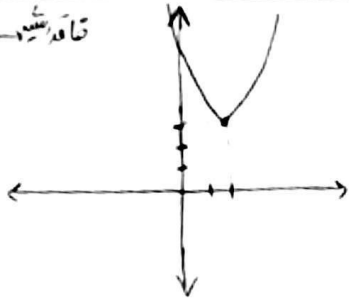
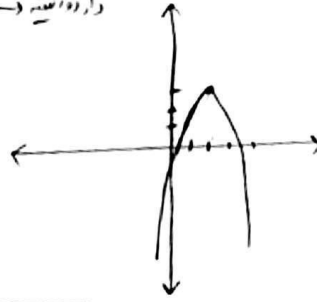


الف) $\Delta < 0$ ناقص
 $-\frac{b}{a} = 2$
 $|3$



ب) $\Delta > 0$ داره
 $-\frac{b}{a} = 2$
 $|3$



الف) $\Delta > 0 \rightarrow (m+1)^2 - 4(2)(\frac{1}{2}m+2) = m^2 - 2m - 1 > 0$
 $\Delta = 4 \rightarrow \sqrt{\Delta} = 2$
 $\rightarrow m = \frac{2 \pm 2}{2} = 0, 2$
 $\rightarrow m > 2 \cup m < -3$
 $(-\infty, -3) \cup (2, +\infty)$

ب) $\Delta = 0 \rightarrow m = -3 \text{ و } 2$
 ج) $\Delta < 0 \rightarrow -3 < m < 2$
 د) $\Delta \geq 0 \rightarrow m \in (-\infty, -3] \cup [2, +\infty)$

الف) $\frac{c}{a} > 0 \rightarrow \frac{10}{m-2} > 0 \rightarrow \frac{-\infty}{-2} < \frac{10}{m-2} < \frac{+\infty}{+2}$
 $-\frac{b}{a} < 0 \rightarrow \frac{2(m+1)}{m-2} < 0 \rightarrow \frac{-\infty}{-2} < \frac{2(m+1)}{m-2} < \frac{+\infty}{+2}$
 $\Delta > 0 \checkmark$
 باران میرزا و لاتی
 m

ب) $\frac{c}{a} < 0 \rightarrow \frac{10}{m-2} < 0 \rightarrow (-\infty, 2)$
 $-\frac{b}{a} < 0 \rightarrow (-1, 2)$

الف) $C.a < 0 \Rightarrow \frac{c}{a} < 0 \Rightarrow (m-2) < 0 \rightarrow m < 2$

ب) $-\frac{b}{a} = -2 \rightarrow b = 4a$
 $-2(m+1) = 4(m-2)$
 $m = 1$

$\Delta \geq 0 \rightarrow (2 \sin \alpha)^2 - 4(\frac{1}{4})(\frac{1}{4}) \geq 0$
 $4 \sin^2 \alpha - 1 \geq 0 \rightarrow \sin^2 \alpha \geq \frac{1}{4}$
 $\sin \alpha \geq \frac{1}{2} \text{ و } \sin \alpha \leq -\frac{1}{2}$
 $\left\{ \begin{array}{l} 4m^2 - 12m + 9 \geq 0 \Rightarrow m^2 - 3m + \frac{9}{4} \geq 0 \\ (m - \frac{3}{2})^2 \geq 0 \Rightarrow m = \frac{3}{2} \end{array} \right.$
 $4m^2 + 12m + 9 = 0 \Rightarrow (m+3)^2 \leq 0 \Rightarrow m = -3$
 غ $\frac{1}{4}$

$$\frac{(x-1)(x+\frac{1}{x})(x+1)(x-\frac{a}{x})}{-(x-1)(x+1)} = -(x+\frac{1}{x})(x-\frac{a}{x}) \Rightarrow$$

$$-x^2 + \frac{14}{x}x + \frac{a}{x} = y \rightarrow -9x^2 + 14x + a \rightarrow \frac{-\Delta}{4a} = \frac{-(14^2 - 4(-9)a)}{-4 \cdot 9} = \frac{196}{36} = 12,0 \text{ F}$$

$$yS = \omega p + v$$

$$y\left(\frac{m+r}{m}\right) = \omega\left(\frac{-r}{m}\right) + v \Rightarrow \alpha^r + \beta^r S^r - r\rho = \left(\frac{y}{r}\right)^r - r\left(-\frac{1}{r}\right) = \frac{14}{r}$$

$$14 = km \rightarrow m = k$$

$$\frac{k\alpha + \beta^a}{\omega\beta \cdot \beta} \xrightarrow{\alpha \cdot \beta = r \Rightarrow \alpha = \frac{r}{\beta}} \frac{\frac{r}{\beta} + \beta(B^r)^r}{(\beta^r + r)\beta} = \frac{\frac{1}{\beta}(1 + \beta^r(B^r)^r)}{(\beta^r + r)\beta} \Rightarrow$$

$$\frac{\frac{1}{\beta}(1 + \beta^r)}{(\beta^r + r)\beta} = \frac{\frac{1}{\beta}(r + \beta^r)(r - r\beta^r + \beta^r)}{(\beta^r + r)\beta} = \frac{r - r\beta^r + \beta^r}{\beta^r} \xrightarrow{\text{تفكيك}}$$

$$\frac{k}{\beta^r} - r + \beta^r \xrightarrow{\alpha = \frac{r}{\beta} \Rightarrow \alpha^r = \frac{r^r}{\beta^r}} \alpha^r + \beta^r - r = r - r = 19$$

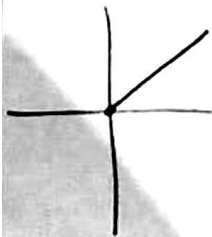
$$\begin{aligned} x=2 &\rightarrow y_1 = y_r = 14 \\ x=-3 &\rightarrow y_1 = y_r = k \\ 'C=k & \end{aligned} \Rightarrow \begin{cases} ka + 2b + k = 14 \\ 9a - 3b + k = k \end{cases} \rightarrow \begin{cases} 2a + b = \omega \\ 3a - b = 0 \end{cases}$$

$$\Rightarrow -\frac{b}{3a} = \frac{-r}{r} \rightarrow x = -\frac{r}{r}$$

$$\omega a = \omega \rightarrow a = 1, b = 3$$

$$y = 2x^2 + (m+1)x + m + 4 \Rightarrow x = 2x^2 + (m+1)x + m + 4 - 10$$

$$2m^2 + m + 4 = 0$$



$$\Delta \leq 0 \rightarrow m^2 - 1m + 4 \leq 0$$

$$(m-1)(m+4) \leq 0$$

مقاطع نقطه در
نواحی سه

$$m = -4 \rightarrow 2x^2 - 4x + 4 \rightarrow \begin{cases} x=2 \\ y=2 \end{cases} \text{ دو نقطه}$$