

sci.math: int(exp(x)*erf(x),x = a .. b)

int(exp(x)*erf(x),x = a .. b)

Source: <http://sci.tech-archive.net/Archive/sci.math/2004-06/2663.html>

From: John Creighton (*JohnCreighton__at_hotmail.com*)

Date: 06/13/04

Date: 13 Jun 2004 12:38:42 -0700

using MATLAB 6.1.0.450 (R12.1) to access the maple kernel I don't get a solution. for:

$\text{int}(\exp(x)*\text{erf}(x),x = a .. b)$

Does anyone know if this is solvable? It looks like you could do parts a few times, and then equate terms. Since:

$\gg \text{int}(\text{sym}('erf(x)'))$

ans =

$x*\text{erf}(x)+1/\pi^{1/2}*\exp(-x^2)$

What about the integral:

$\text{int}(\exp(x^2)*\text{erf}(x),x = a .. b)$

For this I could let $u=\text{erf}(x)$ and do substitution. Right?

Moreover, If I figure out how to do the integral myself, how do I teach maple to do it?