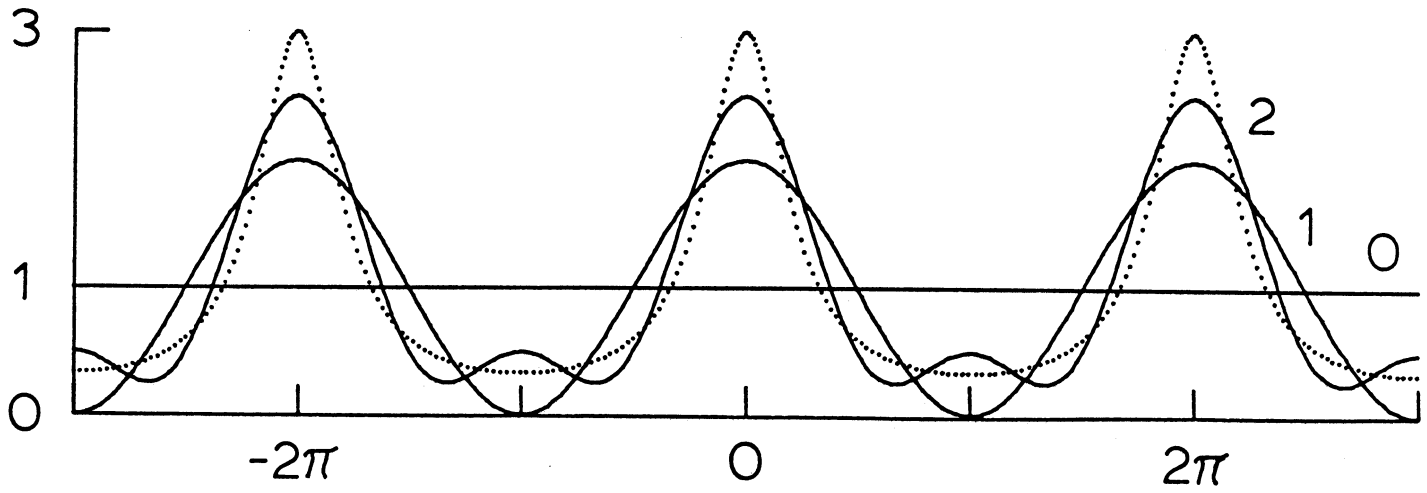
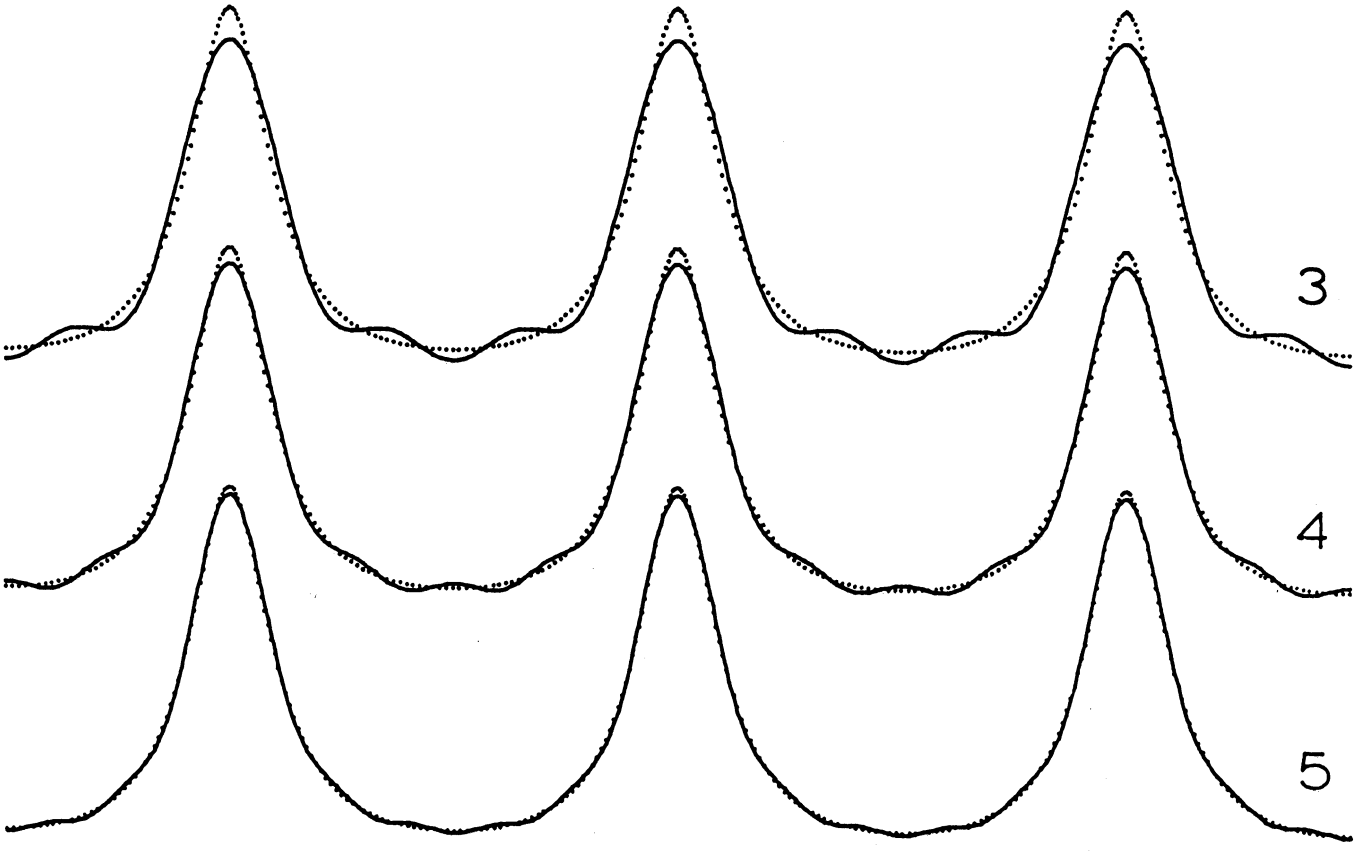
alleging that

$$\boxed{\frac{3}{5 - 4\cos\theta}} \simeq 1 + \cos\theta + \frac{1}{2}\cos 2\theta + \frac{1}{4}\cos 3\theta + \frac{1}{8}\cos 4\theta + \ldots$$





And here is a computer-drawn morsel just too interesting to pass up: The <u>truncated Fourier sine series</u>

$$g_k(x) = 2\left[\sin x - \frac{1}{2}\sin 2x + \ldots - \frac{1}{k}(-1)^k \sin kx\right]$$

that is claimed to imitate better and better the function $f(x) = x$ in the interval $-\pi < x < \pi$ as the number of terms k increases.