

MATHEMTAICAL TABLES

$\int \frac{(\sin ax)}{(b+c \sin ax)} dx = \frac{x}{c} - \frac{b}{c} \sqrt{\left(\frac{dx}{(b+c \sin ax)}\right)}$
$\int \frac{dx}{(b+c \sin ax)^2} = \frac{(c \cos ax)}{(a(b^2-c^2)(b+c \sin ax))} + \frac{b}{(b^2-c^2)} \int \left(\frac{dx}{(b+c \sin ax)}\right)$
$\int \frac{(\sin ax)}{(b+c \sin ax)^2} dx = \frac{(b \cos ax)}{(a(c^2-b^2)(b+c \sin ax))} + \frac{c}{(c^2-b^2)} \int \frac{dx}{(b+c \sin ax)} + c$
$\int \sin px \sin^n x dx = \frac{-(\sin^n x \cos px)}{p} + \frac{n}{2p} \int \sin^{(n-1)} x \cos(p-1)x dx + \frac{n}{2p} \int \sin^{(n-1)} x \cos(p+1)x dx$
$\int \frac{(\sin x)}{(\sqrt{(a^2+b^2 \sin^2 x)})} dx = \frac{-1}{b} \sin^{-1} \left(\frac{b \cos x}{\sqrt{(a^2+b^2)}} \right) + c$
$\int \frac{(\sin x)}{(\sqrt{(a^2-b^2) \sin^2 x})} dx = \frac{-1}{b} \ln (b \cos x + \sqrt{(a^2-b^2 \sin^2 x)}) + c$
$\int \sin x \sqrt{(a^2+b^2 \sin^2 x)} dx = -\cos \frac{x}{2} \sqrt{(a^2+b^2 \sin^2 x)} - \frac{(a^2+b^2)}{2b} \sin^{-1} \left(\frac{b \cos x}{(\sqrt{(a^2+b^2)})} \right) + c$
$\int \sin x \sqrt{(a^2-b^2 \sin^2 x)} dx = \frac{-(\cos x)}{2} \sqrt{(a^2-b^2 \sin^2 x)} - \frac{(a^2-b^2)}{2b} \ln (b \cos x + \sqrt{(a^2-b^2 \sin^2 x)}) + c$
$\int \frac{(\sin 2x)}{(\sin x)} dx = 2 \sin x + c$
$\int \frac{(\sin 2x)}{(\sin^2 x)} dx = 2 \ln \sin x + c$
$\int \frac{(\sin 2x)}{(\sin^3 x)} dx = \frac{-2}{(\sin x)} + c$
$\int \frac{(\sin 2x)}{(\sin^n x)} dx = \frac{-2}{((n-2) \sin^{(n-2)} x)} + c, n \geq 3$
$\int \frac{(\sin x)}{(\sin 2x)} dx = \frac{1}{2} \ln \left \left(\cot \left(\frac{x}{2} - \frac{\pi}{4} \right) \right) \right + c$
$\int \frac{(\sin^2 x)}{(\sin 2x)} dx = \frac{-1}{2} \ln (\cos x) + c$
$\int \frac{(\sin^3 x)}{(\sin 2x)} dx = \frac{-1}{2} \ln \left \left(\cot \left(\frac{x}{2} - \frac{\pi}{4} \right) \right) \right - \frac{1}{2} \sin x + c$
$\int \frac{(\sin 3x)}{(\sin x)} dx = x + \sin 2x + c$
$\int \frac{(\sin 3x)}{(\sin^2)} dx = 3 \ln \left \left(\tan \left(\frac{x}{2} \right) \right) \right + 4 \cos x + c$
$\int \frac{(\sin 3x)}{(\sin^3)} dx = -3 \cot x - 4x + c$