

FORMULA 3.267.1

$$\int_0^1 \frac{x^{3n} dx}{\sqrt[3]{1-x^3}} = \frac{2\pi}{3\sqrt{3}} \frac{\Gamma\left(n + \frac{1}{3}\right)}{\Gamma\left(\frac{1}{3}\right) \Gamma(n+1)} \quad n \in \mathbb{N}$$