

FORMULA 3.197.6

$$\int_1^{\infty} x^{\lambda-\nu} (x-1)^{\nu-\mu-1} (ax-1)^{-\lambda} dx = a^{-\lambda} B(\mu, \mu-\nu) {}_2F_1 \left[\lambda, \mu; \nu; \frac{1}{a} \right]$$