NEW FORMULA 3.411.2

The original formula is

$$\int_0^\infty \frac{x^{2n-1}\,dx}{e^{px}-1} = (-1)^{n-1}\left(\frac{2\pi}{p}\right)^{2n}\frac{B_{2n}}{4n}$$

The change of variables $t = px$ and using $|B_{2n}| = (-1)^{n-1}B_{2n}$ gives the new formula (going back to x as the variable of integration)

$$\int_0^\infty \frac{x^{2n-1}\,dx}{e^{x}-1} = \frac{(2\pi)^{2n}|B_{2n}|}{4n}$$