

ORIGIN := 1

$$f(t) := \sin(t) \cdot (-3 \cdot t^3 + 5t^2 - 2 \cdot t + 5) + 30$$

N := 50 $\Delta\tau := 2 \cdot 10^{-2}$ $T_{\max} := 3$ Q := 1

$$\text{imp}(t, \tau) := \begin{cases} f(\tau) & \text{if } \tau \leq t \leq (\tau + \Delta\tau) \\ 0 & \text{otherwise} \end{cases}$$

i := 1..N

$$\text{step} := \frac{T_{\max}}{N} \quad \Delta\tau = 0.02$$

$\tau_i := \text{step} \cdot i$

$$F(t) := \sum_{i=1}^N \text{imp}(t, \tau_i)$$

t := 0, 0.001.. T_{\max}

