NEW FORMULA 3.194.6

The original formula is

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

The scaling $t = \beta x$ shows that this formula should be replaced by

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