9/22/2019 Table of Integrals



Homework Help

Practice

Teacher |

<u>Parents</u>

<u>Glossary</u>

Calculators & Tools

Games

Store

Email this page to a friend

Formulas & TablesReferences

<u>Test Preparation</u><u>Study Tips</u>

• Wonders of Math

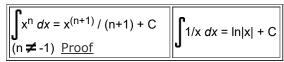
Search

Resources
- Cool Tools

Table of Integrals

(Math | Calculus | Integrals | Table Of)

Power of x.



Exponential / Logarithmic

$$\int_{\text{Proof}} e^{x} dx = e^{x} + C$$

$$\int_{\text{Proof}} b^{x} dx = b^{x} / \ln(b) + C$$

$$\int_{\text{Proof}} \ln(x) dx = x \ln(x) - x + C$$

$$\int_{\text{Proof}} \ln(x) dx = x \ln(x) - x + C$$

Trigonometric

$$\int \sin x \, dx = -\cos x + C$$

$$\frac{\operatorname{Proof}}{\operatorname{Proof}}$$

$$\int \operatorname{COs} x \, dx = \sin x + C$$

$$\frac{\operatorname{Proof}}{\operatorname{Proof}}$$

$$\int \cot x \, dx = -\ln|\operatorname{COs} x| + C$$

$$\frac{\operatorname{Proof}}{\operatorname{Proof}}$$

$$\int \cot x \, dx = \ln|\sin x| + C$$

$$\frac{\operatorname{Proof}}{\operatorname{Proof}}$$

Trigonometric Result

Inverse Trigonometric

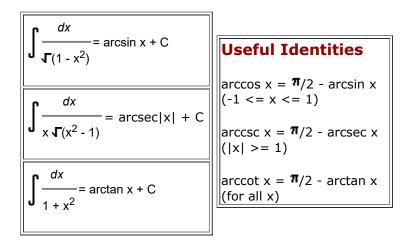
$$\int \operatorname{arcsin} x \, dx = x \operatorname{arcsin} x + \mathbf{\Gamma}(1-x^2) + C$$

$$\int \operatorname{arccsc} x \, dx = x \operatorname{arccos} x - \mathbf{\Gamma}(1-x^2) + C$$

$$\int \operatorname{arctan} x \, dx = x \operatorname{arctan} x - (1/2) \ln(1+x^2) + C$$

9/22/2019 Table of Integrals

Inverse Trigonometric Result



Hyperbolic

$\int \sinh x dx = \cosh x + C$ Proof	$\int \operatorname{csch} x dx = \ln \tanh(x/2) + C$ Proof
$\int \cosh x dx = \sinh x + C$ Proof	$\int \operatorname{sech} x dx = \arctan \left(\sinh x \right) + C$
$\int \tanh x dx = \ln \left(\cosh x\right) + C$ Proof	$\int \coth x dx = \ln \sinh x + C$ Proof

Click on **Proof** for a proof/discussion of a theorem.

To solve a more complicated integral, see <u>The Integrator</u> at http://integrals.wolfram.com/

Contact us | Advertising & Sponsorship | Partnership | Link to us

© 2000-2005 Math.com. All rights reserved. <u>Legal Notices</u>. Please read our <u>Privacy Policy</u>.