

$S_2 \alpha + \beta = -(-d) = d$ (۱)
 $P = \alpha\beta = \frac{c}{a} = 2$ (۲)

$\frac{(\alpha\beta)(\alpha) + \beta^2}{(\alpha + \beta)(\beta^2)} = \frac{(\beta^2)(\alpha + \beta^2)}{(\beta^2)(\alpha + \beta)} = \frac{S_2 - 2PS}{d} = \frac{4d}{d} = 4$

$\alpha m^2 + b m + c = 9 \rightarrow \begin{cases} (2, -4) \\ (-1, 0, -6) \end{cases} \rightarrow \text{عرض می کنیم} \rightarrow \frac{3-1,5}{2} = 0,75 \Rightarrow \text{طول محور تنان}$

$\frac{\alpha + \beta}{2} = 0,75 \rightarrow \alpha + \beta = 1,5$

$2a + 2b + c = 12 \times 0,5 - 1,5b + c$

منفرجه تا بهای تابع یعنی مجموع ریشه ها

$\frac{\Delta}{4a} = \frac{f}{3}k \rightarrow a=1 \rightarrow \Delta = \frac{f}{3}k \rightarrow \Delta = \frac{16}{9}k^2 \rightarrow 4k^2 - 20 = \frac{16}{9}k^2 \rightarrow k^2 = 9$

$\left| \frac{k^2}{2} \right| = \left[\frac{9}{2} \right]$

راستش متوجه شدیم این علامت برابرت هست یا نه؟

$1a + 2b + c = 2d a - db + c \rightarrow 1b = 19a \rightarrow b = 19a *$

$-2 + \beta^2 = S_2 - 2P_2 \rightarrow \frac{b^2}{a^2} - \frac{2c}{a} = \Delta \rightarrow -1 = \frac{2c}{a} \rightarrow a = -2c$

$\text{عرض} = \frac{-\Delta}{4a} = \frac{b^2 - 4ac}{-4a} = \frac{4a^2 - 4(a)(-\frac{a}{2})}{-4a} = \frac{4a^2 + 2a^2}{-4a} = \frac{6a^2}{-4a} = -\frac{3}{2}a = 1$

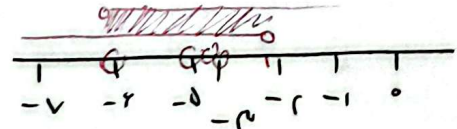
$a = -\frac{2}{3}, b = -\frac{4}{3}, c = \frac{1}{3}$

$-\frac{2}{3}a^2 + \frac{4}{3}a + \frac{1}{3} \rightarrow \frac{1}{3}$

$\Delta a - m = 0 \rightarrow \Delta \gamma_0 \rightarrow 2d + fm \gamma_0 \rightarrow m \gamma_0 - 4,2d$

$2 < 2(\frac{2}{3}) \rightarrow \Delta < 9 \checkmark$

$\gamma > 0 \rightarrow (4,0) - d(4,0) - m \gamma_0 \rightarrow m < -1,2d$



$\{-6, -2, 0, 2, 4, 6, 8, 10\}$

$\rightarrow \frac{-\Delta}{4a} = 2 \rightarrow -(b^2 - 4ac) = 16a \rightarrow 16m = 20m^2 - fm - 122 \rightarrow 4m^2 - 5m - 31$

$\omega^2 = \frac{3 \pm \sqrt{9 - 4(-31)}}{1} = 3, 9$

$12m + 14 = 9 \rightarrow \frac{-b}{2a} = \frac{12}{2 \times 3} = 2 \rightarrow \Delta = 2$

$$\alpha\beta = \alpha^r \rightarrow \frac{c}{a} = 2a - 1 = a^r \rightarrow a^r - 2a + 1 = 0 \rightarrow (a-1)^r \rightarrow \alpha = 1$$

(7)

(1)

$$\begin{aligned} \text{طول رأس} &= \frac{b}{2a} = \frac{y}{k} \\ \text{عرض رأس} &= \frac{-\Delta}{2a} = -\frac{f+4k}{k} \end{aligned} \rightarrow \frac{f+4k}{k} = \frac{1}{k} + f \xrightarrow{xk} f+4k = 1+k \rightarrow k=2$$

$$\frac{-f+(2 \times 4)}{2} = -1$$

عرض برابر است

لغات فارسی

$$x^2 = t \rightarrow t^2 - vt - \Delta = 0 \rightarrow \frac{t}{v} = \frac{v \pm \sqrt{v^2 + 4\Delta}}{2}$$

(9) این سوال ۸ ←

چون $x^2 = t$ پس t نمی تواند منفی باشد پس $\frac{v - \sqrt{v^2 + 4\Delta}}{2}$ نیست پس $x^2 = \frac{v + \sqrt{v^2 + 4\Delta}}{2}$

$$\begin{aligned} x &= \pm \sqrt{\frac{v + \sqrt{v^2 + 4\Delta}}{2}} \rightarrow S = \sqrt{\frac{v + \sqrt{v^2 + 4\Delta}}{2}} + \left(-\sqrt{\frac{v + \sqrt{v^2 + 4\Delta}}{2}}\right) = 0 \\ \rightarrow P &= \left(\sqrt{\frac{v + \sqrt{v^2 + 4\Delta}}{2}}\right) \left(-\sqrt{\frac{v + \sqrt{v^2 + 4\Delta}}{2}}\right) = -\left(\frac{v + \sqrt{v^2 + 4\Delta}}{2}\right) \rightarrow 2P^2 = 2P^r \rightarrow \\ (2) \left(\frac{(v + \sqrt{v^2 + 4\Delta})^r}{(2)^r}\right) &= (2) \left(\frac{12^3 + 14\sqrt{v^2 + 4\Delta}}{2}\right) = \frac{12^3 + 14\sqrt{v^2 + 4\Delta}}{2} \end{aligned}$$

(10)

$$y_1 = y_2 \rightarrow -m^r + m^{r+1} = -m - m \rightarrow m^r - (m+1)m - (m+1) = 0$$

$$\Delta < 0 \rightarrow b^r - 4ac = (m+1)^r + 4m(m+1) < 0 \rightarrow (m+1)(\Delta m + 1)$$

$$\begin{array}{c} -1 \qquad -\frac{1}{\Delta} \\ \hline + \quad | \quad - \quad | \quad + \end{array}$$

حدود m هیچ عدد صحیح نیست

خارجی سخت بود!!