = \frac{c}{a} = -\frac{1}{2} \rightarrow \boxed{\rho = -\frac{1}{2}}$

$|m| \times \frac{\sqrt{\Delta}}{|a|} \times \frac{1}{r} = \frac{r}{r} \rightarrow |m| \times \frac{\sqrt{m^2 + 4m + 4 - 4m}}{4} = |m| \times \frac{\sqrt{m^2 - 4m + 4}}{4}$

$\rightarrow = |m| \times \frac{|m-2|}{4} = \frac{r}{r} \rightarrow m^2 - 2|m| = 3 \rightarrow m^2 - 2|m| - 3 = 0$

$\xrightarrow{\text{لمت}} t^2 - 2t - 3 = 0 \rightarrow (t-3)(t+1) \rightarrow \begin{cases} |m| = -1 \times \text{قوی} \\ |m| = 3 \checkmark \end{cases} \rightarrow \begin{cases} \underline{m = -3} \\ \underline{m = 3} \end{cases}$

$\text{ent} \begin{vmatrix} -\frac{b}{2a} \\ \frac{-\Delta}{4a} \end{vmatrix} \rightarrow \frac{m}{r} \rightarrow \begin{cases} 1/5 \\ -1/5 \end{cases} \rightarrow \boxed{\{-1/5, 1/5\}}$



$\Delta \min \rightarrow a \geq 0$ ,  $\text{ent} \left| \begin{array}{l} -\Delta \\ \epsilon a \end{array} \right| \rightarrow \frac{-\Delta}{\epsilon a} = \frac{V}{\Lambda} \rightarrow -\epsilon \Delta = V a$   
 $\rightarrow -r(9 - \epsilon a^r) = V a \rightarrow \Lambda a^r - V a - 1 \Lambda = 0 \rightarrow a = \frac{V \pm \sqrt{49 + 8V^2}}{14}$   
 $a = \frac{V \pm 2\Delta}{14} \rightarrow \begin{cases} \frac{cr}{14} = r \checkmark \\ \frac{-11}{14} = -\frac{9}{14} \times \text{و } \epsilon \end{cases} \rightarrow \underline{a = 2} \rightarrow \boxed{\text{به ازای یک مقدار}}$

$x^r - (a+1)x + a = 0 \rightarrow \frac{\sqrt{\Delta}}{1a} = r \rightarrow \sqrt{a^r + 1 - 4a} = r \rightarrow \sqrt{a^r - 2a + 1} = r$   
 $|a-1| = r \rightarrow \begin{cases} a = -1 \\ a = 3 \end{cases} \rightarrow a+1 > 0 \rightarrow \underline{a = 3}$   
 $x^r - 10 + b \rightarrow S = 10 = 4 + \epsilon \rightarrow P = b = 2\epsilon \rightarrow \Delta p = 2\epsilon - 2 = \boxed{21}$

$\frac{-b}{r a} \frac{\alpha}{r a} = \frac{1}{r}, \quad \frac{-\Delta}{\epsilon a} = \frac{-(a^r + 1a)}{\epsilon a} = -\frac{a-1}{\epsilon}$   
 $\frac{b}{r} - \frac{b}{r} - 1 = -\frac{a}{\epsilon} - r \rightarrow -\frac{a}{\epsilon} = 1 \rightarrow \underline{a = -\epsilon} \rightarrow b - a = -2\epsilon - (-\epsilon) = \boxed{-\Delta r}$   
 $\frac{-b}{r a} = \frac{b}{r b} = \frac{1}{r}, \quad \frac{-\Delta}{\epsilon a} = \frac{-(b^r + 1b)}{\Lambda b} = -\frac{b}{\Lambda} - 1 \rightarrow \frac{b}{r} - \frac{b}{r} - 1 = -\frac{b}{\Lambda} - 1 \rightarrow \frac{b}{\Lambda} = 1 \rightarrow b = -2\epsilon$

$\alpha \beta = \frac{\beta}{r b a} \rightarrow \alpha = \frac{1}{r \Delta a} \times \alpha^r = \frac{1}{r \Delta} \rightarrow \alpha = \pm \frac{1}{\Delta}$   
 $\text{if } \alpha = \begin{cases} +\frac{1}{\Delta} \rightarrow 0 = r \Delta \times (\frac{1}{8}) \times (\frac{1}{18}) + \frac{\epsilon}{\Delta} + \beta = \frac{1}{8} + \frac{\epsilon}{\Delta} + \beta \rightarrow \beta = -1 \checkmark \\ -\frac{1}{\Delta} \rightarrow 0 = r \Delta \times (-\frac{1}{\Delta}) \times \frac{1}{18} - \frac{\epsilon}{\Delta} + \beta = -\frac{1}{\Delta} - \frac{\epsilon}{\Delta} + \beta \rightarrow \underline{\beta = +1}, \underline{\alpha = -\frac{1}{\Delta}} \end{cases}$   
 $\rightarrow y = -\Delta n^r + \epsilon n + 1 \rightarrow \text{ent} \left| \frac{\epsilon}{10} = \frac{r}{\Delta} \right| \rightarrow \text{ent} \left| \frac{r}{\Delta} \right| \rightarrow \boxed{\text{ناحیه اول}}$

$S = a + b = a^r + b^r - 1r \rightarrow a^r - a - 4 + b^r - b - 4 = 0$   
 $(a-2)(a+2) + (b-2)(b+2) = 0 \rightarrow \begin{cases} (a-2)(a+2) = 0 \rightarrow a = \begin{cases} 2 \\ -2 \end{cases} \\ (b-2)(b+2) = 0 \rightarrow b = \begin{cases} 2 \\ -2 \end{cases} \end{cases}$   
 $\xrightarrow{\text{در رابطه مقادیر}} a \neq b \rightarrow a + b = \begin{cases} 2 + (-2) = 0 \\ (-2) + 2 = 0 \end{cases} \rightarrow \boxed{a + b = 0}$