τ_{i+1} τ_i

$$\tau_i = \exp(-\sigma(x_i)\Delta x) \qquad \Delta x = (x_N - x_0)/N$$

$$\tau_i^{N-1} = \exp(-\int_{-\infty}^{x_N} \sigma(s_i)ds) = \prod_{i=1}^{N-1} \tau_i$$