

$$3x' - ax + f = 0 \quad S = x + 2x = 3x = \frac{a}{3}$$

$$p = x \cdot 3x = 3x^2 = \frac{f}{3} \rightarrow x' = \frac{f}{9} \rightarrow x = \pm \frac{f}{9}$$

$$\rightarrow 1 - (-1) = 2$$

$$39x' - (m+14)x + 1 = 0 \quad mx' + 14x + 2 = 0$$

$$\frac{1}{\sqrt{x}} + \frac{1}{\sqrt{y}} = \frac{\sqrt{x} + \sqrt{y}}{\sqrt{xy}} = \omega \rightarrow \frac{x + y + 2\sqrt{xy}}{xy + 2} = \omega \rightarrow x + y + 2\sqrt{xy} = \frac{\omega}{34}$$

$$\frac{m+14}{39} + \frac{2}{9} = \frac{\omega}{39} \rightarrow m+14+12 = \omega \rightarrow m = -1 \Rightarrow \frac{2}{m} = \frac{2}{-1} = -2$$

$$x'' + kx' - 9x - 2 = 0$$

$$x + y = -1 \rightarrow x + \frac{-2}{x} = 1 \rightarrow x^2 - x - 2 = 0 \rightarrow (x-2)(x+1)$$

$$x = 2, -1$$

$$x = 2, -1 \rightarrow \begin{cases} x=2 \\ y=-1 \end{cases} \rightarrow 4 + 2k - 18 - 2 = 0 \Rightarrow k = -3$$

$$x + y = -4 \quad xy = x \quad x < y < 0$$

$$3x' + 2y' = 12\sqrt{2} + 12 \rightarrow \frac{3}{4}(x' + y') + \frac{1}{4}(x' - y') \rightarrow x' + y' = 4\sqrt{2} - 2xy$$

$$x' - y' = 5p = -4\sqrt{2} \Rightarrow 12\sqrt{2} + 12 = \frac{3}{4}(4\sqrt{2} - 2xy) + \frac{1}{4}(-4\sqrt{2})$$

$$\rightarrow 12\sqrt{2} = -4\sqrt{2} \rightarrow \sqrt{2} = -4\sqrt{2} \quad 34 - 39 = -2xy \rightarrow xy = 1 \rightarrow p = 1 = a$$

$$x'' - vx' - a = 0 \rightarrow t = x' \rightarrow t' - vt + a = 0 \xrightarrow{t \rightarrow 0} \frac{v + \sqrt{v^2 + 4a}}{2}$$

$$\rightarrow t = \frac{v + \sqrt{v^2 + 4a}}{2} = x' \rightarrow x = t \sqrt{\frac{v + \sqrt{v^2 + 4a}}{2}}$$

$$\rightarrow S = 0, p = \frac{-v - \sqrt{v^2 + 4a}}{2} \rightarrow 2p' - 35p + 25 = 2p' = \frac{111 + 14\sqrt{59}}{2} = 55.5 + 7\sqrt{59}$$

$$2x' - ax + b = 0 \rightarrow S = \frac{a}{2}, p = \frac{b}{2} \quad a = 1$$

$$2ax' + ax - 4 = 0 \rightarrow S = \frac{1}{2}, p = -4 \quad b = -4 \Rightarrow \left[\frac{ab}{f} \right] = \left[\frac{-4}{2} \right] = -2$$

Subject

Date

» نه لکړه «

$$a\alpha^r - a\alpha - b = 0 \rightarrow S = 1 \rightsquigarrow \alpha = 1 - \beta$$

$$f. \beta^r + r \cdot \frac{\alpha^r}{(1-\beta)^r} - r \cdot \beta = 1 \Rightarrow r \cdot \beta \underbrace{(\beta-1)}_{-\alpha} = -1 \Rightarrow \alpha\beta = \frac{1}{r} = \frac{-b}{a} \rightarrow a = -r \cdot b$$

$$\hookrightarrow -r \cdot b\alpha^r + r \cdot b\alpha - b = 0 \Rightarrow |\alpha - \beta| = \frac{\sqrt{\Delta}}{|a|} = \frac{\sqrt{4r \cdot b^2}}{|1 - r \cdot b|} = \sqrt{\frac{\Delta}{1}} = \frac{r}{\sqrt{a}}$$

$$S = a + 1 \rightarrow r\alpha + r$$

$$p = a \rightarrow \alpha^r + r\alpha \rightarrow \alpha^r + r\alpha + 1 = r\alpha + r \Rightarrow \alpha = 1 \rightarrow \alpha = 1 \rightsquigarrow a = r$$

$$S = 1 = r\beta + r \rightarrow \beta = r$$

$$b = r \cdot r = r^2$$

$$b - a = r^2 - r = r$$

$$\alpha + \beta = \frac{-b}{a} = -1$$

$$\alpha\beta = -1 - m^r \rightarrow \alpha^r + \beta^r = S^r - r\rho = 1 - r(-1 - m^r) = r m^r + r$$

$$m^r \geq 0 \rightarrow \min = r$$

$$A \begin{vmatrix} r \\ y \end{vmatrix} B \begin{vmatrix} -a \\ y \end{vmatrix} \rightarrow \text{Condition} \Rightarrow \omega_1, \omega_2 = \frac{-a + r}{r} = -1 \Rightarrow \omega_1, \omega_2 \begin{vmatrix} -1 \\ 1 \end{vmatrix}$$

$$\hookrightarrow y - 1 = a(\alpha + 1)^r \Rightarrow \frac{1}{a} = (\alpha + 1)^r \xrightarrow{t = \sqrt[r]{\frac{1}{a}}} \alpha = -1 \pm t \rightarrow \begin{cases} \alpha = -1 + t \\ \beta = -1 - t \end{cases}$$

$$\alpha^r + \beta^r = a \rightarrow (-1 + t)^r + (-1 - t)^r = r + r t^r \Rightarrow r t^r + r = a$$

$$t^r = \frac{a-r}{r} \rightarrow -\frac{1}{a} = \frac{r}{r} \rightarrow a = -\frac{r}{r}$$

$$\hookrightarrow \alpha = 0 \text{ در معادله } y - 1 = a(1)^r \Rightarrow y = \frac{1}{r} \text{ عرض از مبدا}$$