

FORMULA 3.624.2

$$\int_0^{\pi/2} \frac{\sin^{\mu-\frac{1}{2}} x \, dx}{\cos^{2\mu-1} x} = \int_0^{\pi/2} \frac{\cos^{\mu-\frac{1}{2}} x \, dx}{\sin^{2\mu-1} x} = \frac{\Gamma\left(\frac{\mu}{2} + \frac{1}{4}\right) \Gamma(1-\mu)}{2\Gamma\left(\frac{5}{4} - \frac{\mu}{2}\right)}$$