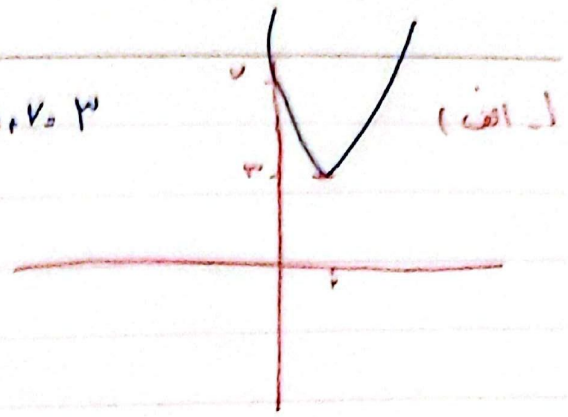


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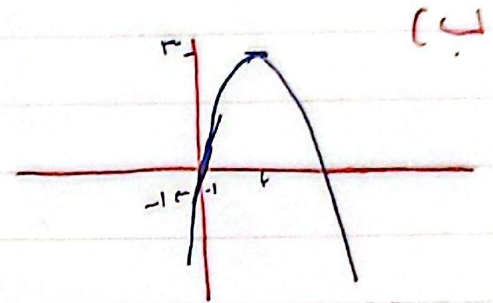
للنمبر علي

$$x = \frac{-b}{2a} = \frac{-1}{2} = -\frac{1}{2}$$

$$y = 1 \cdot \left(-\frac{1}{2}\right)^2 + 1 \cdot \left(-\frac{1}{2}\right) + 1 = \frac{3}{4}$$



$$x = \frac{-b}{2a} = \frac{-1}{2} = -\frac{1}{2} \quad y = -1 \cdot \left(-\frac{1}{2}\right)^2 + 1 \cdot \left(-\frac{1}{2}\right) + 1 = \frac{3}{4}$$



$$\Delta > 0$$

$$(m+1)^2 - (m-1)^2 > 0$$

$$m^2 - 2m - 1 > 0 \quad (-\infty, -3) \cup (5, +\infty)$$

$$(m-5)(m+3) > 0$$

$$\begin{array}{c} -3 \quad 5 \\ + \quad 0 \quad - \quad 0 \quad + \end{array}$$

$$\Delta = 0$$

$$\{-3, 5\}$$

$$\Delta < 0 \Rightarrow$$

$$(-3, 5)$$

$$(-3, 5)$$

$$\Delta > 0$$

$$(-\infty, -3] \cup [5, +\infty)$$

$$\delta < 0 \Rightarrow \frac{-b}{a} < 0 \quad \frac{r m + r}{m - r} < 0 \quad \text{الف. ۳۰}$$

$$\frac{-1}{r} < \frac{r}{r} \Rightarrow m \in (-1, r) \quad \text{①}$$

$$p > 0 \Rightarrow \frac{1}{m \cdot r} > 0 \Rightarrow m > r \quad \text{②}$$

$$\Delta > 0 \Rightarrow \{m^2 - 4m\} + \{-\{0m\} \wedge 0\} = \{m^2 - 4m + 4\} > 0$$

$$m^2 - 4m + 4 > 0$$

① و ②:  $\Delta < 0$ پس همیشه مثبت است.

ب. $p < 0 \quad \frac{c}{a} < 0 \quad \frac{1}{m \cdot r} < 0 \quad m < r \quad \text{③}$ چون $\frac{c}{a}$ منفی است پس $\Delta < 0$ است.

$$\delta < 0 \quad \frac{r m + r}{m - r} < 0 \quad \frac{-1}{r} < \frac{r}{r}$$

$$(-1, r) \quad \text{④}$$

$$\text{① و ③} \Rightarrow m \in (-1, r)$$

الف. ۳۱. $\Delta > 0$ است. زیرا $p < 0$ پس $m < r$

$$\frac{-b}{r a} = -r \Rightarrow -r a = -b$$

$$1 - \{m\} = r m + r$$

$$r = r m$$

$$m = 1$$

$$\Delta = \epsilon \sin^2 \alpha - \epsilon$$

$$\epsilon (\sin^2 \alpha - 1)$$

$$\Delta = 0$$

$$\epsilon \sin^2 \alpha = \epsilon$$

$$\sin^2 \alpha = 1$$

Δ یا منفی است یا 0 چون سوال

گفته شده ریشه حقیقی دارد پس $\Delta = 0$ $\sin \alpha = +1 \Rightarrow \alpha = 2k\pi + \frac{\pi}{2}$

$$\sin \alpha = +1 \Rightarrow \alpha = 2k\pi + \frac{\pi}{2}$$

$$k=1$$

$$1 - x$$

$$x=1 \quad x-1 \quad x^2=1 \quad \text{پس} \quad \frac{C}{a}, 1, \text{پس}$$

$$\frac{(3x^2 - 2x - 1)(2x^2 - 3x - 5)}{(1-x)(1+x)} =$$

جمع ضرایب منفی است $\Rightarrow 3x^2 - 2x - 1$
از ریشه ها 1 است

$$\frac{(3x+1)(x-1)(2x-5)(x+1)}{(1-x)(1+x)} = - (3x+1)(2x-5) =$$

$$-4x^2 + 13x + 5 \Rightarrow x_{max} = \frac{-13}{-8} = \frac{13}{8}$$

$$\frac{-\Delta}{4a} = \frac{-219}{-32} \Rightarrow \frac{219}{32}$$

4, 13, 13

$$\delta: \frac{m+r}{m} \quad p = -\frac{r}{m} \quad -V$$

$$\frac{wm+r}{m} = -\frac{1}{m} + V$$

$$\frac{14+rm}{m} = V$$

$$Vm = 14 + rm$$

$$6m = 14$$

$$m = \frac{7}{3}$$

$$\frac{wr}{14} = \frac{rs}{14} = \frac{rs}{\epsilon}$$

$$\epsilon x^r + 4x \cdot r = 0$$

$$\alpha^r + \beta^r: \delta^r - r p = \frac{wr}{14} + 1 = \frac{wr}{14}$$

$$\frac{\epsilon \alpha + \beta^0}{\alpha \beta^r} = \frac{\alpha^r \beta^r + \beta^0}{\alpha \beta^r} = \frac{\alpha^r + \beta^r}{\alpha} = \frac{9\alpha}{\alpha} = 9$$

$$\alpha^r + \beta^r = \delta^r - r p \delta = 12\alpha - (r \times \alpha \times r) = 9\alpha$$

$$\begin{cases} \epsilon a + r b + c = 1\epsilon \\ 9a - r b + c = \epsilon \end{cases} \xrightarrow{c=\epsilon} \begin{cases} r a + r b = 10 \\ 9a - r b = 0 \end{cases}$$

$$1ra + 4b = 10$$

$$11a + 4b = 0$$

$$r \cdot a = r$$

$$a = 1, b = r$$

$$\frac{-b}{ra} = \frac{-r}{r}$$

$$y = x^2, (m+1)x, m+6$$

$$y = x$$

$$x^2 + (m+1)x + m+6 = x$$

دلتا صفر است زیرا
مماس است و 1 ریشه دارد

$$x^2 + mx + m - 5 = 0$$

$$m^2 - 12m - 25 = 0$$

$$(m-12)(m+2) = 0$$

$$m = 12 \quad -2$$

$$-2$$