NEW FORMULA 3.194.4

The original formula is

$$\int_0^\infty \frac{x^{\mu-1}\,dx}{(1+\beta x)^{n+1}} = (-1)^n \frac{\pi}{\beta^\mu} \binom{\mu-1}{n} \operatorname{cosec}(\mu\pi)$$

and it should be written as

$$\int_0^\infty \frac{x^{a-1}\,dx}{(1+bx)^{n+1}} = (-1)^n \frac{\pi}{b^a \sin \pi a} \binom{a-1}{n}$$