

الف) $y = 2x^2 - 4x + 1$ \rightarrow min ~~.....~~ $\begin{bmatrix} 4 & -4 \\ 0 & 4 \end{bmatrix}$ $\begin{bmatrix} 1 \\ -1 \end{bmatrix}$

ب) $y = -2x^2 + 4x - 5$ \rightarrow max ~~.....~~ $\begin{bmatrix} -4 & 4 \\ 0 & -4 \end{bmatrix}$ $\begin{bmatrix} 1/2 \\ 1/2 \end{bmatrix}$

الف) $y = x^2 - 6x + 1 = (x-3)^2 - 8$ \rightarrow min $\begin{bmatrix} 2 \\ -6 \end{bmatrix}$

ب) $y = x^2 + 4x + 1 = (x+2)^2 - 3$ \rightarrow min $\begin{bmatrix} 2 \\ 4 \end{bmatrix}$

$\alpha + \beta = 1$ \rightarrow $\alpha^2 + \beta^2 = 1 - 2\alpha\beta = 1 - 2(-1) = 3$

سایه‌های $3x + 4y$ \rightarrow $\begin{cases} 2x = -1 \\ x = -1/2 \end{cases}$

$\sqrt{\alpha} - \sqrt{\beta} = 1$ $\rightarrow (\sqrt{\alpha} - \sqrt{\beta})^2 = 1 = \alpha + \beta - 2\sqrt{\alpha\beta} = 1$

$\alpha + \beta = 1$ \rightarrow $\sqrt{\alpha\beta} = 0$ \rightarrow $\alpha = 0$ or $\beta = 0$

$\alpha = 1$ \rightarrow $\sqrt{1} - \sqrt{\beta} = 1$ \rightarrow $\sqrt{\beta} = 0$ \rightarrow $\beta = 0$

$m^2 - (m+1)m + m = 0$ \rightarrow $m^2 - m^2 - m + m = 0$ \rightarrow $0 = 0$

$m = 1$ \rightarrow $\frac{1}{1} = 1$

$(1 - \frac{m}{p})m$ \rightarrow $\frac{m}{p} = 1$ \rightarrow $m = p$

ارتفاع \rightarrow $\frac{m}{p} = 1$ \rightarrow $m = p$

$$\frac{-\Delta}{\epsilon a} = \frac{\epsilon a^2 - q}{\epsilon a}$$

$$\frac{\epsilon a^2 - q}{\epsilon a} = \frac{v}{\lambda}$$

$$\Rightarrow \lambda a^2 - v a - u = 0 \rightarrow \lambda a^2 + \lambda a - \lambda a - u = 0$$

$a = r$

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$$r_{n+1}, r_{n+2} \rightarrow s = \epsilon r_n + \epsilon r_{n+1} \rightarrow \epsilon r_{n+2} = a$$

$$\rightarrow r = \epsilon r_n + \epsilon r_{n+1} = a \rightarrow \epsilon r_{n+2} = a$$

$$r^2 - \epsilon r_{n+1} = 0$$

$$a^2 - \lambda a - u = 0 \quad |r_2 - r_1| = |r|$$

$$w^2 - \lambda w + b = 0$$

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$$y = a r^2 + a r$$

$$y = r b r^2 - b r - 1$$

$$-a \left(\frac{1}{r} \right) + a \left(\frac{1}{\epsilon} \right) + r = \frac{-b-1}{\lambda}$$

$$\frac{-r}{\epsilon} - r + r = \frac{-b-1}{\lambda} \rightarrow b = -9$$

$$-9 - (-1r) = 5$$

$$r b \left(\frac{1}{\epsilon} \right) - b \left(\frac{1}{r} \right) - 1 = \frac{a}{r} + r \rightarrow \frac{a}{r} = -r \rightarrow a = -r^2$$

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$$r \delta a r + \epsilon a + \beta = 0$$

$$\alpha + \beta = \dots$$

$$\alpha \beta = \frac{\beta}{r \delta a} \rightarrow r \delta a \alpha \beta - \beta = 0 \rightarrow \beta (r \delta a r - 1) = 0$$

$$\beta = -\frac{9}{10 a} - \frac{1}{r \delta a} = \frac{1}{r \delta a} = \frac{1}{\delta a}$$

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$$a + b = a^2 + b^2 - 1r = (a+b)^2 - r a b - 1r$$

$$a b = a r b - 1$$

$$\Rightarrow s^2 - r(s-1) - 1r = s^2 - r s - 10 = 0$$

$$(s-0)(s+r) = 0$$

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