

不定積分

$\int \sin x \, dx$	$-\cos x + C$
$\int \cos x \, dx$	$\sin x + C$
$\int \tan x \, dx$	$-\log \cos x + C$
$\int \sin^2 x \, dx$	$\frac{1}{2}x - \frac{1}{4}\sin 2x + C$
$\int \cos^2 x \, dx$	$\frac{1}{2}x + \frac{1}{4}\sin 2x + C$
$\int \tan^2 x \, dx$	$\tan x - x + C$
$\int \sin^3 x \, dx$	$\frac{1}{3}\cos^3 x - \cos x + C / \frac{1}{12}\sin 3x + \frac{3}{4}\sin x + C$
$\int \cos^3 x \, dx$	$-\frac{1}{3}\sin^3 x + \sin x + C / \frac{1}{12}\sin 3x + \frac{3}{4}\sin x + C$
$\int \tan^3 x \, dx$	$\frac{1}{2\cos^2 x} + \log \cos x + C$
$\int \sin^4 x \, dx$	$\frac{1}{32}\sin 4x - \frac{1}{4}\sin 2x + \frac{3}{8}x + C$
$\int \cos^4 x \, dx$	$\frac{1}{32}\sin 4x + \frac{1}{4}\sin 2x + \frac{3}{8}x + C$
$\int \tan^4 x \, dx$	$\frac{1}{3}\tan^3 x - \tan x + x + C$
$\int \frac{1}{\sin x} \, dx$	$-\frac{1}{2}\log\left \frac{\cos x - 1}{\cos x + 1}\right + C$
$\int \frac{1}{\cos x} \, dx$	$\frac{1}{2}\log\left \frac{\sin x - 1}{\sin x + 1}\right + C$
$\int \frac{1}{\tan x} \, dx$	$\log \sin x + C$
$\int \frac{1}{\sin^2 x} \, dx$	$-\frac{1}{\tan x} + C$
$\int \frac{1}{\cos^2 x} \, dx$	$\tan x + C$
$\int \frac{1}{\tan^2 x} \, dx$	$-\frac{1}{\tan x} - x + C$
$\int \frac{1}{\sin^3 x} \, dx$	$-\frac{1}{2\tan x \sin x} - \frac{1}{4}\log\left(\frac{1 + \cos x}{1 - \cos x}\right) + C$

$\int \frac{1}{\cos^3 x} dx$	$\frac{\sin x}{2\cos^2 x} + \frac{1}{4} \log\left(\frac{1+\sin x}{1-\sin x}\right) + C$
$\int \frac{1}{\tan^3 x} dx$	$-\frac{1}{2\sin^2 x} - \log \sin x + C$
$\int \frac{1}{\sin^4 x} dx$	$-\frac{1}{3\tan^3 x} - \frac{1}{\tan x} + C$
$\int \frac{1}{\cos^4 x} dx$	$\frac{1}{3}\tan^3 x + \tan x + C$
$\int \frac{1}{\tan^4 x} dx$	$-\frac{1}{3\tan^3 x} + \frac{1}{\tan x} + x + C$

三角関数 和積の変換

$\sin A \cos B = \frac{1}{2}\{\sin(A+B) + \sin(A-B)\}$
$\sin A \sin B = -\frac{1}{2}\{\cos(A+B) - \cos(A-B)\}$
$\cos A \cos B = \frac{1}{2}\{\cos(A+B) + \cos(A-B)\}$

三角関数 2倍角／3倍角／半角

$<2\text{倍角}>$
$\sin 2x = 2\sin x \cos x$
$\cos 2x = 1 - 2\sin^2 x = 1 - 2\cos^2 x$
$<3\text{倍角}>$
$\sin 3x = 3\sin x - 4\sin^3 x$
$\cos 3x = 4\cos^3 x - 3\cos x$
$\tan 3x = \frac{3\tan x - \tan^3 x}{1 - 3\tan^2 x}$
$<\text{半角}>$
$\sin^2 \frac{x}{2} = \frac{1 - \cos x}{2}$
$\cos^2 \frac{x}{2} = \frac{1 + \cos x}{2}$
$\tan^2 \frac{x}{2} = \frac{1 - \cos x}{1 + \cos x}$