

Rubi 4.16.1.4 Integration Test Results

on the problems in the test-suite directory "2 Exponentials"

Test results for the 98 problems in "2.1 u (F^(c (a+b x)))^n.m"

Test results for the 93 problems in "2.2 (c+d x)^m (F^(g (e+f x)))^n (a+b (F^(g (e+f x))))^p.m"

Test results for the 774 problems in "2.3 Exponential functions.m"

Problem 692: Unable to integrate problem.

$$\int e^{x^2} x^{2x} (1 + \text{Log}[x]) dx$$

Optimal (type 3, 11 leaves, ? steps):

$$e^{x^2} (-1 + x^x)$$

Result (type 8, 29 leaves, 2 steps):

$$\text{CannotIntegrate}[e^{x^2} x^{2x}, x] + \text{CannotIntegrate}[e^{x^2} x^{2x} \text{Log}[x], x]$$

Problem 694: Unable to integrate problem.

$$\int x^{-2-\frac{1}{x}} (1 - \text{Log}[x]) dx$$

Optimal (type 3, 9 leaves, ? steps):

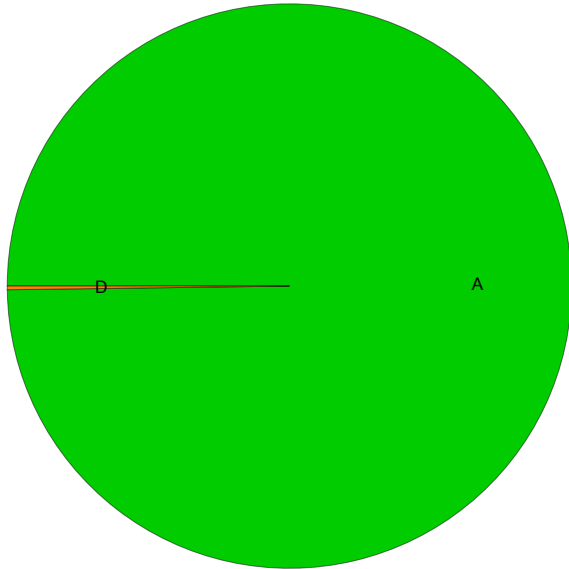
$$-x^{-1/x}$$

Result (type 8, 28 leaves, 2 steps):

$$\text{CannotIntegrate}[x^{-2-\frac{1}{x}}, x] - \text{CannotIntegrate}[x^{-2-\frac{1}{x}} \text{Log}[x], x]$$

Summary of Integration Test Results

965 integration problems



A - 963 optimal antiderivatives

B - 0 valid but suboptimal antiderivatives

C - 0 unnecessarily complex antiderivatives

D - 2 unable to integrate problems

E - 0 integration timeouts

F - 0 invalid antiderivatives