

MAPLE. See [adaptqalg.mw](#) or [adaptqalg.pdf](#) for the implementation of this pseudocode as a Maple procedure. To use the algorithm in problem solving, see [adaptquad.mw](#) or [adaptquad.pdf](#).

To approximate $\int_1^3 \frac{100}{x^2} \sin\left(\frac{10}{x}\right) dx$ with tolerance less than 10^{-4} with the procedure `adaptq` requires that Simpson's rule with $n=4$ be performed on the 23 subintervals indicated on the graph below. This approximation also requires 93 function evaluations.

