Convergence Analysis of Romberg Integration Integration of $x^{1/4}$ 10⁰ Integration of $4x^4$ Machine Precision Region 10-2 Log Absolute Error (log10 |Error|) 10^{-4} 10^{-6} 10-8 10-10 10^{-12} 10^{-14} 10^{-16} 3 10 11 12 5 13 14 15 8 Romberg Iteration Step