

$$y = (a-1)m^2 + m + r$$

نشان دهیم

$$\frac{-b}{2a} < r \rightarrow \frac{-1}{2a-1} < r \quad \text{با } a > 1$$

$$\text{با } a < 1 \quad a < \frac{r}{\epsilon}$$

$$-\frac{1}{\epsilon}m^2 + m + r < 0$$

$$m^2 - \epsilon m - 1 < 0 \rightarrow (m-4)(m+1) < 0$$

$$m < 4 \quad m > -1$$

$$f(m) = m^2 - 5m + 4$$

m	m ₁	m ₂
f(m)	-	+

$$m < 0$$

$$b^2 - 4ac > 0$$

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

$$\epsilon m^2 < r^2 \quad m^2 < \frac{r^2}{\epsilon} \rightarrow -\frac{r}{\epsilon} < m < \frac{r}{\epsilon}$$

$$m_1 = \frac{r - \sqrt{r^2 - 4\epsilon}}{2\epsilon}$$

$$m_2 = \frac{r + \sqrt{r^2 - 4\epsilon}}{2\epsilon}$$

$$m^2 - 5m + 4$$

$$S = \frac{r - \sqrt{r^2 - 4\epsilon}}{2\epsilon} + \frac{r + \sqrt{r^2 - 4\epsilon}}{2\epsilon} = \frac{r}{\epsilon}$$

$$m^2 - 5m + \frac{4}{9} < 0$$

$$9m^2 - 45m + 4 < 0$$

$$P = \frac{r + \sqrt{r^2 - 4\epsilon}}{2\epsilon} \times \frac{r - \sqrt{r^2 - 4\epsilon}}{2\epsilon} = \frac{\epsilon}{9}$$

$$\alpha, \beta \rightarrow r\alpha^2 - \lambda m + m + r < 0 \quad \alpha < \beta$$

$$\alpha < 1 \rightarrow r - \lambda + m + r < 0 \rightarrow m < \epsilon$$

$$r\alpha^2 + \beta^2 < 1 \rightarrow m < P$$

$$r + \beta^2 < 1 \rightarrow \beta < \frac{1}{r} \quad \beta < \frac{1}{r}$$

$$S < \epsilon \rightarrow \alpha + \beta < \epsilon \rightarrow \beta < \epsilon - \alpha$$

$$r\alpha^2 + (\epsilon - \alpha)^2 < 1$$

$$r\alpha^2 + 1 + \epsilon - 2\alpha < 1 \rightarrow r\alpha^2 - 2\alpha + \epsilon < 0 \rightarrow \alpha^2 - 2\alpha + 1 < 0 \rightarrow \alpha < 1$$

موضوع: تاريخ: (5) قيميات راسي سكرين $S(2, 9)$ عمن (ازمنا) 5

$$y = a(m-2)^2 + 9$$

$$-5a + 9 = 0 \quad a = -1$$

$$-(m-2)^2 + 9 > 0$$

$$m^2 - 4m - 5 < 0 \rightarrow (m-5)(m+1) < 0$$

$$(m-2)^2 - 9 < 0$$

$$m^2 - 4m - 9 < 0$$

$$\begin{array}{c|c} -1 & 5 \\ \hline + & - \\ \hline 0 & 0 \end{array}$$

$(-1, 5)$

$$\alpha, \beta \rightarrow \alpha m^2 - \sqrt{m} + 9\beta = 0$$

$$\beta > 0$$

$$\frac{1}{\alpha} + \frac{1}{\beta} = 0$$

$$P \rightarrow \alpha\beta = \frac{9\beta}{\alpha}$$

$$\alpha^2\beta = 9\beta$$

$$S \rightarrow \alpha + \beta = \frac{\sqrt{m}}{\alpha}$$

$$\alpha^2 = 9$$

$$\alpha = \pm 3$$

$$\alpha = +3 \rightarrow \frac{\sqrt{m}}{3} = 3 + \beta \rightarrow \beta = \frac{\sqrt{m}}{3} - 3$$

$$\alpha = -3$$

$$\alpha = -3 \rightarrow -\frac{\sqrt{m}}{3} = -3 + \beta \rightarrow \beta = \frac{\sqrt{m}}{3} + 3$$

$$\beta = \frac{\sqrt{m}}{3}$$

$$\left[\frac{\sqrt{m}}{3} + \frac{\sqrt{m}}{3} = \frac{2\sqrt{m}}{3} \right]$$

$\leftarrow \beta, \alpha$ (V)

$$P \rightarrow \alpha\beta = \frac{9\beta}{\alpha} \rightarrow \alpha^2 - m\beta = 1 \rightarrow \alpha^2 + m\alpha - 2m = 0$$

$$\beta^2 + m\beta - 2m = 0 \rightarrow \beta^2 - 2m = -m\beta \quad \alpha^2 - m\beta = 1$$

$$\alpha^2 + \beta^2 - 2m = 1 \rightarrow m^2 + 4m - 2m = 1$$

$$S^2 - 2P$$

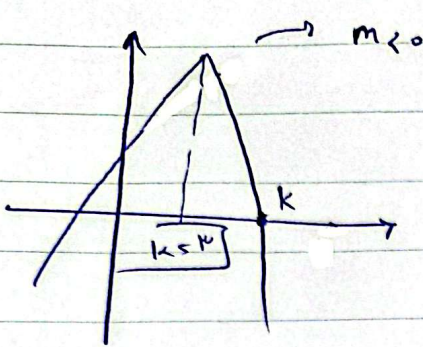
$$m^2 + 2m - 1 = 0$$

$$m = -1 \rightarrow m^2 - 4m + 1 = 0 \quad \Delta < 0 \rightarrow \text{No real roots}$$

$$(m+1)(m-2) = 0$$

$$m = 2 \rightarrow m^2 + 2m - 1 = 0 \quad S = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

$$m = -1, m = 2$$



$$f(m) = mm^r + \epsilon m + \frac{m}{r} + v$$

(A)

$$-\frac{\Delta}{\epsilon a} = \Lambda$$

$$-\Delta = r^2 a$$

$$-(14 - \epsilon(m)(\frac{m}{r} + v)) = r^2 m$$

$$-14 + r^2 m + r\Lambda = r^2 m \rightarrow r^2 m - \epsilon m - 14 = 0$$

$$m^r - r m - \Lambda = 0$$

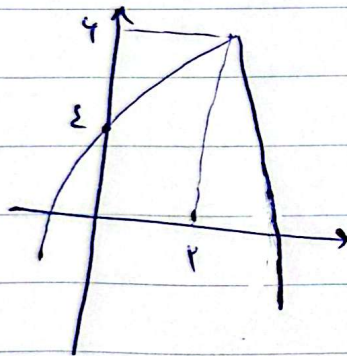
$$(m - \epsilon)(m + r) = 0 \rightarrow m = \epsilon \quad m = -r \checkmark$$

$$-r^2 m^r + \epsilon m + 4 = 0$$

$$m^r - r m - r = 0$$

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

$$\boxed{m = r} \quad m = -1 \times$$



$$y = a(m - r)^2 + 4$$

$$\epsilon a = 4 \epsilon$$

$$\epsilon a = -r^2 a = -\frac{1}{r}$$

$$-\frac{1}{r}(m^r - \epsilon m + \epsilon) + 4 = -\frac{1}{r}m^r + r m - r + 4 = -\frac{1}{r}m^r + r m + \epsilon - m^r + \epsilon m + \Lambda$$

$$\frac{1}{a} + \frac{1}{b} = \frac{a+b}{ab} \Rightarrow -\frac{\epsilon}{\Lambda} = -\frac{1}{r}$$

$$m^r - (\epsilon a + \epsilon)m + (r^2 m^r + 4a + r) = 0 \rightarrow m_1 = r \quad m_2 = ?$$

$$\epsilon a + \epsilon = r + m^r$$

$$r^2 a^r + 4a + r = r m^r$$

$$r^2 a^r + 4a + r = \Lambda a + \epsilon$$

$$r^2 a^r - r a - 1 = 0$$

$$a = 1, -\frac{1}{r}$$

$$a = 1 \rightarrow m^r - \Lambda m + r = 0$$

$$(m - r)(m - 4) = 0 \rightarrow m = r, 4$$

$$a = -\frac{1}{r} \rightarrow m^r - \frac{1}{r}m + \frac{\epsilon}{r} = 0 \rightarrow r^2 m^r - \Lambda m + \epsilon = 0$$

$$\boxed{m = r, \frac{r}{\mu}} \quad m = 4, \frac{r}{\mu}$$