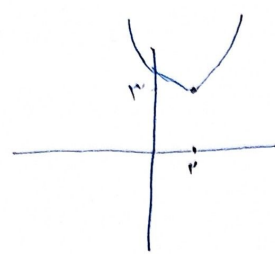
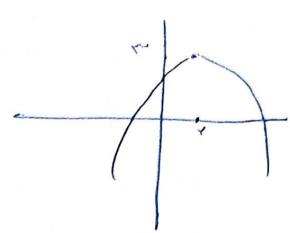


min $\begin{matrix} 2 \\ 2 \end{matrix}$ 	max $\begin{matrix} 2 \\ 2 \end{matrix}$ 	۱	
الف) $\Delta > 0 \Rightarrow (m+1)^2 - 4(2)(\frac{1}{2}m+2) > 0 \Rightarrow m^2 - 2m - 8 > 0 \Rightarrow m < -3 \text{ یا } m > 5$ ب) $\Delta = 0 \Rightarrow \frac{-2}{+4-4+} = \frac{0}{0} \Rightarrow m = \{-3, 5\}$ ج) $\Delta < 0 \Rightarrow \frac{-2}{+4-4+} < 0 \Rightarrow -3 < m < 5$ د) $\Delta \geq 0 \Rightarrow m \leq -3 \text{ یا } m \geq 5$			۲
الف) $\Delta > 0 \Rightarrow 4m^2 - 12m + 16 > 0$ $P > 0 \Rightarrow \frac{16}{m-2} > 0 \Rightarrow m > 2$ $S < 0 \Rightarrow \frac{2(m+1)}{m-2} < 0 \Rightarrow \frac{-1}{+4-8+} < 0$ ب) $\Delta > 0 \checkmark$ $P < 0 \Rightarrow \frac{16}{m-2} < 0 \Rightarrow m < 2$ $S < 0 \Rightarrow \frac{2(m+1)}{m-2} < 0 \Rightarrow \frac{-1}{+4-8+} < 0$ $-1 < m < 2$			۳
الف) $\Delta > 0 \Rightarrow 4m^2 - 12m + 16 > 0 \checkmark$ $P < 0 \Rightarrow \frac{16}{m-2} < 0 \Rightarrow m-2 < 0 \Rightarrow m < 2$ ب) $\frac{-b}{2a} = \frac{2(m+1)}{2(m-2)} = -2 \rightarrow m+1 = -2m+4 \Rightarrow m = 1$			۴
$\Delta \geq 0 \Rightarrow 4\sin^2 \alpha - 4(\frac{x}{x})(\frac{x}{x}) \geq 0 \Rightarrow 4\sin^2 \alpha \geq 4$ $\Rightarrow \sin^2 \alpha \geq 1 \Rightarrow \sin^2 \alpha = 1 \Rightarrow \sin \alpha = \pm 1 \rightarrow \sin \alpha = 1 \text{ و } -1$ $\Rightarrow \frac{2x^2}{3} - 2x + \frac{2}{3} = 0 \Rightarrow x = \frac{2}{3}$			۵

$$\frac{(n-1)(1^{n+1})(n+1)(1^{\eta-0})}{(n+1)(1-n)}$$

$$-4n^2 + 11n + 8 \rightarrow n^2 < \frac{\frac{1}{11}}{-1 \pm 0.199} = \frac{1}{11}$$

$$\frac{-10}{m} = \frac{r(m+r) - v_m}{m} \Rightarrow 14 = \epsilon_m \Rightarrow m = \epsilon$$

$$S = \frac{r}{r} \quad P = -\frac{1}{r}$$

$$\alpha^r + \beta^r = S - rP = \frac{9}{\epsilon} + 1 = \frac{1}{\epsilon}$$

$$\frac{\frac{r}{\alpha}}{\frac{\partial}{\partial \beta^r}} + \frac{\beta^r \left(\frac{r}{\alpha}\right)^r}{\frac{\partial}{\partial \beta^r}} = \frac{\beta^r}{\alpha^r} + \frac{r \alpha^r}{\frac{\partial}{\partial \alpha^r}} = \frac{\alpha^r + \beta^r}{\alpha^r} = \frac{S - rP}{\alpha^r}$$

$$= \frac{150 - 10}{0} = 19$$

$$r(r) + 10 = 1\epsilon \Rightarrow 1\epsilon = \epsilon a + r b + \epsilon \Rightarrow \epsilon a + 4a = 10$$

$$\Rightarrow a = 1$$

$$b = \frac{r}{9}$$

$$r(-r) + 10 = \epsilon \Rightarrow \epsilon = 9a - r b + \epsilon \rightarrow b = \frac{r}{9}a$$

$$n = -\frac{b}{ra} = \left(-\frac{r}{r}\right)$$

$$rn^r + (m+1)n + m + 4 = n$$

$$\Delta = 0$$

$$rn^r + mn + m + 4 = 0$$

$$m^r - \Delta m - \epsilon \Delta = 0 \quad \leftarrow \begin{matrix} m = 1 \Rightarrow n^r + 9n + 9 = 0 \\ m = -\frac{r}{r} \Rightarrow n^r - rn + 1 = 0 \quad \checkmark \end{matrix}$$