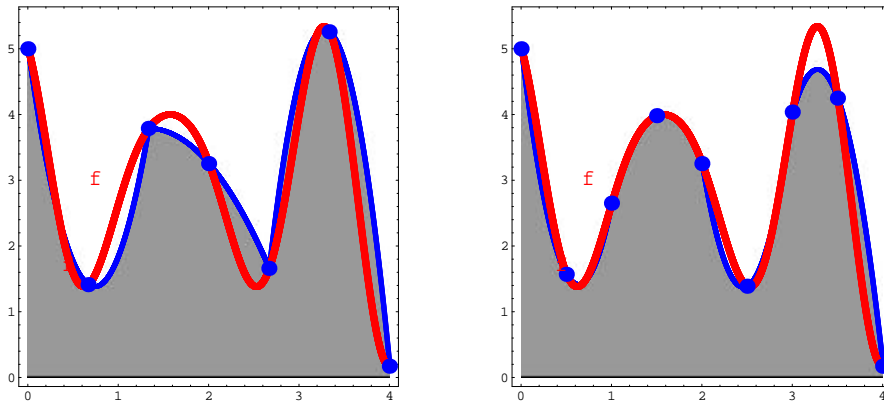


Fórmula de Simpson composta



Exemplo

$$\int_0^1 f(x)dx, \text{ com } f(x) = e^x + 2 \cos(4x)$$

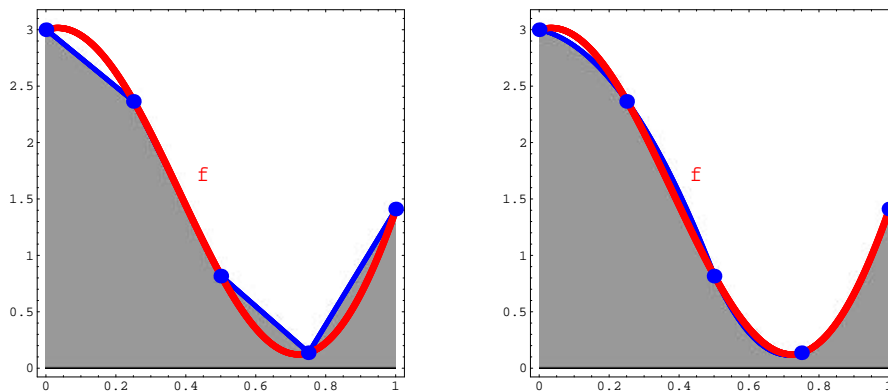


Figura 1: Aplicação das regras dos trapézios composta e de Simpson composta.

N	$ E_N^T $	$ E_N^S $
8	0.01015	1.331×10^{-4}
16	0.0025	8.127×10^{-6}
32	6.327×10^{-4}	5.051×10^{-7}
64	1.581×10^{-4}	3.152×10^{-8}
128	3.953×10^{-5}	1.970×10^{-9}