

$$7. \quad \int_0^{\pi} x \cos(2m+1)x \, dx = 0 \quad \text{ГХ2 (332)(12a)}$$

$$8. \quad \int_0^{\pi} \sin^{v-1} x \cos ax \, dx = \frac{\pi \cos \frac{a\pi}{2}}{2^{\nu-1} \nu B\left(\frac{v+a+1}{2}, \frac{v-a+1}{2}\right)}$$

[Reν > 0]      Лб ∨ 121(68)и, Вт 337и

$$9. \quad \int_0^{\pi/2} \sin^{v-1} x \cos ax \, dx = \frac{\pi}{2^{\nu} \nu B\left(\frac{v+a+1}{2}, \frac{v-a+1}{2}\right)}$$

[Reν > 0]      ГХ2 (332)(9с)

$$10. \quad \int_0^{\pi/2} \sin^{v-2} x \cos \nu x \, dx = \frac{1}{\nu-1} \sin \frac{\nu\pi}{2} \quad [Re\nu > 0] \quad \text{ГХ2 (332)(9с)}$$