Mathematica 11.3 Integration Test Results

Test results for the 9 problems in "4.1.8 (a+b sin)^m (c+d trig)^n.m"

Problem 2: Result more than twice size of optimal antiderivative.

$$\int \frac{A + B \cos[x]}{1 + \sin[x]} \, dx$$

Optimal (type 3, 19 leaves, 5 steps):

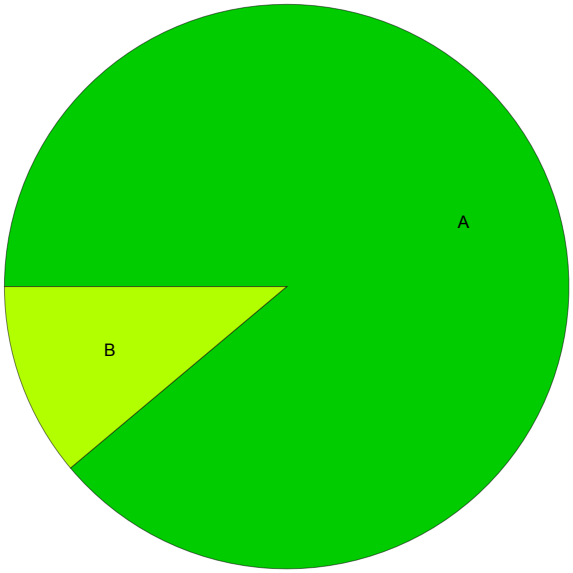
$$B \log[1 + \sin[x]] - \frac{A \cos[x]}{1 + \sin[x]}$$

Result (type 3, 42 leaves):

$$2 B \log\left[\cos\left[\frac{x}{2}\right] + \sin\left[\frac{x}{2}\right]\right] + \frac{2 A \sin\left[\frac{x}{2}\right]}{\cos\left[\frac{x}{2}\right] + \sin\left[\frac{x}{2}\right]}$$

Summary of Integration Test Results

9 integration problems



A - 8 optimal antiderivatives

B - 1 more than twice size of optimal antiderivatives

C - 0 unnecessarily complex antiderivatives

D - 0 unable to integrate problems

E - 0 integration timeouts