Integration rule errors for sin(2*x)**2Gauss Legendre Quadrature 10^{0} Trapezoidal rule Simpsons rule 10^{-2} 10^{-4} 10^{-6} Relative error 10-8 10^{-10} 10^{-12} 10^{-14} 10^{-16} 10^{1} 10² Ν