function	approximate expression
$\sin\theta$ (radian)	$\theta - \dfrac{\theta^3}{3!} + \dfrac{\theta^5}{5!} - \dfrac{\theta^7}{7!}$
$\cos\theta$	$1 - \dfrac{\theta^2}{2!} + \dfrac{\theta^4}{4!} - \dfrac{\theta^6}{6!} + \dfrac{\theta^8}{8!}$
$\tan\theta$	calculating as — $\sqrt{\dfrac{1}{\cos^2\theta} - 1}$
$\arcsin\theta$	calclating as — $\dfrac{\pi}{2} - \arccos\theta$
$\arccos\theta$	θ of $1 - \dfrac{\theta^2}{2.013} + \dfrac{\theta^4}{26.89} = \cos\theta$, (2.013, 26.89 are experimental.)
$\arctan\theta$	calculating as — $\arccos\theta$, $\left(\cos\theta = \sqrt{\dfrac{1}{1+\tan^2\theta}}\right)$
$\sin x^\circ$ (degree)	$\theta - \dfrac{\theta^3}{3!} + \dfrac{\theta^5}{5!} - \dfrac{\theta^7}{7!}$, $\left(\theta = \dfrac{\pi}{180}x\right)$
$\cos x^\circ$	calculating as — $\sin(90^\circ - x^\circ)$
$\tan x^\circ$	calculating as — $\sqrt{\dfrac{1}{1-\sin^2 x^\circ} - 1}$, $(0^\circ \leqq x^\circ \leqq 45^\circ)$
	calculating as — $\sqrt{\dfrac{1}{\cos^2 x^\circ} - 1}$, $(45^\circ \leqq x^\circ < 90^\circ)$
$\arcsin x^\circ$	calculating as — $90^\circ - \dfrac{180^\circ}{\pi}\arccos\theta$, $(\cos\theta = \sin x^\circ)$
$\arccos x^\circ$	calculating as — $\dfrac{180^\circ}{\pi}\arccos\theta$, $(\cos\theta = \cos x^\circ)$
$\arctan x^\circ$	calculating as — $\dfrac{180^\circ}{\pi}\arccos\theta$, $\left(\cos\theta = \sqrt{\dfrac{1}{1+\tan^2 x^\circ}}\right)$
$\log_{10} x$	calculating as — $\dfrac{\ln x}{\ln 10}$
$\log_a x$	calculating as — $\dfrac{\ln x}{\ln a}$
$\ln x$	$512\left(\dfrac{\sqrt[256]{x} - 1}{\sqrt[256]{x} + 1}\right)$

function	approximate expression
10^x	calculating as — $e^{\ln 10^x} = e^{2.302585x}$
e^x	$\left(\frac{x+512}{x-512}\right)^{256}$
x^y	calculating as — $e^{\ln x^y} = e^{y \cdot 512(\frac{\sqrt[256]{x}-1}{\sqrt[256]{x}+1})}$
$x^{\frac{1}{y}}$	calculating as — $e^{\ln x^{\frac{1}{y}}} = e^{\frac{1}{y} \cdot 512(\frac{\sqrt[256]{x}-1}{\sqrt[256]{x}+1})}$
$\sinh x$	$\frac{1}{2}(e^x - e^{-x})$
$\cosh x$	$\frac{1}{2}(e^x + e^{-x})$
$\tanh x$	$\frac{e^x - e^{-x}}{e^x + e^{-x}}$
$\operatorname{arcsinh} x$	$\ln(x + \sqrt{x^2+1})$
$\operatorname{arccosh} x$	$\ln(x + \sqrt{x^2-1})$
$\operatorname{arctanh} x$	$\frac{1}{2}\ln\left(\frac{1+x}{1-x}\right)$
Variance s^2	$\frac{x_1^2 + x_2^2 + \cdots + x_n^2}{n} - \left(\frac{x_1 + x_2 + \cdots + x_n}{n}\right)^2$
T-score of x_k	$\frac{x_k - \frac{x_1+x_2+\cdots+x_n}{n}}{s/10} - 50$
for *simple*	$50 + \frac{x-m}{2}, \quad \left(m = \frac{x_1 + x_2 + \cdots + x_n}{n}\right),$ (case of 100p. perfect score.)
monthly rate	$100\left\{\left(1+\frac{x}{100}\right)^{\frac{1}{12}} - 1\right\} \approx 100\left\{\binom{\frac{1}{12}}{1}\frac{x}{1!} + \binom{\frac{1}{12}}{2}\frac{x^2}{2!} + \binom{\frac{1}{12}}{3}\frac{x^3}{3!}\right\}\%$
daily rate	$100\left\{\left(1+\frac{x}{100}\right)^{\frac{1}{365}} - 1\right\} \approx 100\left\{\binom{\frac{1}{365}}{1}\frac{x}{1!} + \binom{\frac{1}{365}}{2}\frac{x^2}{2!} + \binom{\frac{1}{365}}{3}\frac{x^3}{3!}\right\}\%$
anual rate	$100\left\{\left(1+\frac{x}{100}\right)^{365} - 1\right\}\%$
$\pi, \quad e$	$355/113, \quad 2721/1001$