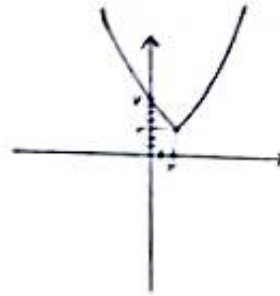


مضرباً
الف) $y = x^2 - 4x + 7$

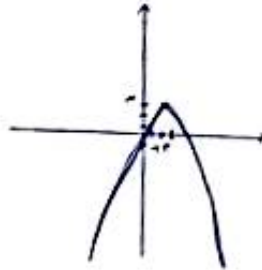
$$x \pm \frac{2}{3}$$



①

مضرباً
ب) $y = -x^2 + 4x - 1$

$$x \pm \frac{2}{3}$$



$$2x^2 + (m+1)x + \frac{1}{2}m + 2 = 0$$

$$\Delta = b^2 - 4ac$$

②

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

$$\frac{-2 \quad 0}{+ \quad - \quad +}$$

$$(m-1)(m+1) > 0$$

الف) در نتیجه متمایز $\Delta > 0$

$$\Rightarrow m \in \mathbb{R} - [-1, 1]$$

" " "

$$m^2 - 2m - 1 = 0$$

$$(m-1)(m+3) = 0$$

$$m = \{-3, 1\}$$

ب) یک مجموعه $\Delta = 0$

" " "

$$(m-1)(m+3) < 0$$

$$\frac{-2 \quad 0}{0 \quad - \quad +}$$

$$m \in (-3, 1)$$

ج) فاصله مثبت صغیری $\Delta < 0$

" " "

$$(m-1)(m+3) \geq 0$$

$$m \in \mathbb{R} - (-3, 1)$$

د) مازاد مثبت و مثبت دارد $\Delta = 0$

$$Y = (m-2)K^2 - 2(m+1)K + 10$$

$$S < 0 \rightarrow \frac{2m+2}{m-2} < 0 \quad \frac{-1 \quad 2}{+ \quad - \quad - \quad +}$$

$$-1 < m < 2 \quad I$$

$$P > 0 \rightarrow \frac{10}{m-2} > 0 \quad \frac{2}{- \quad + \quad +}$$

$$m > 2 \quad II$$

$$\Delta > 0 \rightarrow 4m^2 + 4m + 8 - 4(m+1) > 0 \xrightarrow{\div 4} m^2 - 1 > 0 \quad \mathbb{R} \setminus \{-1, 1\} \quad III$$

$$\Rightarrow I \cap II \cap III = \emptyset$$

$$S < 0 \rightarrow \frac{2m+2}{m-2} < 0 \quad \frac{-1 \quad 2}{+ \quad - \quad - \quad +}$$

$$-1 < m < 2 \quad I$$

$$P < 0 \rightarrow \frac{10}{m-2} < 0 \quad \frac{-2 \quad +}{- \quad + \quad +}$$

$$m < 2 \quad II$$

$$\Delta > 0 \rightarrow m^2 - 1 > 0 \quad \mathbb{R} \setminus \{-1, 1\} \quad III$$

$$\Rightarrow I \cap II \cap III = \{m \in (-1, 2)\}$$

$$Y = (m-2)K^2 - 2(m+1)K + 10$$

$$P < 0 \rightarrow \frac{10}{m-2} < 0 \quad \frac{2}{- \quad + \quad +}$$

$$m < 2$$

$$\Delta > 0 \rightarrow m^2 - 1 > 0 \quad \mathbb{R} \setminus \{-1, 1\} \quad II$$

$$\Rightarrow m < 2$$

الف) برای هر m که $m < 2$ باشد، $P < 0$ و $\Delta > 0$ است.

$$\frac{-b}{2a} = -2 \rightarrow \frac{-2m-2}{2m-2} = -2 \rightarrow -2m-2 = 4m-4 \rightarrow 4m = 2 \rightarrow m = \frac{1}{2}$$

$$\frac{-b}{2a} = -2 \quad \text{ب) عدد مقابل}$$

بازرسی

معین نظری

تلفیظ شده

$$\frac{rK^r}{r} - (r \sin \alpha) u + \frac{r}{r} = 0$$

$$p > 0 \rightarrow \frac{r}{r} > 0 \checkmark$$

$$r > 0 \rightarrow \frac{r \sin \alpha}{r} > 0 \checkmark$$

$$\frac{(u-1)(ru+1)}{Y} \quad \frac{(u-1)(ru-0)}{Y}$$

$$Y = \frac{(ru^2 - ru - 1)(ru^2 - ru - 0)}{1 - u^r} \rightarrow -(ru+1)(ru-0) = -(4u^2 - 10u + ru - 0)$$

$$-(u-1) \quad (1-u)(1+u)$$

$$\rightarrow -4u^2 + 10u + 0 \cdot y$$

$$\max \rightarrow \frac{-0}{4a} = \frac{10 + 10}{4c} = \frac{20}{4c}$$

$$mu^r - (m+r)u - r = 0$$

$$\rightarrow rs - v = \Delta p \rightarrow \frac{rm+y}{m} - v = \frac{10}{m} \rightarrow rm+y - vm = -10$$

$$\rightarrow -em = -10 \quad (m = 5)$$

$$\rightarrow em^r - 4m - r = 0 \quad \xrightarrow{\text{تجزیه}} \alpha^r + \beta^r = s^r - rp = \frac{34}{14} + 1 = \left(\frac{\Delta r}{14} \rightarrow \frac{r}{14} = \frac{13}{c} \right)$$

$$\frac{e\alpha + \beta^0}{\Delta \beta^r}$$

$$\Rightarrow \frac{\alpha^r \beta^r + \beta^0}{\Delta \beta^r}$$

$$\frac{c}{a} = r \rightarrow \alpha \beta = r \rightarrow c = \alpha^r \beta^r$$

$$\rightarrow \frac{\beta^r(\alpha^r + \beta^r)}{\Delta \beta^r} = \frac{\alpha^r + \beta^r}{\Delta} = \frac{s^r - r p}{\Delta} = \frac{14\Delta - 30}{\Delta} = \frac{9\Delta}{\Delta} = 19$$

$$\sin \alpha = 1 = \left\{ rK u + \frac{r}{c} \right\}$$

$$u = \frac{r}{r} \rightarrow \text{ریشه ثابت}$$

$$p > 0$$

$$s > 0$$

$$0 > 0$$

دلیلی ریشه حقیقی

(5)

$$\Delta > 0 \rightarrow r \sin \alpha^r - \epsilon > 0$$

$$\sin \alpha^r > 1 \quad \xrightarrow{\cdot \sin \alpha^r} \sin \alpha^r = 1$$

$$\sin \alpha = 1$$

عقبات

چون ریشه ثابت است

(6)

(7)

(1)

بزرگ

نوی

کتاب

$$y_1 = au^r + bu + c$$

$$y_2 = ru + 10$$

$$\frac{c = \epsilon}{\text{مقدار } 10 - r \cdot 10}$$

$$\begin{cases} \epsilon a + 2b = 10 \\ 2a - 2b = 0 \end{cases}$$

(9)

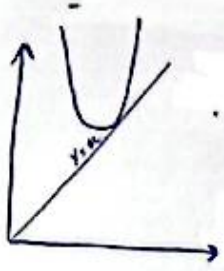
$$\begin{cases} a = 1 \\ b = 3 \end{cases}$$

$$y = u^r + 2u + \epsilon$$

$$\frac{\text{مقدار}}{r \cdot a} = \frac{-b}{r \cdot a} = \left(-\frac{3}{2} \right)$$

(10)

نوی:



$$\Delta = 0 \rightarrow \begin{cases} y = ru^r + (u+1)u + m + y \\ y = x \end{cases} \Rightarrow y = y \Rightarrow ru^r + (u+1)u + m + y = x$$

$$\Rightarrow ru^r + m + (u+1) = 0$$

$$\Rightarrow \Delta = 0 \rightarrow m^2 - 12m - \epsilon = 0$$

$$(m-12)(m+\epsilon) = 0$$

$$m = \begin{cases} -\epsilon \\ 12 \end{cases}$$

$$m = -f$$

$$\begin{aligned} \text{مثال: } \begin{cases} x > 0 \\ y > 0 \end{cases} &\rightarrow \frac{-b}{r \cdot a} > 0 \rightarrow \begin{cases} -\epsilon \\ 12 \end{cases} \\ &\rightarrow \frac{-(b^2 - 4ac)}{r} > 0 \rightarrow \begin{cases} -\epsilon \\ 12 \end{cases} \end{aligned}$$