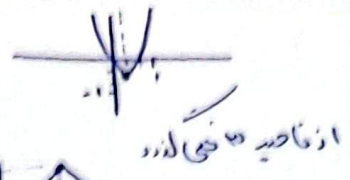
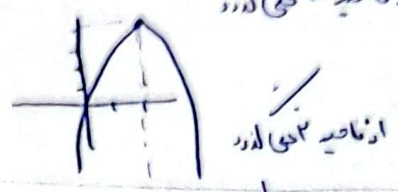


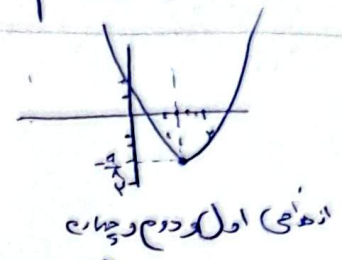
الف)  $y = 2m^2 + 4m \xrightarrow{\frac{a > 0}{min}} \text{cat} \left| \begin{array}{l} -\frac{b}{2a} = \frac{1}{2} \\ 4 \times \frac{1}{4} - \frac{16}{4} = -3 \end{array} \right.$



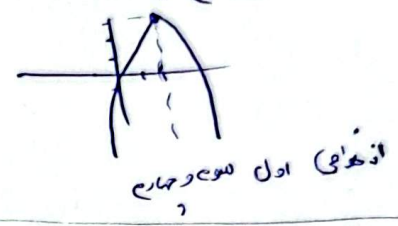
ب)  $y = -m^2 + 4m \xrightarrow{\frac{a < 0}{max}} \text{cat} \left| \begin{array}{l} -\frac{b}{2a} = 2 \\ -4 + 16 = 12 \end{array} \right.$



الف)  $y = 2m^2 - 6m + 2 \xrightarrow{\frac{a > 0}{min}} \text{cat} \left| \begin{array}{l} -\frac{b}{2a} = \frac{3}{2} \\ 2 \times \frac{9}{4} - \frac{36}{4} + 2 = -\frac{9}{2} \end{array} \right.$



ب)  $y = -m^2 + 4m - 1 \xrightarrow{\frac{a < 0}{max}} \text{cat} \left| \begin{array}{l} -\frac{b}{2a} = 2 \\ -4 + 16 - 1 = 11 \end{array} \right.$



$m^2 - m - 3 = 0 \rightarrow \frac{d, \beta}{\text{ریشه}} \rightarrow d + \beta = 1 \quad d - \beta = \frac{\sqrt{\Delta}}{|a|} \rightarrow \frac{1 - 4(-3 \times 1)}{2} = \frac{7}{2}$

الف)  $\frac{1}{\sqrt{13}} = \frac{\sqrt{13}}{13}$

ب)  $S^2 - 4P \rightarrow 1 - 4(-3) = 13$

ج)  $S^3 - 3SP \rightarrow 1 - 3(-3 \times 1) = 10$

د)  $d^3 - \beta^3 \rightarrow (d - \beta)^3 = d^3 - d^2\beta + d\beta^2 - \beta^3 \rightarrow d^3 - \beta^3 - d^2\beta + d\beta^2$

$\frac{d^3 - \beta^3}{d - \beta} = \frac{d^2 + d\beta + \beta^2}{1} \rightarrow S^3 - P \frac{\Delta}{|a|} = 10$

این معادله طبق روش اول باید جواب دارد پس تنها خطی که به عنوان جواب میماند

در نتیجه می توانیم بگوییم که جواب داشته باشد پس  $\Delta = 0$  که خارج از سوال است

$1 - (-3 \times \sqrt{13})$   
 $1 + 3\sqrt{13}$

$m^2 - 4m + 4 \rightarrow \Delta = 0$   
دو جواب یکسان

$d^2 - 4a = 0 \quad (0, 2) \rightarrow \frac{d}{a}$

$\frac{1}{0} - \frac{1}{2} = +$

$2m^2 - 14m + 4 = 0 \quad d, \beta \text{ ریشه} \quad 2d^2 + \beta^2 - 14a = 7, \quad d + \beta = 7 \quad 2\beta = -\frac{a}{c}$

$d^2 + \beta^2 + a^2 - 14a = 7$   
 $2d^2 - 14a = a \rightarrow d^2 - 7a = \frac{a}{2} \rightarrow 14 + \frac{14a}{2} + \frac{a}{2} = 7 \rightarrow 14 + a = 7 \rightarrow a = -7 \rightarrow 2\beta = 3$

$2m^2 - 14m + 4 = 0 \rightarrow m^2 - 7m + 2 = 0 \quad (m-1)(m-6)$   
 $\rightarrow 1 - 6 = -5$

