

$$\zeta(3)=\frac{5}{2}\sum_{n=1}^{\infty}\frac{(-1)^{n-1}}{n^3\binom{2n}{n}}.$$

$$g(g(x))=-\frac{1}{\alpha}g(\alpha x).$$

$$\left(\sum_{i=1}^na_i\right)^p\left(\sum_{i=1}nb_i\right)^q\geq\left(\sum_{i=1}^np^{+q}\sqrt[p+q]{a_i^pb_i^q}\right)^{p+q}.$$

$$\gcd(a,n)=1\implies a^{\varphi(n)}\equiv 1\pmod n.$$

$$m\ddot{x}=-kx.$$

$$\pi^{-s/2}\Gamma\left(\frac{s}{2}\right)\zeta(s)=\pi^{-(1-s)/2}\Gamma\left(\frac{1-s}{2}\right)\zeta(1-s).$$

$$\frac{\mathrm{d} f}{\mathrm{d} x}=\lim_{h\rightarrow 0}\frac{f(t+h)-f(t)}{h}.$$

$$G=\beta(2)=\sum_{k=0}^{\infty}\frac{(-1)^k}{(2k+1)^2}=\iint_{[0,1]^2}\frac{\mathrm{d} x\mathrm{d} y}{1+x^2y^2}.$$

$$\Phi(x)=\frac{1}{\sqrt{2\pi}}\int_{-\infty}^xe^{-t^2/2}\mathrm{d} t.$$

$$f:A\subset\mathbb{R}\rightarrow\mathbb{R}:x\mapsto\frac{x^2}{\arctan(\exp\sqrt{x^{-1}})}.$$