

FORMULA 4.271.13

$$\int_0^1 (\ln x)^{2n+1} \frac{\cos 2\pi a - x}{1 - 2x \cos 2\pi a + x^2} dx = -(2n-1)! \sum_{k=1}^{\infty} \frac{\cos(2\pi k a)}{k^{2n+2}}$$