

Mathematica 11.3 Integration Test Results

Test results for the 33 problems in "6.1.4 (d+e x)^m sinh(a+b x+c x^2)^n.m"

Problem 19: Attempted integration timed out after 120 seconds.

$$\int \frac{\text{Sinh}[a + b x + c x^2]^2}{x} dx$$

Optimal (type 8, 33 leaves, 2 steps):

$$-\frac{\text{Log}[x]}{2} + \frac{1}{2} \text{Int}\left[\frac{\text{Cosh}[2 a + 2 b x + 2 c x^2]}{x}, x\right]$$

Result (type 1, 1 leaves):

???

Problem 23: Attempted integration timed out after 120 seconds.

$$\int \frac{\text{Sinh}[a + b x - c x^2]^2}{x} dx$$

Optimal (type 8, 33 leaves, 2 steps):

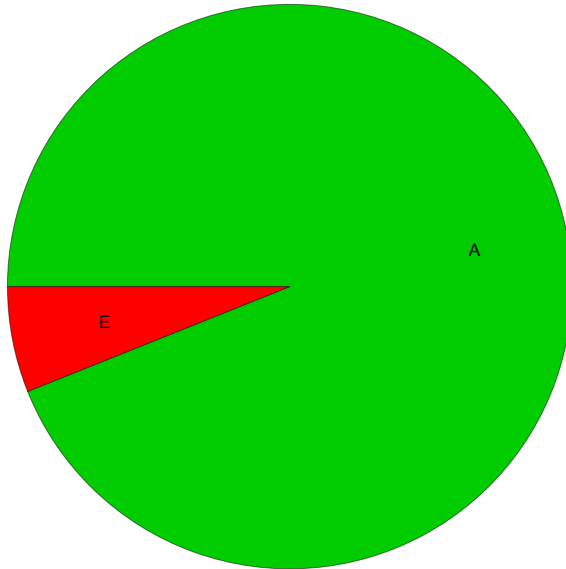
$$-\frac{\text{Log}[x]}{2} + \frac{1}{2} \text{Int}\left[\frac{\text{Cosh}[2 a + 2 b x - 2 c x^2]}{x}, x\right]$$

Result (type 1, 1 leaves):

???

Summary of Integration Test Results

33 integration problems



A - 31 optimal antiderivatives

B - 0 more than twice size of optimal antiderivatives

C - 0 unnecessarily complex antiderivatives

D - 0 unable to integrate problems

E - 2 integration timeouts