

Download Integral Of Sin Ax B

Integrals with Trigonometric Functions $\int \sin ax dx = -\frac{1}{a} \cos ax$ (63) $\int \sin^2 ax dx = \frac{x}{2} - \frac{\sin 2ax}{4a}$ (64) $\int \sin^n ax dx = -\frac{1}{a} \cos ax \frac{1}{n-1} \sin^{n-1} ax + \frac{1}{n-1} \int \sin^{n-2} ax dx$; $n \geq 2$; $n \neq 1$; $n \neq 3$; $\cos^2 ax$ (65) $\int \sin^3 ax dx = -\frac{\cos ax}{a} + \frac{1}{3a} \cos^3 ax$ Table of Basic Integrals Basic Forms (1) $\int x^n dx = \frac{1}{n+1} x^{n+1}$; $n \neq -1$ (2) $\int \frac{1}{x} dx = \ln|x|$ (3) $\int u dv = uv - \int v du$ (4) $\int \frac{1}{ax+b} dx = \frac{1}{a} \ln|ax+b|$ Integrals of Rational Functions Integration is the basic operation in integral calculus. While differentiation has easy rules by which the derivative of a complicated function can be found by differentiating its simpler component functions, integration does not, so tables of known integrals are often useful. Common Derivatives and Integrals Visit <http://tutorial.math.lamar.edu> for a complete set of Calculus I & II notes. © 2005 Paul Dawkins Integrals