

FORMULA 3.632.4

$$\int_{-\pi}^{\pi} \cos^{n-1} x \cos [m(x-a)] dx = \int_{-\pi/2}^{\pi/2} \cos^{n-1} x \cos [m(x-a)] dx = \frac{[1 - (-1)^{n+m}] \pi \cos ma}{2^{n-1} n B\left(\frac{n+m+1}{2}, \frac{n-m+1}{2}\right)}$$