

List of Integrals.

Integrand	Integral
$(ax + b)^n$	$\frac{(ax + b)^{n+1}}{a(n + 1)}$ for $n \neq -1$
$\frac{1}{(ax + b)}$	$\frac{1}{a} \ln ax + b $
$\frac{1}{(ax + b)(cx + d)}$	$\frac{1}{(ad - bc)} \ln \left \frac{(ax + b)}{(cx + d)} \right $ for $ad - bc \neq 0$
$\frac{1}{(ax^2 - b)}$ for $a, b > 0$	$\frac{1}{2\sqrt{ab}} \ln \left \frac{(\sqrt{ax} - \sqrt{b})}{(\sqrt{ax} + \sqrt{b})} \right $
$\frac{1}{(ax^2 + b)}$ for $a, b > 0$	$\frac{1}{\sqrt{ab}} \tan^{-1} \left(\sqrt{\frac{a}{b}} x \right)$
$\frac{1}{\sqrt{(a^2x^2 + b^2)}}$	$\frac{1}{a} \sinh^{-1} \left(\frac{ax}{b} \right)$
$\frac{1}{\sqrt{(a^2x^2 - b^2)}}$	$\frac{1}{a} \cosh^{-1} \left(\frac{ax}{b} \right)$
$\frac{1}{\sqrt{(b^2 - a^2x^2)}}$	$\frac{1}{a} \sin^{-1} \left(\frac{ax}{b} \right)$
$e^{ax} \cos bx$	$\frac{1}{(a^2 + b^2)} e^{ax} (a \cos bx + b \sin bx)$
$e^{ax} \sin bx$	$\frac{1}{(a^2 + b^2)} e^{ax} (a \sin bx - b \cos bx)$