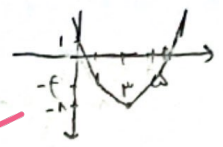


۲. آفرین

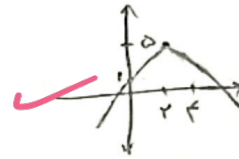
الف) $y = 2m^2 - fm + 1 \rightarrow a > 0 \rightarrow U \rightarrow \min$ $\left| \begin{array}{l} -\frac{b}{2a} \rightarrow -\frac{(-f)}{2} = \frac{f}{2} \\ -\frac{\Delta}{4a} \rightarrow \frac{f^2 - 4(2)(1)}{4(2)} = \frac{f^2 - 8}{8} \end{array} \right.$ $\rightarrow -\frac{(-f)}{2} = 1 \xrightarrow{\text{بازرسی}} 2 - f + 1 = -1$

ب) $y = -2m^2 + 3m - 5 \rightarrow a < 0 \rightarrow \cap \rightarrow \max$ $\left| \begin{array}{l} -\frac{b}{2a} \rightarrow \frac{-3}{-4} = \frac{3}{4} \\ -\frac{\Delta}{4a} \rightarrow \frac{9 - 4(-2)(-5)}{4(-2)} = \frac{9 - 40}{-8} = \frac{-31}{8} \end{array} \right.$

الف) $y = m^2 - 4m + 1 \rightarrow a > 0 \rightarrow U \rightarrow \min$ $\left| \begin{array}{l} \frac{y}{x} = \frac{3}{-1} \\ \frac{m}{y} \left| \begin{array}{l} 1 \quad 3 \quad 5 \\ -1 \quad -1 \quad -4 \end{array} \right. \end{array} \right.$



ب) $y = -m^2 + 4m + 1 \rightarrow a < 0 \rightarrow \cap \rightarrow \max$ $\left| \begin{array}{l} \frac{y}{x} = \frac{2}{5} \\ \frac{m}{y} \left| \begin{array}{l} 1 \quad 4 \quad 4 \\ -1 \quad 1 \quad 1 \end{array} \right. \end{array} \right.$



$\alpha^2 + \beta^2 = 5^2 - 3^2 = 16$ $\alpha^2 + \beta^2 = 5^2 - 2^2 = 21$ $\alpha + \beta = 1$ $1 - 3(-2) = 5$
 $\begin{cases} f\alpha^2 + k\alpha^2 - 9\alpha - 2 = 0 \\ f\beta^2 + k\beta^2 - 9\beta - 2 = 0 \end{cases}$ $1 - 2(-2) = 5$ $\alpha\beta = -2$

$f(\alpha^2 + \beta^2) + k(\alpha^2 + \beta^2) - 9(\alpha + \beta) - 2 = 0$
 $\frac{5^2 - 3^2}{5} + \frac{5^2 - 2^2}{5} - 9(1) - 2 = 0$ $\frac{16}{5} + \frac{21}{5} - 9 - 2 = 0$ $37 - 50 = -13 \rightarrow k = -13$

$\alpha + \beta = -\frac{(-2)m}{1} = 2m$ $\sqrt{\alpha} - \sqrt{\beta} = 1$ $\sqrt{m} = 1 \rightarrow m = 1$
 $\alpha\beta = m^2 = 1$
 $(\sqrt{\alpha} - \sqrt{\beta})^2 = \alpha + \beta - 2\sqrt{\alpha\beta} \rightarrow 2m - 2\sqrt{m} = 1 \rightarrow 2m - 2\sqrt{m} - 1 = 0$
 $2m^2 - m - 1 = 0$ $\Delta = 1 - 4(2)(-1) = 17$
 $\frac{c}{a} = \frac{-1}{2}$

$\frac{1}{r} \times \text{ارتفاع} \times \text{عرض} = \frac{10}{r}$
 $m^2 - 2m + 1 = (m-1)^2$
 $\frac{1}{r} \times m \times \frac{(m-1)}{r} = \frac{10}{r}$
 $\frac{m}{r} \times \frac{(m-1)}{r} = \frac{10}{r^2} \rightarrow m^2 - 2m - 10 = 0$
 $(m-1)^2 - 11 = 0$
 $m = 1 \pm \sqrt{11}$

$m = 1 \rightarrow x^2 - m + 1 \rightarrow x^2 - 1 + 1 = x^2 = 0$
 $m = -1 \rightarrow x^2 - m + 1 \rightarrow x^2 + 1 + 1 = x^2 + 2 = 0$

$\frac{-\Delta}{f_a} = -\frac{(4-f(a^2))}{f_a} = \frac{f_a^2 - 4}{f_a} = \frac{V}{\Lambda} \rightarrow \Lambda a^2 = \mu \Lambda a^2 - V \mu$

$\mu \Lambda a^2 - \mu \Lambda a - V \mu = 0 \rightarrow f(\Lambda a^2 - V a - \Lambda) = 0 \rightarrow \frac{V \pm \sqrt{V^2 - 4\Lambda^2}}{2\Lambda} \rightarrow \frac{V \pm \sqrt{14}}{14} \rightarrow \frac{V \pm \sqrt{14}}{14} = \frac{V}{\Lambda}$

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$\frac{\sqrt{\Delta}}{|a|} = \sqrt{(a+1)^2 - f_a} = \sqrt{a^2 + 1 + f_a - f_a} \sqrt{(a-1)^2} = \frac{|a-1|}{1} = |a-1| = r$

$a^2 - (\mu \times \mu) + 1 + b = 0$
 $a^2 - 10 + b = 0$

$\frac{\sqrt{\Delta}}{|a|} = r = \sqrt{100 - f(b)} = r$
 $100 - fb = f \rightarrow 99 = fb \rightarrow b = \frac{99}{f}$

$\frac{-a}{-ra} = \frac{1}{r} \rightarrow \frac{-a}{r} + \frac{a}{r} + r \rightarrow \frac{-a + \frac{a}{r} + r}{r} \rightarrow \frac{1}{r} \left(b \times \frac{1}{r} \right) - \left(b \times \frac{1}{r} \right) - 1$

$\frac{b}{fb} = \frac{1}{f} \rightarrow b \times \frac{1}{\frac{b}{f}} - b \times \frac{1}{f} - 1 \rightarrow \frac{b}{\frac{b}{f}} - \frac{b}{f} - 1 \rightarrow \frac{b - rb}{\frac{b}{f}} - 1 \rightarrow \frac{-b - \Lambda}{\frac{b}{f}} \rightarrow \frac{1}{f} \left(\frac{-b - \Lambda}{b} \right)$

$\frac{-a}{14} + \frac{fa}{14} + \frac{\mu r}{14} = \frac{-b + \Lambda}{\Lambda} \rightarrow \frac{\mu a + \mu r}{14} = \frac{-b + \Lambda}{\Lambda} \rightarrow \mu a + \mu b = -f \Lambda \rightarrow \mu b = -14 \rightarrow b = -4$

$\alpha \times \beta = \frac{\beta}{\mu \alpha} \rightarrow \mu \alpha \times \beta = \beta \rightarrow \mu \alpha = 1 \rightarrow \alpha = \frac{1}{\mu} \rightarrow \alpha = \pm \frac{1}{\omega} \rightarrow \frac{1}{\omega} + \beta = -f \times \frac{1}{\omega} \rightarrow \frac{1}{\omega} + \beta = \frac{-f}{\omega} - 1$

$\alpha + \beta = \frac{-f}{\mu \alpha}$
 $\beta = 1$
 $\alpha = -\frac{1}{\omega}$

$14 - f(-2) = 14 + \mu \sqrt{14} = 4$
 $\frac{-f}{-14} = \frac{f}{14}$

$\sqrt{a+b} = \sqrt{a^2 + b^2} - 12$
 $\sqrt{a+b} = \sqrt{a^2 + b^2} - 12$
 $\sqrt{a+b} = \sqrt{a^2 + b^2} - 12$

$s = s^2 - 2p - 12$
 $s = s^2 - 2(s-1) - 12$
 $s^2 - 2s - 10 = 0$

$9 - f(-1.0) = \sqrt{fa} = V$

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