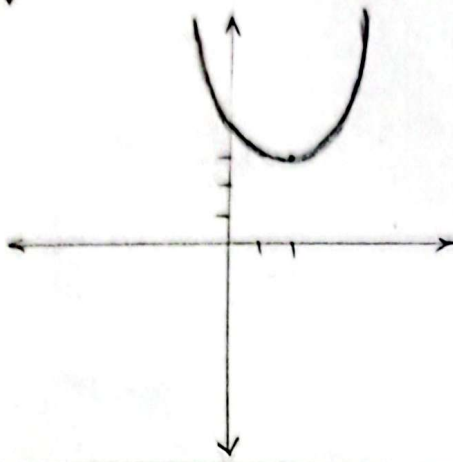


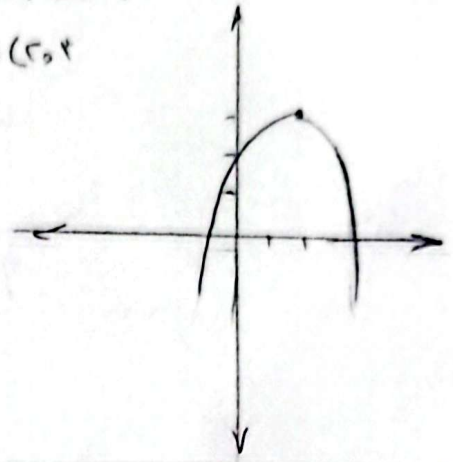
الف) $y = x^2 - 8x + 7$

محور (نقطه) $\rightarrow (4, -9)$



ب) $y = -x^2 + 8x - 1$

محور (نقطه) $\rightarrow (4, 9)$



①

$y = 2x^2 + (m+1)x + \frac{1}{2}m + 2 = 0 \rightarrow a = 2 \quad b = m+1 \quad c = \frac{1}{2}m + 2$

②

دو ریشه ی متمایز (الف)

$\Delta > 0 \rightarrow \Delta = (m+1)^2 - 4(2)(\frac{1}{2}m + 2) \rightarrow m > 5$

$\rightarrow m^2 - 2m - 1 > 0 \rightarrow (m-2)(m+3) > 0 \rightarrow m < -3$

بدون ریشه حقیقی (ج)

$\Delta < 0 \rightarrow m^2 - 2m - 1 < 0$

$\rightarrow (m-2)(m+3) < 0 \rightarrow -3 < m < 2$

یک ریشه مضرب (ب)

$\Delta = 0 \rightarrow m^2 - 2m - 1 = 0$

$\rightarrow (m-2)(m+3) = 0 \rightarrow m = -3$

دارای ریشه (د)

$\Delta \geq 0 \rightarrow m^2 - 2m - 1 \geq 0$

$\rightarrow m \geq 2$

$\rightarrow m \leq -3$

$y = (m-2)x^2 - 2(m+1)x + 1 = 0 \rightarrow a = m-2 \quad b = -2(m+1) \quad c = 1$

③

الف) محور (نقطه) $\rightarrow (1, 0)$
 ب) ریشه ی متمایز (ج)
 ج) ریشه ی مضرب (د)
 د) ریشه ی مضرب (ه)

$\Delta > 0 \quad S = -\frac{b}{a} < 0 \rightarrow \frac{2(m+1)}{m-2} < 0 \rightarrow -1 < m < 2$

$P = \frac{c}{a} > 0 \rightarrow \frac{1}{m-2} > 0 \rightarrow m > 2$

$\Delta(m^2 - 8m + 1) > 0 \rightarrow m = \frac{4 \pm \sqrt{12}}{2} \rightarrow$ جواب برابر

$\Delta = 4m^2 - 8m + 1 > 0 \rightarrow 4(m^2 - 2m + \frac{1}{4}) > 0$

$P = \frac{c}{a} < 0 \rightarrow \frac{1}{m-2} < 0 \rightarrow m < 2$

$x = -\frac{b}{2a} = \frac{m+1}{m-2} < 0 \rightarrow -1 < m < 2$

$y = (m-2)x^2 - 2(m+1)x + 1 = 0 \rightarrow a = m-2 \quad b = -2(m+1) \quad c = 1 \quad \Delta = 4(m^2 - 8m + 1)$

④

الف) محور (نقطه) $\rightarrow (1, 0)$

ب) محور (نقطه) $\rightarrow (1, 0)$

$\Delta > 0 \rightarrow 4(m^2 - 8m + 1) > 0 \rightarrow$ جواب برابر

$P = \frac{c}{a} = \frac{1}{m-2} < 0 \rightarrow m < 2$

$y(0) = 1 \rightarrow a = m-2 < 0 \rightarrow m < 2$

$x = -2 = -\frac{b}{2a} = -\frac{-2(m+1)}{2(m-2)} = \frac{m+1}{m-2}$

$m+1 = -2(m-2) \rightarrow m = 1$

$\frac{2x^2}{3} - (2\sin\alpha)x + \frac{4}{3} = 0 \quad \alpha > 0 \quad \alpha = \theta \rightarrow \alpha = \frac{\pi}{2}$

⑤

$\rightarrow x_1 \rightarrow 2x^2 - 12(\sin\alpha)x + 4 \rightarrow a = 2 \quad b = -12\sin\alpha \quad c = 4$

$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a} \rightarrow \frac{12\sin\alpha \pm \sqrt{144\sin^2\alpha - 32}}{4} \rightarrow \sin^2\alpha \geq 0 \rightarrow \sin\alpha \geq 0 \rightarrow \sin\alpha \geq 1$

$\rightarrow$ if $\sin\alpha = 1 \rightarrow x = \frac{12}{4} = 3$

$\rightarrow$ if $\sin\alpha = -1 \times$

$$y = \frac{(r_n^r - r_{n-1})(r_n^r - r_{n-d})}{1 - r_n^r} \rightarrow \text{man: ?}$$

(6)

$$\begin{aligned} (r_n^r - r_{n-1}) &\Rightarrow (n-1)(r_{n+1}) \\ (r_n^r - r_{n-d}) &\Rightarrow (n+1)(r_{n-d}) \\ (1 - r_n^r) &\Rightarrow -(n-1)(n+1) \end{aligned} \left\{ \begin{aligned} \frac{(n-1)(r_{n+1})(n+1)(r_{n-d})}{-(n-1)(n+1)} &= -(r_{n+1})(r_{n-d}) \\ &\rightarrow -4r_n^r + 1r_{n+1} + d \\ y_{\text{man}} &= \frac{-A}{\epsilon a} = \frac{-149.1r_0}{-r\epsilon} = \frac{r_{149}}{r\epsilon} \end{aligned} \right.$$

$$mx^r - (m+r)x - r = 0$$

$$\psi(s) = \Delta(\rho) + V \quad \alpha^r + \beta^r = \rho$$

(7)

$$\psi(\alpha + \beta) = \Delta(\alpha \cdot \beta) + V \rightarrow S = \frac{m+r}{m}, \rho = \frac{-r}{m} \rightarrow \psi\left(\frac{m+r}{m}\right) = \Delta\left(\frac{-r}{m}\right) + V \rightarrow m = \epsilon$$

$$\alpha^r + \beta^r = S^r - r\rho = \frac{9}{\epsilon} - r\left(-\frac{1}{\epsilon}\right) = \frac{9}{\epsilon} + \frac{\epsilon}{\epsilon} = \frac{1r}{\epsilon}$$

$$S = \frac{r}{\epsilon} \quad \rho = \frac{-1}{\epsilon}$$

$$x^r - \alpha x + r = 0 \rightarrow \alpha$$

$$\frac{\epsilon \alpha + \beta^d}{\Delta \beta^r}$$

(8)

$$\beta^r = \Delta \beta - r$$

$$S = \frac{-b}{a} = \Delta$$

$$P = \frac{c}{a} = r$$

$$\left\{ \begin{aligned} \beta^r - \Delta \beta + r &= 0 \rightarrow \beta^r = \beta(\Delta \beta - r) = \Delta \beta^r - r\beta \\ \beta^r &= r\beta - 10 \end{aligned} \right.$$

$$\beta^d = 474\beta - 10 \leftarrow \text{سے بعض ترتیب (اگر کسی بھی صورت میں) } \beta \text{ کا پتہ لگایا جائے}$$

$$\text{طریقہ} \rightarrow \alpha = \Delta - \beta \rightarrow \frac{r_0 - \epsilon \beta + \epsilon 474\beta - r_0}{2\Delta \beta - 10} = \frac{474\Delta \beta - 190}{2\Delta \beta - 10} = \frac{4\Delta \beta - 38}{\Delta \beta - r} = 19$$

$$y_1 = ax^r + bx + c \quad y_r = rx + 10$$

مقدار:

(9)

$$\begin{aligned} n &= r_0 - r \\ y &= \epsilon \end{aligned}$$

$$\rightarrow y = a(n-r)(n+r) = a(n^r + n - 4)$$

$$an^r + bn + c = rx + 10 \rightarrow an^r + (b-r)n + (c-10) = 0$$

$$y = n^r + rn + \epsilon \rightarrow n_{\text{اس}} = \frac{-b}{ra} = -\frac{r}{r} \rightarrow a = a, b = a+r, c = \epsilon = -4a + 10 \rightarrow a = 1 \text{ جس } b = r$$

$$y = rx^r + (m+1)x + m + 4 \rightarrow \text{محاسن پر مشتمل ترتیب}$$

(10)

$$\rightarrow rx^r + mx + m + 4 = 0 \rightarrow \Delta = 0 \text{ جس } \Rightarrow \Delta = 0 \rightarrow m^r - 4m - \epsilon 4 = 0 \rightarrow m = -\epsilon$$

$$\begin{aligned} m &= 1r \\ \frac{-b}{ra} &= -\frac{r}{r} \end{aligned} \left\{ \begin{aligned} \text{دریافتی اہل} \\ \text{نہیں} \end{aligned} \right.$$