NEW FORMULA 3.251.6

The original formula is

$$\int_0^\infty \frac{x^{\mu+1}\,dx}{(1+x^2)^2} = \frac{\pi\mu}{4\sin(\pi\mu/2)}$$

and it looks better in the new form (simply replacing μ by $2a$)

$$\int_0^\infty \frac{x^{2a+1}\,dx}{(1+x^2)^2} = \frac{\pi a}{2\sin\pi a}$$