

$$1 - \frac{x^2}{6} + \frac{x^4}{6 \cdot 20} \dots = \lambda - \sqrt{\alpha} \left(1 + \frac{\beta x^2}{2\alpha} + \frac{\beta^2 x^4}{8\alpha^2} + \dots \right)$$

$$\lambda - \sqrt{\alpha} = 1$$

$$\frac{\beta}{\sqrt{\alpha}} = \frac{1}{3} \quad \frac{\beta}{\sqrt{\alpha}} = \frac{9}{15}$$

$$\alpha = \frac{25}{9}$$

$$\lambda = 1 + \frac{5}{3}$$

$$\sqrt{\alpha} = \frac{5}{3}$$

$$\beta = \frac{5}{9}$$

$$\cos x = \lambda - \sqrt{\alpha + \beta x^2}$$

$$1 - \frac{x^2}{2} + \frac{x^4}{24} = \lambda - \sqrt{\alpha} \left(1 + \frac{\beta x^2}{2\alpha} \dots \right)$$

$$\lambda - \sqrt{\alpha} = 1$$

$$\frac{\beta}{\sqrt{\alpha}} = 1$$

$$\frac{1}{\sqrt{\alpha}} = \frac{1}{3}$$

$$\beta = \sqrt{\alpha}$$

$$\sqrt{\alpha} = 3$$

$$\beta = 3$$

$$\lambda = 4$$

$$\cos x = 2 - \sqrt{9 + 3x^2}$$

$$\cos x = 2 - \sqrt{9 + 3x^2}$$

$$\frac{\sin x}{x} = \frac{8}{3} - \frac{1}{3} \sqrt{25 + 5x^2}$$

$$\cos x = 2 + 3 \left(1 + \frac{x^2}{3} \right)^{\frac{1}{2}}$$

$$\left[1 + \left(\frac{\beta x^2 + \gamma x^4}{\alpha} \right)^{\frac{1}{2}} \right]^{\frac{1}{2}} \cos x = 2 + 3 \left(1 + \frac{x^2}{6} \right)^{\frac{1}{2}}$$

$$\cos x = \lambda + \mu x^2 - \sqrt{\alpha + \beta x^2 + \gamma x^4}$$

$$\cos x = \lambda + \mu x^2 + \nu x^4 - \sqrt{\alpha + \beta x^2 + \gamma x^4}$$

$$\cos x = 2$$

$$\frac{1}{2}(-1)$$

$$1 - \frac{x^2}{2} + \frac{x^4}{24} - \frac{x^6}{24 \cdot 30} + \frac{x^8}{24 \cdot 30 \cdot 56} = -\sqrt{\alpha} \left[1 + \frac{1}{2} \left(\frac{\beta}{\alpha} x^2 + \frac{\gamma}{\alpha} x^4 \right) + \frac{1}{8} \left(\frac{\beta^2}{\alpha^2} x^4 + 2 \frac{\beta\gamma}{\alpha^2} x^6 + \frac{\gamma^2}{\alpha^2} x^8 \right) + \frac{1}{16} \left(\frac{\beta^3}{\alpha^3} x^6 + 3 \frac{\beta^2\gamma}{\alpha^3} x^8 + \dots \right) \right]$$

$$1 - \lambda = -\sqrt{\alpha}$$

$$+\mu = \sqrt{\alpha} \cdot \frac{\beta}{2\alpha}$$

$$-\nu = -\sqrt{\alpha} \left(\frac{\beta^2}{2\alpha} - \frac{\beta^2}{8\alpha^2} \right)$$

$$+\frac{1}{24 \cdot 30} = \sqrt{\alpha} \left(-\frac{\beta\gamma}{4\alpha^2} + \frac{\beta^3}{16\alpha^3} \right)$$

$$\lambda = 1 + \sqrt{\alpha}$$

$$\frac{1}{2} + \mu = \frac{\beta}{2\sqrt{\alpha}}$$

$$\frac{1}{24} = \frac{\beta^3}{8\alpha^2\sqrt{\alpha}}$$

$$\frac{1}{24 \cdot 30} = \frac{\beta^3}{16\alpha^2\sqrt{\alpha}}$$

$$\lambda = 16$$

$$\frac{1}{2} + \mu =$$

$$\frac{\beta}{2\sqrt{\alpha}} = \frac{1}{30}$$

$$\beta = \frac{\alpha}{15}$$

$$\sqrt{\alpha} = 5.15$$

$$\frac{1}{3} = \frac{\sqrt{\alpha}}{15} \cdot \frac{1}{15} \quad \beta = 5.1$$