

### NEW FORMULA 3.194.2

The original formula is

$$\int_u^\infty \frac{x^{\mu-1} dx}{(1+\beta x)^\nu} = \frac{u^{\mu-\nu}}{\beta^\nu(\nu-\mu)} {}_2F_1[\nu, \nu-\mu; \nu-\mu+1; -1/\beta u]$$

and it should be replaced by

$$\int_u^\infty \frac{x^{a-1} dx}{(1+bx)^c} = \frac{u^{a-c}}{b^c(c-a)} {}_2F_1[c, c-a; c-a+1; -1/bu]$$